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CONFERENCE ON ENTREPRENEURSHIP
(CU-ICE) 2023**

Theme:

**ENTREPRENEURSHIP
AND SUSTAINABLE
DEVELOPMENT IN THE
21ST CENTURY**



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Covenant University, Ota, Nigeria**

CONFERENCE PROCEEDINGS

EDITORS

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Preface

Covenant University International Conference on Entrepreneurship (CU-ICE) is currently in its sixth year, and 2023 is witnessing the sixth edition of this annual Conference. The remarkable impact of CU-ICE annually, primarily through the Conference's ability to harness inspiring, innovative and well-rooted intellectual ideas from policymakers, academic, industry experts and students, has positioned it as a leading entrepreneurship Conference in Africa. The main idea that gave birth to the Conference was to set it up as a platform that engages the various entrepreneurship stakeholders across Africa in meaningful discussions that consciously diagnose the situations surrounding entrepreneurship education and practice in Africa, proffer innovative solutions to these challenges and engage in strategic actions for an improved entrepreneurial ecosystem in the continent.

Therefore, the theme of each year's CU-ICE Conference is arrived at after think-tank sessions of carefully selected experts that form the yearly Conference Organizing Committee and their comprehensive consultations with industry and academic experts. This team of intellectuals and practitioners engage series of dialogues resulting in identifying a spectrum of issues, and out of which a contemporary theme is arrived at for each year's CU-ICE.

This year's theme followed the same pattern in its decision. The theme of CU-ICE 2023, "Entrepreneurship and Sustainable Development in the 21st Century", represent a continuation of the year 2021's focus on Sustainable Entrepreneurship and Development Goals. By discussing this theme, the Conference sought to make contributions towards actualising SDG Goals: 1 (No Poverty), 8 (Decent Work and Economic Growth) and 9 (Industry, Innovation and Infrastructure). In the global entrepreneurship space, sustainable entrepreneurship is in its nascent phase. The conceptualisation of strategic entrepreneurship is widely varied depending on whether it is viewed as a contributory factor to the core agenda of sustainable development (economic, social and environment) or as an effort of entrepreneurial actors to achieve the long-term existence of their firms. Additionally, it has been described as a resource maximising concept with a futurity orientation in which present resources are strategically utilised for economic purposes and preserve the future sustenance of both people and the economy. Whichever perspective applies, the goal of sustainable entrepreneurship should reflect its critical role for repositioning the African entrepreneurship ecosystem as one that should focus on productivity, engagement of human capital, serving as a springboard for cultivating dynamic and innovative ideas and transforming informal start-ups into well-nourished firms that can create jobs and breed new ideas.

At CU-ICE 2023, we have carefully selected papers that will make quality arguments about what African economies should do to achieve sustainable entrepreneurship and innovation, significantly contributing to the development of the continent. The papers presented at this year's Conference resolve three thematic areas: entrepreneurship education/practices and

sustainability, digital transformation and sustainable entrepreneurship and multidisciplinary practices and sustainable entrepreneurship. Consequently, the diversity of this year's Conference reflects in its

(i)relatedness to impacting the triple bottom line of economic, social and ecological goals; (ii)the pedagogical aspects of entrepreneurship, especially as it relates to improving the culture of entrepreneurship training and education; and (iii)the multidisciplinary nature of entrepreneurship to infuse entrepreneurial mind-set across all fields

The CU-ICE 2023 paper submission was premised on the objective of ensuring quality papers through a blind peer-review process. Therefore, the Conference Organising Committee would like to thank all reviewers for their valuable support of the CU-ICE 2023. We also appreciate all participants for their valuable contributions. The International Conference on Entrepreneurship 2023 proceedings are, therefore, a collection of highly resourceful academic papers that would aid research and development endeavours. The papers in this Conference Proceedings would serve as valuable materials to advance policy design and implementation related to entrepreneurship practices across African economies. Researchers will also find the papers as helpful guides in advancing new areas of entrepreneurship research across disciplines, while industrialists will be able to identify valuable recommendations that will help foster more sustainable practices.

Dr. Taiye, T. Borishade
Chair, CU-ICE 2023 Organising Committee,
Covenant University.

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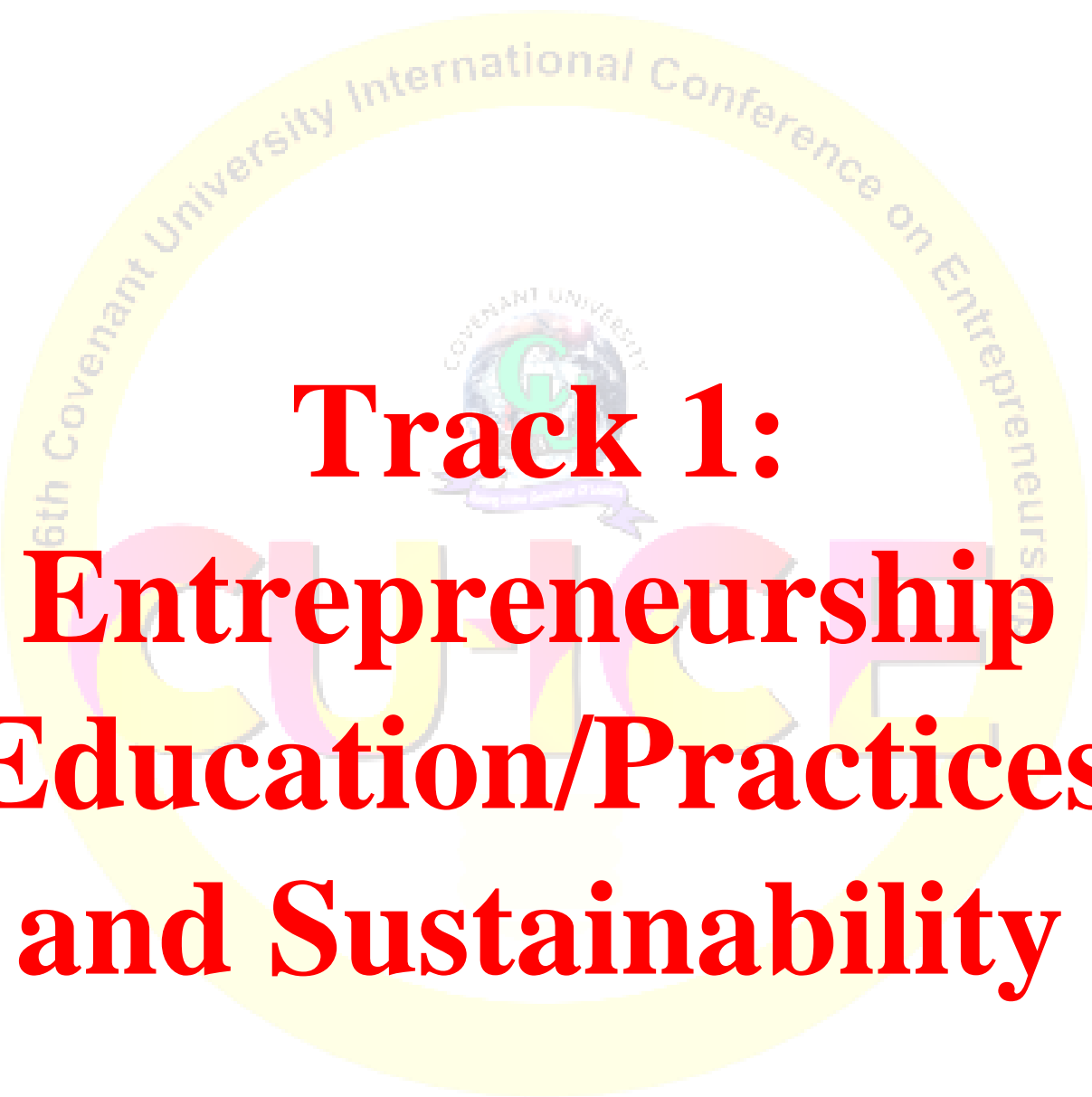
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**Track 1:
Entrepreneurship
Education/Practices
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Higher Education Student Entrepreneurship Support Services: Implications for the Development of Entrepreneurial Skills

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Abstract

The lack of support for student entrepreneurship in universities has limited the potential for economic development and job creation through this pathway. To investigate the relationship between student support services, entrepreneurship skills development, and student entrepreneurship in public and private universities in Lagos and Ogun States, a mixed-method research design was employed. The study involved 26,830 final-year undergraduate students and 8 Directors of Entrepreneurship Development Centers, with a sample of 2394 students and 6 directors selected using a multi-stage sampling technique. Two objectives were established, leading to two research questions and one hypothesis. Data analysis involved frequency count, mean, and standard deviation, and the hypothesis was tested using Pearson Product Moment Correlation. Qualitative data were analyzed through verbatim reports and emerging themes and patterns from transcribed key informant interviews. Results showed a strong positive relationship ($r = 0.42^$, $P = .01 < 0.05$) between student support and entrepreneurship skills development thereby providing evidence of student support being a significant driver of entrepreneurship development. It was concluded that student support programs promote student entrepreneurship in Higher Educational settings but such support needs to be personalized to meet the diverse needs of student entrepreneurs. Among others, it was recommended that universities should invest in partnerships that will drive informal support in terms of internships, competition, and seed grants. Such support should however be structured in ways that make measurement of impact possible.*

Keywords: *Student support, entrepreneurship education, skills development, entrepreneurship skills development, student entrepreneurship.*

Introduction

Countries worldwide have recognized the importance of entrepreneurship education in addressing skill gaps, shortages, mismatches, graduate unemployment, and underemployment. As a developing country, Nigeria has made consistent efforts to improve graduates' abilities, principles, and attitudes necessary to identify and seize various opportunities. Unemployment

has negative effects on Nigeria's socioeconomic development and global perception. In 2019, Nigeria was ranked among the nations with extreme poverty, with over 86.9 million people, representing more than 50% of its estimated 180 million population, affected by poverty, according to the World Poverty Clock.

As seen in developed countries, entrepreneurship education has been a tactic for enabling citizens to overcome the challenge of poverty brought on by the government's inability to provide jobs for students who have graduated from university. As a result, starting with the 2007–2008 academic year, all students in Nigerian universities were required to take an entrepreneurship education course. The implementation of the policy appears to be a step in the right direction, even though the statistics on unemployment have not significantly decreased as a result of this action. In Q2, 2020, the National Bureau of Statistics reported that the unemployment rate among young people (15-34 years old) was 34.9%, up from 29.7%, while the rate of underemployment for the same age group rose to 28.2% from 25.7% in Q3, 2018. When compared to other age groups, the rates for young people were the highest, according to this report. These statistics demonstrate that entrepreneurship education is not a one-size-fits-all solution to the unemployment crisis that has ravaged Nigeria and given rise to a high level of crime, terrorism, civil unrest, and other vices that make living and doing business in Nigeria undesirable.

Students' support has been identified as one of the numerous ways universities can maximise the experiences of students before and after graduation. It includes the personal development opportunities and support made available for students to seamlessly achieve their academic potential, maximize personal development, and also develop pertinent entrepreneurship skills while they are in the university. Although supporting the development of entrepreneurial skills through the teaching of entrepreneurship to students may be a useful tactic, little will be achieved if proper consideration and attention are not given to individualised experiences. The ever-changing diversity of students enrolling in universities is beginning to dictate new pathways for providing individualized support for students who desire to become entrepreneurs.

There are several ways in which universities can indicate support for student entrepreneurs. Morrison (2021) avers that universities can indicate support for student entrepreneurs in a variety of ways, such as offering entrepreneurship courses, providing access to mentorship and funding opportunities, and organizing entrepreneurship events and competitions. Supporting students enrolled in entrepreneurship education programs favors the launch of new businesses even before students graduate, thereby boosting the economy of the country. In addition to this, numerous advantages, such as increased innovation, economic growth, and job creation, can be gained by universities that support student entrepreneurs (Gibb & Haskins, 2017). By providing resources and training, universities can help students turn their ideas into successful businesses, contributing to the overall success of the institution and the wider community.

Entrepreneurship education can improve students' entrepreneurial attitudes, intentions, and skills, and can lead to increased rates of entrepreneurial activity (Bosma et al., 2018). By providing entrepreneurship education and support, universities can help to develop the next generation of entrepreneurs and innovators." However preparing to be an entrepreneur goes beyond attending lectures where information is presented by lecturers, participating in class discussions, and then passing exams to demonstrate learning. Actionable activities that link theory to the real-world experiences of entrepreneurs must support the learning outcomes, and this is not the case with the entrepreneurship education programs delivered in Nigerian universities. University education should be what youth look forward to by merely observing

the success it has made out of graduates. The implication is that students graduate and are able to significantly contribute to societal growth by creating jobs that will last, making entrepreneurship appealing to other students. In light of these considerations, this study investigates Higher Education Student Entrepreneurship Support Services and its implications for the Development of Entrepreneurial Skills among students at Lagos and Ogun state universities.

Purpose of the Study

The purpose of this study is to provide evidence that creates a further understanding of the implication of students' support programmes on entrepreneurship skills development of higher institution students. Specifically, with reference to higher institution students in Lagos and Ogun State Nigeria, the study is set to:

1. ascertain the relationship between students' support and entrepreneurship skills development among university students.
2. understand further the formal and informal support available to students of the universities in Lagos and Ogun States

Research Questions

1. What is the relationship between students' support and entrepreneurship skills development among university students?
2. Which formal and informal support do the universities in Lagos and Ogun State offer to help students who want to become entrepreneurs?

Hypotheses

H₀₁: There is no significant relationship between students' support programs and entrepreneurship skills development among university students of Lagos and Ogun States Universities.

Literature Review

Student support

Student support services aim to enhance the quality of students' academic achievement and learning experience by offering personalized experiences that go beyond the university curriculum. These services provide students with practical experiences that give them an advantage in the real world. According to Coates et al. (2016), empowering students through personalized support is not limited to formal education but includes broader experiences that contribute to personal development and productive participation in their organization of work. Students can engage in various activities such as essay writing competitions, ideation, idea pitching competitions, enterprise clubs, and skill hubs to develop relevant entrepreneurial skills and gain unique personal development experiences.

In universities, there are many ways to support students, including through academic support, career support, mental health support, and financial support (Robinson, 2020). Academic support may include tutoring services, study groups, and writing centers (Kim & Kuh, 2021). Career support may involve career counseling, job fairs, and networking opportunities (Chung & O'Keefe, 2021). Mental health support may encompass counseling services, peer support

groups, and crisis intervention (Barry, 2020). Financial support may include scholarships, grants, and emergency funds (Eckert & Kuh, 2022).

To effectively provide student support, universities may need to consider a comprehensive approach that addresses students' needs holistically (Hu & McCoy, 2021). This approach may involve collaboration between various departments and the implementation of evidence-based practices (Chen & Thoresen, 2020).

Coates et al. (2016) emphasised on personalized student support programs characterized primarily by providing the students with the information, support, guidance, and help they require at the time they require it, rather than when the institution schedules it. A study by Othman et al. (2020), showed that "student support programs are effective ways to foster entrepreneurial intentions and increase the likelihood of starting a business among university students" (p. 348). Therefore, student support services are critical to student success in higher education, particularly for students from disadvantaged backgrounds who may face a range of challenges in accessing and completing their studies (Coates et al., 2021)

Students' Support and Entrepreneurship Skill Development

There has been a growing emphasis on the need to create more student-centric institutions geared towards reconstructing students' experiences through student support, and this has compelled many universities to strengthen the creation of personalized experiences for students, connecting them to the support they require to attain both educational and career goals. The diverse and growing student population has however made it more difficult to manage the various aspects of student life; thus, making the student's support system become more critical (Audin and Davy, 2003; Dhillon et al., 2006). In addition to this, the growing demand for university entrepreneurship education, as well as the high level of dynamism in the "business world," has necessitated the requirement for additional support for students. However, Dhillon et al. (2006) maintained that, among the support programs made available to students at the universities, only programs that are relevant to the academic, self-development, and emotional needs of the student are the most crucial.

According to Liguori et al. (2020), "entrepreneurial skills training programs for students have been shown to significantly enhance their entrepreneurial capabilities and increase their likelihood of starting a business" (p. 164). A study by Tegtmeier et al. (2019) found that "student support programs that focus on entrepreneurship skills development have been shown to positively impact students' entrepreneurial intentions and behaviors" (p. 513).

Universities can boost entrepreneurship and the rate of entrepreneurial activities by commending and supporting campus enterprise developments. According to Hofer and Potter (2010), universities are key players in providing early growth support in the form of training for students to complement entrepreneurship education. Lea and Farbus (2000) saw this support system as an "educational necessity" which is beneficial to both the students and staff members. Furthermore, student support programs have been shown to be an effective way to foster entrepreneurial intentions and increase the likelihood of starting a business among university students (Othman et al., 2020), while entrepreneurial skills training programs for students have been shown to significantly enhance their entrepreneurial capabilities and increase their likelihood of starting a business (Liguori et al., 2020; Tegtmeier et al., 2019).

Honig et al. (2019), affirmed that university-based incubators have been shown to be an effective way to support student entrepreneurs, providing them with mentorship, funding

opportunities, and access to professional networks" (p. 513). Through dedicated start-up support services, universities offer those already in the start-up process, avenues and great networks to form their businesses (Hofer and Potter, 2010). Lannarelli and Mischel, (2008) however conducted a study that shows that students who participated in such enterprise activities had greater overall entrepreneurial characteristics, more personal control, greater self-esteem, and more innovation than a comparable cohort. Overall, a strong student support system that addresses the unique needs of students, coupled with entrepreneurship education, can help universities to develop students' entrepreneurial skills and prepare them for success in the business world.

Methodology

Research Design

For this study, a mixed-method research design was employed which involved the collection of both quantitative and qualitative data. According to Johnson and Onwuegbuzie (2004), mixed-method research combines various research techniques, methods, approaches, procedures, and languages in a single study. This research design was chosen for the study because of its ability to provide a comprehensive understanding of the implications of student support for the development of entrepreneurial skills. Therefore, the study utilized the diverse nature of the mixed-method research design to investigate the impact of student support on the development of entrepreneurial skills in universities located in Lagos and Ogun States, Nigeria.

Population of the Study

The population for this study comprised all final-year students of all private and public universities that have been in existence in Lagos and Ogun states for at least ten years. It is assumed that the selected universities would have introduced entrepreneurship education courses for at least five years. This implies that the final-year students would have taken the mandatory entrepreneurship courses recommended by the university, experienced the teaching of entrepreneurship education, and are preparing for the world of work. As at today, the Nigerian National Universities Commission (2017) reports that out of the 152 universities in Nigeria, 22 are domiciled in Lagos and Ogun States, Nigeria (3 federal, 2 state and 17 private) as shown in Table 1.

Table 1: Distribution of Universities in Lagos and Ogun States

State	Federal	State	Private	Total
Lagos	2	1	5	8

Ogun	1	1	12	14
Total				22

Source: National Universities Commission, 2017

Sample and Sampling Technique

Yamane (1967) sample size statistical model for a finite population was used to determine the sample size for the population. Thus, applying the Yamane formula to individual universities, the sample size for the quantitative survey in the study is totaling 2394 as indicated in table 2.

Table 2: Distribution of Sample Size of each university.

State	University	Population of Final Year Students	Sample Size
Lagos	University of Lagos, Akoka	3643	360
	Lagos State University, Ojo	10,252	385
	Caleb University, Imota	399	200
	Pan Atlantic University, Aja	69	59
	Total	14363	1004
Ogun	Federal University of Agriculture, Abeokuta	3325	358
	Olabisi Onabanjo University, Ago Iwoye	4386	367
	Babcock University, Ilishan Remo	3,449	359
	Covenant University, Ota	1307	306
	Total	12467	1,390
		26830	2,394

Source: Universities' websites, 2019

Sampling Procedure

A multi-stage sampling procedure was used to select the participants for the study. The first stage entailed stratifying the 22 universities into federal, state, and private, resulting in a total of 3-3 federal, 2-state and 17 private universities. The Purposeful sampling technique was then used to select 4 private universities and 4 public. The selected universities must have been in existence for, at least, ten years. In selecting participants from each of the 8 participating universities, the purposive sampling technique was used to identify participants from the two faculties (Social Sciences and Management Sciences) that cut across the eight universities. The random sampling technique was then adopted to select respondents from five departments (Economics, Mass Communication, Accounting, Business Administration and Banking and Finance). Altogether, 2394 final year students from 8 universities formed the sample for the

quantitative survey. In addition to this, six directors of the entrepreneurship centres were purposefully selected for the key informant interview.

Research Instrument

A researcher constructed questionnaire tagged, Student Support and Entrepreneurial Skills Development Questionnaire (SSESDQ), and a Key Informant Interview Guide for Directors of University Entrepreneurship and Skills Development Centres was adopted for the study. This questionnaire consists of three sections. The first section sought demographic data of the participants in terms of gender, faculty, department, and university category. The second section contains items for the variables of teaching quality while the third section had the variables of entrepreneurship education. The variables were developed based on the literature reviewed by the researcher. The response categories were rated on a 4-point Likert type scale which was scored 4, 3, 2, and 1 respectively for positive items while the negative items were scored in reverse order. The criterion mean was set at 2.50.

Validity of the Instruments

To ensure the face and the content validity of the instruments, the questionnaire, was examined by the two supervisors, coupled with other experts in educational management; business administration; and measurement and evaluation from the University of Lagos. The instruments were vetted and scrutinized prior to administration to the respondents. The results from their suggestions and other corrections made formed the basis for the modification of the final version of the instruments.

Reliability of the Instruments

To determine the reliability of the instruments, a trial testing of the instrument (Pilot Survey) was carried out with 50 final year students (for the questionnaire instrument) in Ogun State Institute of Technology, Igbesa which is outside the sampled area. In measuring the internal consistency of the instruments, Crobach's alpha co-efficient test of reliability was applied, using the Statistical Package for the Social Sciences (SPSS) software, to ensure reliability on an alpha level of 0.05. The analysis of the alpha co-efficient values for teaching quality was 0.740 for the 17 items of student support while that of entrepreneurship skills development was 0.729 for 16 questionnaire items.

Method of Data Presentation and Analysis

Data from completed questionnaires were screened, coded, and analysed using the Statistical Package for the Social Sciences (SPSS) version 23.. The results were presented using descriptive statistics – frequency distribution, percentages, means, and standard deviation. Additionally, Pearson Product Moment Correlation was used to test the stated null hypotheses. All hypotheses were tested at 0.05 level of significance.

Table 3: Demographic Data of Participants

		Frequency	Percentage
Gender	Male	1360	56.8
	Female	1034	43.2
	Total	2394	100.0

University	University of Lagos	360	15.0
	Lagos State University	385	16.1
	Caleb University	200	8.4
	Pan Atlantic University	59	2.5
	Federal University of Agriculture, Abeokuta	358	15.0
	Olabisi Onabanjo University	367	15.3
	Babcock University	359	15.0
	Covenant University	306	12.8
	Total	2394	100.0
	Ownership	Federal	718
State		752	31.4
Private		924	38.6
Total		2394	100.0
Program	Full time	2080	86.9
	Part time	314	13.1
	Total	2394	100.0

Source: Field Work, 2019

Table 3 represents the demographic data of the participants. The distribution of the participants by gender showed that a total of 1360 (57%) of the participants were male while 1034 (43%) were females. This indicates that the study was dominated by females. The table also showed that participants from Lagos State University were 385 (16%), indicating the highest number of participants from a single university and Pan Atlantic University having the least number of participants in the study with 59 (2.5%). In addition, a total of 718(30%) were from federal universities, 752 (31%) were from state universities while 924(39%) were from private universities. Finally, the distribution of participants showed that majority of the participants, 2080 (87%) undergo a full time program while 314(13%) offered part-time program in the universities.

Answer to research question 1.

Table 4: Response Patterns on Students' Support in Universities in Lagos and Ogun States (N=2394)

S	The	SA	A	D	SD	Me	Stde	R
N	University:					an	v	
1	encourages students to engage in entrepreneurial activities.	989(41.3%	1095(45.7%)	236(9.9%)	74(3.1%)	3.25	0.76	A
2	provides facilities that support the	645(26.9%	1007(42.1%)	592(24.7%)	150(6.3%)	2.9	0.87	A

	teaching of entrepreneurship education.							
3	provides access to funding workshops for students.	633(26.4%)	819(34.2%)	732(30.6%)	210(8.8%)	2.78	0.94	A
4	connects students to mentors and renowned entrepreneurs.	545(22.8%)	1130(47.2%)	567(23.7%)	152(6.3%)	2.86	0.84	A
5	organizes Enterprise Awareness Events e.g. business plan competitions for students.	708(29.6%)	1096(45.8%)	479(20.0%)	111(4.6%)	3	0.83	A
6	allocates time for entrepreneurship related activities at the university entrepreneurship development center	678(28.3%)	961(40.1%)	663(27.7%)	92(3.8%)	2.93	0.84	A
7	invites renowned entrepreneurs to teach entrepreneurship education courses	596(24.9%)	1169(48.8%)	526(22.0%)	103(4.3%)	2.94	0.8	A

Key: SA = Strongly Agree (4), A= Agree (3), D = Disagree (2), SD = Strongly Disagree (1) , R=Remark

The result from Table 4 shows that 2084 (87%) of the students agree that the university encourages students to engage in entrepreneurial activities while 310 (13%) disagreed with the statement. Also, 1652(69%) agreed that the university provides facilities that support the teaching of entrepreneurship education while 742(31%) disagreed with the statement. Similarly, 1452(61%) agreed that the university provides access to workshops for students while 942(39%) disagreed with the statement. With respect to item 4 on the Table, 1675(70%) of the students agree that the university connects students to mentors and renowned entrepreneurs while 719(30%) think that the university does not connect students to mentors. Also, 1804(75%) agree that the university organises enterprise awareness events while 590(25%) disagree with the statement. Similarly, 1639(68%) agree that the university allocates time for entrepreneurship-related activities at the entrepreneurship development center while

755(32%) disagree with the statement. Lastly, 1765 (74%) of the students agree that the university invites renowned entrepreneurs to teach entrepreneurship education courses while 629(26%) disagree with the statement.

Research Question 2: Which formal and informal support do the universities in Lagos and Ogun State offer to help students who want to become entrepreneurs?

The findings indicate that formal and informal support for entrepreneurship education is a viable tool for the development of entrepreneurship skills by students. One of the directors in one of the universities in Lagos State had this to say about how the centre supports the goals of entrepreneurship education in the university:

The rate at which graduates are being churned out of the university system without the ability to pursue opportunities that will lead to job creation has become too alarming for comfort. The entrepreneurship development centre is determined to help students develop relevant entrepreneurial skills that will endear them to create jobs and value for themselves and others after graduation. Our dream is that whoever leaves the university does not think of looking for a job. We are able to achieve this because of the support we get from the university as a centre. The results we have been able to achieve is also because of the willingness of the university authority to go into partnerships with organisations and corporate bodies to provide capacity development for our students in support of the theoretical aspect of entrepreneurship that we teach in the classroom. It is however expedient to state that although there is still a lot of ground to be covered as regards reaching a larger population of students with the additional offerings such as internships, pitch competitions and mentoring programmes we provide for students, our achievements have been ascribable to the facilitation of the courses on theory of entrepreneurship backed up by the resources made available for the students to experience entrepreneurship through practice at the entrepreneurship development centres. A remarkable number of our students start businesses before graduation.

Another Director of one of the entrepreneurship and skills development centres said:

The University is officially recognized as an entrepreneurship-focused institution, which encourages entrepreneurial activities among its students and faculty. As outlined in its 25-year strategic plan, the university aims to foster self-reliance, exemplary leadership skills, and capacity in its students, with a particular emphasis on entrepreneurship (as stated in Objective 4, Section 2: Student Matters, Page 55 of the Medium Term Goals of the University's 25-Year Strategic Plan). In line with this, the university has provided formal support for students and lecturers on the university to develop the capacity to become entrepreneurial. In the year 2019, a university-wide training was conducted to develop the lecturer's capacity to identify and exploit the entrepreneurial components of their disciplines. This was done to ignite the consciousness of the lecturers on the need to drive entrepreneurship from the classroom. The university is also very open to partnerships and

collaborations that provide platforms for developing its entrepreneurial ecosystem. These collaborations often lead to the delivery of competitions, ideation programmes, mentorship and seed funding for the students.

Test of Hypotheses

All hypotheses were tested at .05 level of significance.

Hypothesis One

H₀₁: There is no significant relationship between student support and entrepreneurship skills development (ESD) among university students.

Table 4: Students' support and entrepreneurship skills development (ESD) of university students

	N	Mean	SD	r	P	Remark	Decision
Students' Support	2394	20.67	4.54	0.422	0.01	Significant	H ₀₄ rejected
ESD		48.01	9.16				

* Correlation is significant at 0.05 level (2-tailed).

Table 4 presents a summary of the relationship between student support and entrepreneurship skills development (ESD) of university students in Lagos and Ogun States ($r = 0.42^*$, $P = .01 < 0.05$). The result of the tested hypothesis showed that there was a positive and significant relationship between students' support and entrepreneurship skills development (ESD). Thus, the null hypothesis which stated that there was no significant relationship between students' support and entrepreneurship skills development was rejected.

Summary of Findings

The results from this study show that:

1. The availability of formal and informal support for student entrepreneurs has played a significant role in the development of entrepreneurial skills among the students.
2. There is a positive and significant relationship between students' support provided for students and Entrepreneurship Skills Development (ESD). The implication is that universities can leverage on providing additional support for students as a way of reinforcing the development of entrepreneurship skills.

Discussion of findings

Results from test of hypotheses showed a positive and significant relationship between students' support and entrepreneurship skills development among university students. This result is an indication that students' support have direct link with entrepreneurship skills development among university students. The result aligns with the findings of Arifin (2018)

that students' support had important contributions to students' persistence and willingness to continue with school. By encouraging students to engage in entrepreneurship related activities and providing facilities that support the teaching and learning of entrepreneurship, universities promote the development of entrepreneurship skills in the students. Universities that provide formal support for entrepreneurship through laid down policies and by encouraging engagement with industries and external stakeholders create a positive climate for students and lecturers to strive. Through the mission and vision statement of the university, all stakeholders are able to identify the areas of focus of the university. The informal support provided for students in areas of facilities, visiting entrepreneurs, seed funding, work spaces, workshops, enterprise awareness events, business plan competitions among others are veritable tools that endear students to develop entrepreneurship skills. When students know that the university supports their drive to become entrepreneurial by providing relevant facilities and resources, students become encouraged to embrace entrepreneurship. It is however pertinent to note that such support should not end abruptly as soon as the students graduate and should be sustained years after students graduate. Student supports services need to be personalized to each student's particular needs, integrated, and timed to the student's needs and ongoing throughout the students' university experience. An effective students' support provides support when the student needs it rather than when the university deems it fit.

Report obtained from the qualitative data derived from the key informant interview with directors of entrepreneurship and skills development centres in the universities are also consistent with these findings.

The directors of the entrepreneurship development centers were unanimous in their response on the various students support services made available to support students in developing entrepreneurship skills and business ideas. Worthy of note is the fact that all the universities have an entrepreneurship education policy that provides a guideline for the operation of the entrepreneurship development centers of the universities.

Conclusion

There was a significant relationship between students' support and entrepreneurship skills development of students. The study found that there were both formal and informal support for the development of entrepreneurship skills in Lagos and Ogun states universities and opportunities abound for a few relevant support services. However, evidence abound that for the public universities, there is a need for expansion of such services to embrace the teeming population of students that throng into public universities.

Recommendations

1. Concerted efforts should be made by the university administrators to provide personalised support services for students based on interests and areas of specialisation. The drive for entrepreneurship should go beyond technical skills to entrepreneurship skills that reinforce resilience, creativity, collaboration and teamwork especially in the Nigerian context.
2. The University entrepreneurship policies should be broadened to accommodate a Students' Support Centre where industry, students and the university can have a common place for meaningful conversations, projects and start up finance for budding entrepreneurs.
3. The entrepreneurship course module should be entrenched with compulsory activities that will make the students identify an opportunity on campus and then create a solution to it.
4. The entrepreneurship teaching modules should spot light case studies of succesful student entrepreneurs. Such entrepreneurs such that students can make their own contributions

to localised case-studies shared towards final grading and the students should be given every support they require.

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Inclusion of Entrepreneurship Education Programme in Tertiary Institutions Curriculum: Students Perspective.

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Abstract

Entrepreneurship education in tertiary institutions is aimed at inculcating entrepreneurial knowledge, skills and attitudes in students in order to motivate entrepreneurial intentions or increase the drive of tertiary institution graduates to embrace entrepreneurship as a career path. The introduction of entrepreneurship education into the curriculum of tertiary institutions is geared towards equipping students with information on how they can identify and seize opportunities in their environment, which would result in the development and assessment of business ideas, embarking on operational plans, finance and float businesses, grow new enterprises and discuss case studies during teaching so as to provide students with the opportunity to assess entrepreneurial strategies and learn about the successes and failures of existing and new enterprises. The study was therefore embarked upon to find out the perception of students of tertiary institutions towards the inclusion of entrepreneurship education in the school curriculum. The research design for the study is Survey. To guide the study, one research question and three hypotheses were generated. The sample for the study was drawn through a simple random and stratified sampling procedure where 344 students of Yaba College of Technology participated in the study. The instrument for data collection is a questionnaire titled "Students Perception of Inclusion of Entrepreneurship Education Programme in Tertiary Institutions Curriculum" which had a Cronbach Alpha reliability coefficient of 0.78. Data collected from the study were analysed using frequency, percentages and t-test statistical tools on the SPSS version 20. The results from the study revealed that the level of students' perception towards the inclusion of entrepreneurship education into the curriculum was positively high, as indicated by the level of agreement of the respondents to positively worded statements in the instrument for data collection, which revealed a mean score of 3.53 out of 4 and for the negatively worded statements, the level of disagreement of the respondents was a mean score of 2.0. Further results revealed that there was no significant difference in students' perception towards the inclusion of entrepreneurship education into the school curriculum due to gender, level of study and mode of study. It is recommended that more economic resources should be channelled into the teaching of entrepreneurship education in all tertiary institutions.

Keywords: *Entrepreneurship education, Students perception, School curriculum, Tertiary institution.*

1.0 Introduction

Entrepreneurial Education has been introduced into the Nigeria Educational Curriculum with the goal of inculcating into students' suitable entrepreneurial abilities, by equipping them with skills and competencies in vocational and technical education. Exposure to this education would serve as a means through which students after graduation can secure employment because the education would have provided the necessary knowledge, training and skills which would make them relevant human resource persons capable of establishing business enterprises for the growth and development of a nation's economy. Entrepreneurship education is a

lifelong process, starting as early as elementary school and progressing through all levels of education including adult education, focusing on developing an understanding and capacity for the pursuit of entrepreneurial behaviours, skills and attributes in widely different contexts (Abeng & Obinnaya, 2017).

Okon (2021) remarked that entrepreneurship education, as a global field of study, has been a great tool for improving the capacity of nations' human capital for decades. Although scholars differ significantly among themselves in terms of definition. A narrow one is just about training and mentoring students that can start their own businesses, while a broader one is producing students that are creative, proactive, opportunity-seeking oriented, and innovative, thereby relevant to all walks of life. The promotion of entrepreneurship education was emphasized as the solution to youth unemployment and a driver of long-term private sector-driven growth. Entrepreneurship education was introduced in order to give students in tertiary institutions the required knowledge, skills, and inspiration to promote entrepreneurial success in a range of business ventures. Like every other discipline, entrepreneurship education has certain goals one of which is to cultivate an entrepreneurial mindset among students, which can encourage them to carry out entrepreneurial activities.

Abdul Rahim and Mukhtar (2021) stated in their study that entrepreneurship education is been given much priority by the government today in order to encourage graduates to choose entrepreneurship as a career after graduating from a tertiary institution and not to rely on paid employment. This is because entrepreneurship education gives students the opportunity to bring out hidden potentials that will reveal the talents and skills they possess. Entrepreneurship education also have a great impact on students' lives, whether they are entrepreneurs or not. Introduction of entrepreneurship education at tertiary institutions have assisted to take away the frustration of students and parents in producing more students who would be self-employed than those seeking for paid-employment (Mohd Aziz, Harun, MohdEsa, Yaacob, & Ab. Rahman, 2018).

From the aforementioned, it means students are one of the main stakeholders in the successful deployment of entrepreneurship education in a tertiary institution. And to this end, it is important to consider their views on the subject matter. The study is being conducted to find out how important and effective has entrepreneurship education been to the students, are their expectations being met, has it made any significant impact on them and what are the missing areas they are expecting in order to have the expected outcomes as contained in the education policy of the nation?

1.1 Statement of the Problem

The entrepreneurship education programme was included in the curriculum of tertiary institutions in Nigeria during the 2007/2008 academic session as a mandatory course for all students. The rationale for the inclusion is to enable students to possess knowledge, skills and attitudes that would make them become self-reliant and adjust to changing needs of society due to globalization and integration processes. The introduction of the programme became necessary to assist in tackling the rising rate of youth and graduate unemployment, over-dependence on paid employment, decreased economic growth and to advance the overall national development. However, it has been discovered that graduate unemployment seems to be on the increase, which could go a long way to hinder the achievement of full production through full utilisation of all economic resources, of which human resources is one, which is needed for sustainable economic growth and development. This is evident from the data from

the National Bureau of Statistics in Nigeria that the graduate/youth unemployment rate increased from 40.8% in January 2020 to 53.4% in January 2021 (Trading Economics, 2022). These figures seem to question the impact of the entrepreneurship education programme students were exposed to while in school, which is expected to make students more employable after the completion of their educational programme and to also reduce to the barest minimum the rate of graduate/youth unemployment. This study was embarked on to find out the perception of students in tertiary institutions towards the inclusion of entrepreneurship education programme in the school curriculum.

1.2 Objectives of the Study

The study is conducted to examine students' perspective towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.

Specifically, it will:

1. find out the level of students' perception towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.
2. determine the perception of male and female students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.
3. examine the perception of National Diploma (ND) students and Higher National Diploma (HND) students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.
4. determine the perception of students running Full-Time (FT) programme and Part-Time (PT) programme towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.

1.3 Research Question

Below is the research question raised to guide the study:

What is the level of students' perception towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions?

1.4 Hypotheses

The following hypotheses were formulated and tested in the study:

1. The perception of male students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from that of female students.
2. The perception of National Diploma (ND) students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from that of Higher National Diploma (HND) students.
3. The perception of students running Full-Time programme towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from students running Part-Time Programme.

2.0 Literature Review

2.1 The Concept of Entrepreneurship Education

Entrepreneurship education has been defined as a set of formal teachings that enlightens, trains, and educates for the purpose of participating in socio-economic development through a project to encourage entrepreneurship awareness, a new enterprise, or small business development (Okpe, & Oleabhie, 2021). Entrepreneurship education can also be regarded as a deliberate activity which is expected to stimulate the mindset of students to generate innovative and creative business ideas.

Entrepreneurship education is targeted towards developing the student skills, competencies, understandings and characteristics that will equip students to be innovative, creative and successfully manage personal, business and work opportunities, including working for themselves. In addition, it would inculcate entrepreneurial skills and attitudes in students so as to drive entrepreneurial intentions or encourage them to choose entrepreneurship as a career path after the completion of their programme at school.

Shi-Chi and Meng-Cheng (2018), remarked that the ultimate aim of entrepreneurship education is for students to significantly inter-relate with the environment they are in through specific experiences in the society so as to perceive realistic problems. They can then utilise creativity and critical thinking skills to respond to, and resolve issues, while at the same time, they must think on their subjective awareness and analyse their entrepreneurial intentions and value concepts, and perceive their subject position throughout the entrepreneurial action.

2.2 Entrepreneurship Curriculum

The entrepreneurship education curriculum is an effective and continuously changing sequence of formal learning experiences related to the entrepreneurial development of students (Gafar, Kasim & Martin, 2013). An entrepreneurship education curriculum can also be viewed as all students' experience in school which has to do with the development of entrepreneurial skills and capabilities (OECD, 2010). Olokundun, Moses, Iyiola, Ibidunni, Amaihian and Peter (2017) in their article said that an entrepreneurship education curriculum is a tool that can be utilised for entrepreneurial culture reproduction in a formalised way. It should also emphasize creative and critical independent thinking in the setting of entrepreneurship development. Essentially, the best description of an entrepreneurship curriculum should involve a reformation of entrepreneurial-related knowledge and experiences that would allow students to grow the capacity to employ intelligent control of more related knowledge and experiences.

Entrepreneurship education was introduced into the curriculum of tertiary institutions as an empowerment policy for youth self-employment, independence and poverty reduction. Students are exposed to the appropriate skills, attitude and knowledge with necessary practical work so that, after graduation, they would become self-employed and job creators. This will minimise the level of unemployment if not totally eliminate it and take Nigeria from a consumer to a producer nation.

In a study conducted by Olokundu, Ibidunni, Falola, Saau and Oyafunke (2018) it was reported that a large percentage of the lecturers' taking entrepreneurship education courses that were interviewed agreed that the entrepreneurship education curriculum contain aspects that inform and encourage students to develop critical thinking abilities and business idea generation competencies, which are both the hallmark of setting up a business venture.

Furthermore, Olokundu et al (2018) added that the efficacy of an entrepreneurship education curriculum in the context of entrepreneurial development does not depend only on the ability of the curriculum to motivate students to display critical thinking abilities and business ideas generation proficiency, as well as the development of a commitment by students towards the attainment of entrepreneurial objectives at graduation, but rather on a combination of all identified areas of entrepreneurial development. However, the lecturers emphasised that the practical activities, particularly in the classrooms, should entail brainstorming and problem-solving sessions using real-life situations. The lecturers also agreed that less emphasis on such practical activities may hinder the development of critical thinking abilities. One of the quotations from the respondents is; "The curriculum focuses on a good entrepreneurship programme, this has made many students develop relevant entrepreneurial skills and abilities. There are practical areas that engage students in critical thinking sessions, especially during class lectures and this has encouraged them to be more creative". A thorough implementation of an entrepreneurship education curriculum will assist students in Nigerian tertiary institutions to develop entrepreneurial capacities and the ability to be independent and self-employed.

2.3 Students' Perceptions and Entrepreneurship Education

Student perception towards entrepreneurship education is important because perception affects behaviours. When the perception of students towards a concept is positive the likely attitude towards the concept would be positive as well. Students' perception of an entrepreneurship programme shows the way students analyse and interpret the teaching and learning procedures that entrepreneurship education covers. In a study conducted by Okpe & Oleabhie, (2021) on "Students' Perception of Entrepreneurship Education and its Resultant Impact", it was reported that the attitude towards the practical aspect has not really shown the enthusiasm of students to acquire the requisite knowledge for future practice. The passion for good grades/results, paper qualification and the pursuit of white-collar jobs have made the desire for vocational skills acquisition a secondary issue. This position of students on entrepreneurship education can be judged based on their perception, which could be seen as negative. However, with more awareness and a well-packaged entrepreneurship programme, student interest in practical skills acquisition will be re-kindled and active participation will be enhanced. Thereby, accomplishing the purpose for which entrepreneurship education was introduced in our tertiary institution.

Abdul Rahim and Mukhtar (2021) conducted a study on the perception of students on entrepreneurship education in shaping entrepreneurial intentions, the result showed that there is a significant relationship between curriculum and entrepreneurial intentions, which means that entrepreneurship curriculum can impact students' intentions towards carrying out an entrepreneurial activity. Similarly, Abdul Karim (2016) in their study reported that the relationship between curriculum methods and entrepreneurial intentions among students was high. This reveals that the curriculum process in entrepreneurship education can motivate entrepreneurial intentions among students.

3.0 Methodology

The research design for the study is Descriptive (survey). The study population is made up of all the students at Yaba College of Technology. The sample is drawn through a simple random and stratified sampling procedure where 344 students of Yaba College of Technology running Full-Time and Part-Time Programme participated in the study. The instrument for data collection is a questionnaire titled “Students Perception of Inclusion of Entrepreneurship Education Programme in Tertiary Institutions Curriculum” which had a Cronbach Alpha reliability coefficient of 0.78. Data was collected from the respondents through Google form and the link was sent to the various students’ online class platforms for completion. Data collected from the study were analysed using frequency, percentages and t-test statistical tools on the SPSS version 20. All hypotheses were tested at a 0.05 significant level.

4.0 Presentation and Analyses of Responses

4.1 Socio-Demographic Analysis of Respondents

This section presents the analysis of respondents by socio-demographic distribution.

Table1: Classification of Respondents by Gender and Age

Gender	Frequency	Percentage	Age	Frequency	Percentage
Male	155	45.1	20 Yrs. below	69	20.1
Female	189	54.9	21 Yrs. Above	275	79.9
Total	344	100	Total	101	100

Table 1 reveals the classification of the respondents from the study by gender and age. Out of the total number of 344 students that participated in the study, 155 (45.1%) were male while 189 (54.9%) were females.

Respondents from the study were also classified by age and more of the students that participated in the study fall within the age range of 21 years and above which is 275 (79.9%) and 69 (20.1%) within the age range of 20 years and below.

Table 2: Classification of Respondents by Level of Study and Mode of Study

Level of Study	Frequency	Percentage	Mode of Study	Frequency	Percentage
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ND	210	61.0	FULL-TIME	199	57.8
HND	134	39.0	PART-TIME	145	42.2
Total	344	100	Total	101	100

Table 2 reveals the classification of the respondents from the study by Level of Study and Mode of Study. The students that participated in the study were at the National Diploma (ND) Level and Higher National Diploma (HND) Level. The respondents from the study at the ND Level were 210 (61.0%) while those at the HND Level were 134 (39.0%). Similarly, the distribution of respondents was also considered by Mode of Study, that is students running programmes in the Polytechnic were both on a Full-Time and Part-Time Basis. The distribution from the study revealed that more of the respondents from the study were running a Full-Time programme which is 199 (57.8%) of the students while 145 (42.2%) of them were on a Part-Time programme.

4.2 Analyses of Responses

This section presents the analysis of responses to the research question raised to guide the study and the hypotheses tested.

4.2.1 Research Question: What is the perception of students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions?

The instrument used for data collection from the study was a structured questionnaire titled “Questionnaire on students perception of inclusion of entrepreneurship education programme in tertiary institutions curriculum” that had two sections; the first section was on the biodata of the students and the second section contains statements to elicit the perception of students on the inclusion of entrepreneurship education into the curriculum of tertiary institutions. The statements contained in the second section had 20 items. The responses of the students were on a 4-point Likert Scale. A total number of 344 students participated in the study. Table 3 reveals the responses of the students that participated in the study.

Table 3: Analysis of Students Perception using Frequency, Percentage and Mean Score

S/NO	Statements	Mean Score	Agree & Strongly Agree		Disagree & Strongly Disagree	
			F	%	F	%
1	Entrepreneurship education gives a better understanding of business which I find very interesting.	3.60	342	99.4	2	0.6
2	I cannot see the relevance of entrepreneurship education to the programme am undertaking and to my future.	1.68	29	6.4	315	91.6
3	My exposure to entrepreneurship education has given me lots of inspiration and I will want to be an entrepreneur.	3.48	338	98.2	6	1.8
4	The method/strategy of the presentation of the course motivates me to be creative and innovative.	3.46	335	97.3	9	2.7
5	Entrepreneurship education focuses on setting up an enterprise which involves risk-taking which scares me.	2.29	114	33.2	230	66.8
6	The thought of having a business of my own which is the focus of the entrepreneurship education programme is very inspiring.	3.56	343	99.7	1	0.3
7	The course content of entrepreneurship education is very enriching, and it has motivated me to be an entrepreneur.	3.43	337	97.9	7	2.1
8	Entrepreneurship education course is boring.	2.5	109	31.7	232	68.3
9	The business projects carried out while taking the course is very useful for a startup.	3.33	321	93.3	23	6.7
10	The knowledge and skills I was exposed to while taking the course are sufficient for me to set up a business	3.21	309	89.8	35	10.2
11	I didn't have the intention to be self-employed until my exposure to entrepreneurship education course.	2.74	212	61.6	132	38.4
12	I found it difficult to understand/be carried along while taking entrepreneurship education courses.	2.01	60	17.4	216	82.6
13	Entrepreneurship education has made me set business goals and objectives which I am determined to achieve.	3.34	332	96.5	12	3.5
14	Entrepreneurship education is a tool that can be used to make the world a better place if it is put into practice.	3.59	339	98.5	5	1.5

15	With the knowledge and skill I acquired from the entrepreneurship education course, I will be able to position myself in society to solve problems and meet people's needs.	3.42	338	98.2	6	1.8
16	Through the entrepreneurship education course, I have realized that self-employment has many advantages over paid employment.	3.50	185	53.8	159	46.2
17	Through entrepreneurship education, new products, new technologies and new business processes can be developed to solve human problems.	3.50	339	98.5	5	1.5
18	Entrepreneurship education is all about learning to conduct business which is a very worthwhile investment.	3.39	332	96.5	12	3.5
19	Entrepreneurship education gives room for collaboration with others which I don't like.	2.04	60	17.4	284	82.6
20	Through the knowledge and skills I received, I am capable of scouting my environment for ideas and opportunities to set up my own enterprise.	3.50	341	99.4	3	0.6

A thorough look at the statements used to elicit the perception of students towards entrepreneurship education revealed positive responses from a large number of the students on all the items contained in the questionnaire. Furthermore, the result revealed that for the positively worded statements, the level of agreement of the respondents was very high as shown by the large number of students that agree, the high percentage as well as the high mean scores. For example, for statements numbers 1, 3, 6, 17 and 20 an average of 340 (99%) students agreed to these and the average mean score was 3.53. Similarly, the result revealed that for the negatively worded statements, the level of disagreement of the respondents was significant as shown by the large number of students that disagreed, the high percentage as well as the low mean scores. The negatively worded statements were numbers 2, 5, 8, 12 and 19. The average number of students that disagreed with the statements was 255 (78.3%) and the average mean score was 2.0 which is low.

4.2.2 Test of Hypotheses

The analyses of responses are presented in line with the three hypotheses formulated for the study.

Hypothesis 1: The perception of male students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from that of female students.

Table 3: t-test analysis of students' perception of entrepreneurship education by gender

Gender	N	Mean	DF	t-value	Sig.
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Student Perception	Male	155	81.3	342	1.47	.142
	Female	189	82.4	317.12	1.46	.145

Table 3 reveals the t-value for males as 1.47 with a degree of freedom of 342 and a significant value of .142 while for the females, the t-value is 1.46 with a degree of freedom of 317.12 and a significant value of .145. These significant values are above the 0.05 significant level set for Alpha, therefore the null hypothesis is retained; hence there is no significant gender difference in the student's perception towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions.

Hypothesis 2: The perception of National Diploma (ND) students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from that of Higher National Diploma (HND) students.

Table 4: t-test analysis of students' perception of entrepreneurship education by level of study

	Level of Study	N	Mean	DF	t-value	Sig.
Student Perception	ND	210	81.5	342	1.29	.198
	HND	134	82.5	299.57	1.31	.190

Table 4 reveals the t-value for ND students as 1.29 with a degree of freedom of 342 and a significant value of .198 while for the HND students', the t-value is 1.31 with a degree of freedom of 299.57 and a significant value of .190. These significant values are above the 0.05 significant level set for Alpha, therefore the null hypothesis is retained; hence the perception of National Diploma (ND) students towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from that of Higher National Diploma (HND) students.

Hypothesis 3: The perception of students' running Full-Time programme towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from Students' running Part-Time Programme

Table 5: t-test analysis of students' perception of entrepreneurship education by mode of study

	Mode of Study	N	Mean	DF	t-value	Sig.
Student Perception	Full-Time (FT)	199	81.9	342	.018	.986
	Part-Time (PT)	145	81.9	279.47	.017	.986

Table 5 reveals the t-value for FT students as .018 with a degree of freedom of 342 and a significant value of .986 while for the PT students, the t-value is .017 with a degree of freedom

of 279.47 and a significant value of .986. These significant values are above the 0.05 significant level set for Alpha, therefore the null hypothesis is retained; the perception of students' running Full Time programme towards the inclusion of entrepreneurship education programme in the curriculum of tertiary institutions is not significantly different from students' running Part-Time Programme.

5.0 Discussion of Findings

The result from the research question raised to guide the study revealed that the level of students' perception towards the inclusion of entrepreneurship education into the curriculum was high. The statements contained in the questionnaire, revealed that 340 (99%) out of 344 students that participated in the study agreed with the statements used to elicit students' perceptions and 255 (78.3%) that participated in the study disagreed with the statements used to elicit students' perception. Furthermore, looking at the mean score of the students on the ratings of the statements on a 4-point Likert scale, it also revealed a value of 3.53 out of 4 for respondents that agreed with the statements contained in the questionnaire while a value of 2.0 was recorded for respondents that disagreed with the statements contained in the questionnaire. The implication of this result is that students of the tertiary institution have a positive perception towards the inclusion of entrepreneurship education into the school curriculum. Judging from some of the statements used to elicit students' perceptions, for example, the statement "My exposure to entrepreneurship education has given me lots of inspiration and I want to be an entrepreneur"; out of the 344 participants of the study, 338 (98.2%) responded positively to this statement. Similarly, the statement "With the knowledge and skill I acquired from entrepreneurship education course I will be able to position myself in the society to solve problems; out of the 344 participants' of the study, 338 (98.2%) responded positively to this statement.

The study findings support the study conducted by Sanusi, Olaleye and Atjonen (2017) on the Assessment of Innovative Entrepreneurship Education in Nigerian Tertiary Institutions. It was reported that the students who were respondents of the study acknowledged that entrepreneurship education would improve their career opportunities and impact them with creative and transferring skills. Further results from the study also revealed that the students rated the course as greatly impactful and affirm that entrepreneurship education effect as innovation is noticeable. The students stated that they produce, sell and give an account of the proceeds from the sale which is a requirement for the course completion. This method helps to equip the students right from the school environment with transferable skills in readiness for after-school life. With their observations, they conclude it is a course every institution and irrespective of the programme of study must adopt because of the noticeable impact they experience. In addition, most of the students interviewed stated that entrepreneurship education motivates them to be independent and become entrepreneurs even before leaving school.

Similarly, in a study conducted by Iweh, Yukongdi, & Bhujel, (2021) on the topic "An empirical study of entrepreneurship education program in Nigerian Public Universities", the result of the study revealed that respondents admitted during interviews that Entrepreneurship Education Programme (EEP) is relevant and have impacted on them by increasing their awareness, attitudes, entrepreneurial skills and knowledge as well as preference for self-employment. EEP provide a wider range of skills for students to be successful in their pursuit of self-employment. Furthermore, 5% of the students' sample are engaged in small businesses and 24% intend to practice entrepreneurship after leaving school, 63% clearly specified their preference for employment to perfect their skills, acquire sufficient finance, gain experience and develop a stable social relationship. This suggests a greater likelihood of future business

owners. In addition, approximately 80% of the students were thrilled about the programme and rated it academically useful, this implies the program will create a positive future for young graduates. The program has changed students' perceptions, mind-sets, thinking and prompted a passion for self-employment.

Further findings from the study revealed that there was no significant difference in the perception of students towards entrepreneurship education based on gender, level of study and mode of study. This assertion is based on the insignificant t-test and Alpha values obtained from the statistical analysis carried out on the data collected from the study, which is presented in tables 3, 4 and 5. The implication of these results is that both male and female students have a highly positive perception of the inclusion of entrepreneurship education in the school curriculum and both gender were capable of benefitting maximally from the programme. Similarly, students at ND and HND levels as well as students running Full-Time and Part-Time programme had a highly positive perception towards the inclusion of entrepreneurship education in the school curriculum and would both benefit maximally from the programme.

5.1 Conclusion

The focus of the study was the inclusion of entrepreneurship education programme in tertiary institutions curriculum from students' perspective. The result from the study revealed that the level of perception of students towards the inclusion of the programme in the curriculum of tertiary institutions was very high which was reflected by the significant percentage values from the statistical analysis carried out on the data collected from the study. Further statistical analysis also revealed that there was no significant difference in the perception of students towards the programme based on gender, mode of study and level of study. From the findings above it is concluded that the inclusion of entrepreneurship education in the tertiary institution curriculum is relevant and appreciated by students who were exposed to the programme.

5.2 Recommendations

Looking at the merits from the student's perspective of the inclusion of entrepreneurship education programme into the tertiary institution curriculum, it is therefore recommended:

1. That more economic resources should be channelled into teaching entrepreneurship education in all tertiary institutions.
2. That the curriculum on entrepreneurship education should be reviewed regularly for improvements and updates because the education is about creativity, innovation and the display of ingenuity, which the students need to embrace for the economic growth and development of the nation at large.
3. Regular capacity development should be given to lecturers taking entrepreneurship education courses so as to teach effectively since the curriculum would be reviewed and updated regularly.

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BUSINESS ENVIRONMENT AND SURVIVAL OF SMALL AND MEDIUM SCALE ENTERPRISES IN RIVERS STATE.

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Abstract

This study is aimed at investigating the relationship between business environment and survival of Small and Medium Scale enterprises in Rivers State using technological environment, economic environment and socio-cultural environment, but the survival and the performance of these small and medium scale business have been threatened by the environment which these businesses operate, thereby influencing the SMEs performance, survival, productivity and operational efficiency as indicators. The study employed descriptive survey research design and primary data with the use of questionnaires for generating information for analysis. The population comprised of 1016 registered SMEs in Rivers State of which sample size of 287 was determined through Taro Yamen formula. Two copies of questionnaire were distributed to each 287 SMEs. Out of a total of five hundred and seventy-four (574) copies of questionnaires distributed, four hundred and sixty-six (466) copies were found fit for analysis. The Spearman's Rank Correlation Coefficient tool was adopted with the aid of Statistical Package for Social Sciences (SPSS version 23.0). The findings of the study showed that business environment significantly relates with survival of SMEs in Rivers State. From the results of the study, it was concluded that business environment has significant effect in the survival of SMEs in Rivers State. The study therefore recommended that; SMEs should continue to watch out on favourable economic policies made by the State Government to cushion economic hardship in the State. SMEs should from time to time scan the environment through business intelligence system, so that they will not be cut out on the happening within the business environment. SMEs must develop an effective management and economic information system that will help her discover and respond to rapid changes in its environment (most especially the economic environment).

Keywords: *Business Environment, Small and Medium Scale Business, Survival, Operational Efficiency.*

Introduction

The role of Small and Medium Scale Enterprises (SMEs) in the national economy cannot be underestimated as they play important role in the national economy (Taiwo, Ayodeji and Yusuf, 2021). SMEs are key players in the economy and the wider eco-system of firms. However, in the developed economy particularly the Organization for Economic Co-operation and Development countries (OECD), SMEs are the predominant forms of enterprise, accounting for approximately 99% of all firms. They provide the main source of employment, accounting for about 70% of jobs on the average, and are major contributors to value creation, generating between 50% and 60% of value added on average (OECD, 2016). In emerging economies, SMEs contribute up to 45% of total employment and 33% of GDP. SMEs contribute more than half of employment and GDP in most countries irrespective of income levels when taking the contribution of businesses into account (International Finance Corporation, 2010). Furthermore, Ridwan and Ina (2020) states that, SMEs constitute an important part in economic development of any given country and contribute considerably to regional economic development by creating new jobs, providing investment opportunities, and forming the economic capital and potential required for sustainable economic growth.

Business is an organization or enterprising entity engaged in commercial, industrial or professional activities. Most specifically business is the sum total of the organized efforts by which people engaged in commerce and industry, provide the goods and services needed to uphold or get better the standard of living and quality of life to which individual may hope for

(Davis and Powell, 2012). In management, the word “Environment” does not necessarily mean physical surroundings, but is used to describe all those forces that bear upon the individual organization. Business environment is used to mean anything, which affects the business organization. It affects the decisions, strategies, process and performance of the business. The environment is consisting of underlying forces which are further than the control of business (STEP) Social, technological, economical, legal and political. It provides opportunities or poses threats to the organization. Modern business today is dynamic, if there is any word which can best describe today’s business, it is the most dynamic change that has been exhibited by competitive pressure ((Davis and Powell, 2012). Competitors have been applying one strategy or the other to adapt to the dynamic and unpredictable nature of the business environment.

The business environment consists of internal and external environment. The external environment consists of the political, economic, social, competitors, technological, environmental, and legislative, as well as industry forces while the internal factors are within the control of an organization and they are organizational culture, organizational culture, leadership style, workers union, employees’ behavior among others. Johnson and Scholes (2007) argue that understanding more of these forces is critical and enables manufacturing firms evaluate its competitive position vis-a-vis its strategy, internal resource capabilities and stakeholder acceptability.

Business environment is marked by different dynamic features such as global competition, information technology, quality service revolution and corporate social responsibility which compel managers to rethink and reshape their approach to various operational responsibilities. Due to this paradigm shift, new firms are emerging that are more responsive to their external environments (Luthans, 2019). Furthermore, Ibidunni and Ogundele (2013) classified the nature of the business environment as stable, dynamic and unstable and this habitually assists a business enterprise in selecting suitable strategies. Pearce and Robinson (2011) states that an enterprise’s external environment was first recognized by open systems theorists who observed that, organizations operate not as self-sustained isolated units but in continuous and inevitable interaction with the large system surrounding them and within which they exist. The external environment is that system which consists of factors that affect business enterprises from outside such as economic, socio-cultural and technology and these environmental factors are beyond the control of the enterprises (Alkali and Abu, 2012; Pearce and Robinson, 2011).

The World Bank is of the view that enhancement in enabling environment leads to greater levels of investment by the small business establishments, more wealth, job creation and poverty alleviation (Adeoye, 2012). The relationship between business and its environment is one of mutuality, that is, the environment exerts pressure on the business while the business, in turn influences some aspects of its environment. For this reason, SMEs should consistently scan their business environment for better performance attainment. The business environment is continuously changing, as it consists of a number of unpredictable forces which surround the organization. The recent rise in technologies has brought new challenges for manufacturing firms, industries and countries coupled with the competitive strategies in the corporate world, scholars have observed that it is no longer the fittest firm with long-term strategic plan that last longer, but firms with superior level of disruptive innovation idea in the industry (Bayo and Red-well, 2020).

However, Red-well and Hamilton (2020) postulate that the changing business environment has amplified the practices of dynamic capabilities, flexibility, strategic agile practices, resource fluidity, speed and adaptability. The SMEs is highly influenced by economic factors, including: exchange rates fluctuations, inflation rate, interest rate, economic recession, among other

matters. The environment does not just pose threats to an organization; it can also offer tremendous opportunities, such as the chance to exploit potential market niches in which to sell its products and services (Aamodt, 2016). The business environment, therefore, includes all those factors which, while external to the organization, may provide it with opportunities, while at the same time posing threats and challenges. Although the idea of a business environment may at first seem fairly simple, it includes a number of different levels. Many different factors operate at each level, the most important being socio-cultural, economic, and technological variables, as well as raw material suppliers, competitors, and, finally, the government (Thornton, Ribeiro-Soriano, & Urbano, 2011)

Wetherly and Otter (2020) described the socio-cultural environment as factors consisting of everything that is not incorporated within the economy or political system. Socio-cultural environment is important because it determines the product, service and the level of conduct that the society is likely to get. It allows a cordial relationship between management, workers and their customers. Technology forces refer to the rate of scientific changes that have potentially wide-ranging effects on society. According to McNamara and Watson (2005), technology can be defined as the aggregate of means such as knowledge, methods, materials, and instruments used to achieve practical results in order for the enterprise to establish work methods, work pattern and information structures. Technological factor have rendered some SMEs uncompetitive and unable to meet the needs of customers. However, entrepreneurs in Small and Medium Scale Enterprises need to recognize the nature of technology change, and the need to go with the flow to have competitive advantage in order to improve, change or implement new technological processes to meet customer wants and needs.

Theoretical/ Conceptual Framework

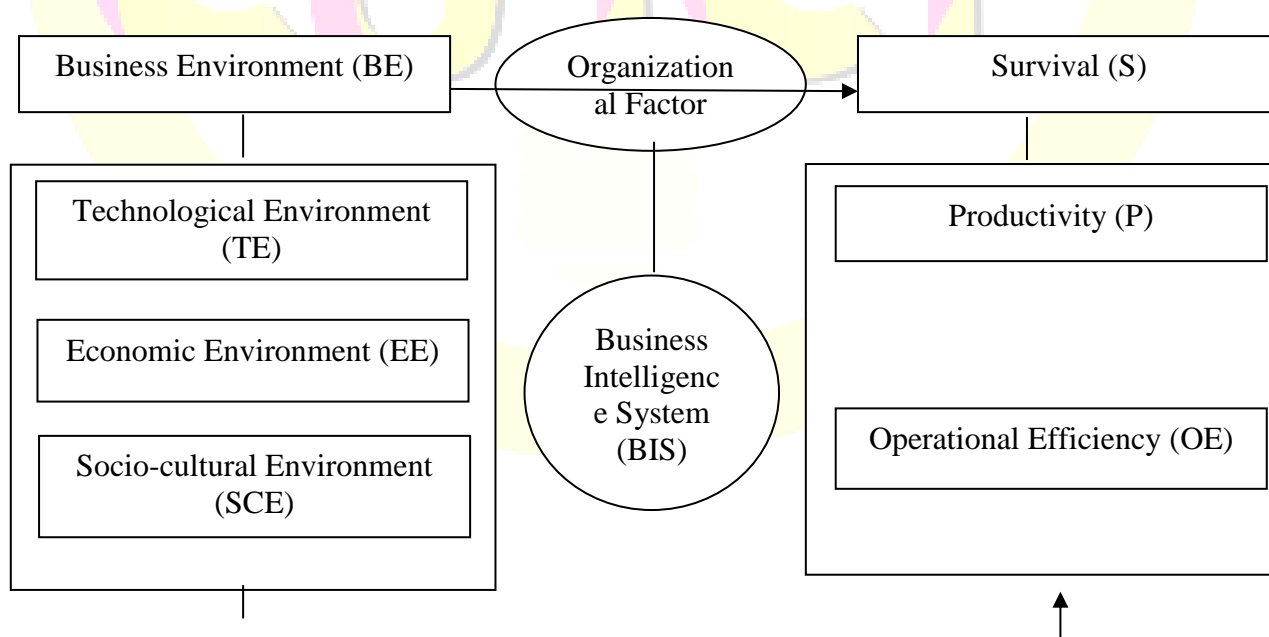


Figure 2.1: Conceptual Framework on business environment and survival of SMEs in Rivers State.

Source: Adapted from Akpoviro and Owotutu, (2018); Jawad et al. (2019); Adefolaju, (2013)

The Concept of SMEs

Small Scale Businesses, Small Scale Industries and Small-Scale Entrepreneurship are used interchangeably to mean Small and Medium Scale Enterprise. In Nigeria and worldwide, there seems to be no specific definition of small business. Different authors, scholars and schools have different ideas as to the differences in capital outlay, number of employees, sales turnover, fixed capital investment, available plant and machinery, market share and the level of development; these features equally vary from one country to the other (Zhiri, 2017).

In Nigeria, for example; the Third National Development Plan defined a small-scale business as a manufacturing establishment employing less than ten (10) people, or whose investment in machinery and equipment does not exceed Six Hundred Thousand Naira (N600,000) only (Bowale and Ilesanmi, 2014). Similarly, Central Bank of Nigeria (CBN) in its credit guidelines, classified small scale business as those business with an annual income/asset of less than half a Million Naira (N500,000) (Bowale and Ilesanmi, 2014). Also, the Federal Government Small Scale Industry Development Plan of 1980 defined a small-scale business in Nigeria as any manufacturing process or service industry, with a capital not exceeding One Hundred and Fifty Thousand Naira (N150, 000) only in manufacturing and equipment alone. In the same vein, the Small-Scale Industries Association of Nigeria (1973) defined small scale business as those having investment (i.e. capital, land, building and equipment of up to Sixty Thousand Naira (N60, 000) only and employing not more than fifty (50) persons. The Federal Ministry of Industries defined it as those enterprises that cost no more than Five Hundred Thousand Naira (N500, 000) only, including working capital to set up. In addition, the Centre for Management Development (CMD) definition of small-scale industry in the policy proposal submitted to the federal government in 1982 defined small scale industry as, "a manufacturing, processing or servicing industry involved in a factory of production type of operation, employing up to fifty (50) full-time workers" (Bowale and Ilesanmi, 2014). In the United States, the Small Business Administration (SBA) defines a small business as one that is independently owned and operated and is not dominant in its field, and meets employment or sales standard developed by the agency (White and Chacaltana, 2002). Agu (2006) defined SME as a business which is owned and led by one or a few persons, with direct owner(s) influence in decision making, and having a relatively small share of the market and relatively low capital requirement.

The earliest manifestations of SMEs in advanced countries were cottage industries that later transformed into industrial complexes and technological factories. SMEs today account for the bulk of output in most countries. It is also a proven job creator; the share of SMEs in global productivity is over 30% higher in some countries, but generally growing. According to SMEDAN/NBS (2013), SME is define as a classification based on dual criteria, employment and assets (excluding land and buildings):

- i. Small Enterprises are those enterprises whose total assets (excluding land and building) are above Five Million Naira (N5m) but not exceeding Fifty Million Naira (N50m) with a total workforce of above ten (10), but not exceeding forty-nine (49) employees.
- ii. Medium Enterprises are those enterprises with total assets (excluding land and building) of above Fifty Million Naira (N50m), but not exceeding Five Hundred Million Naira (N500m) with a total work force of between fifty (50) and one hundred and ninety-nine (199) employees.

If there exists a conflict on classification between employment and assets criteria (for example, if an enterprise has assets worth Seven Million Naira (N7m) but employs seven (7) persons), the employment-based classification will take precedence and the enterprise be regarded as micro. This study adopted the definition of SMEs by SMEDAN (2013).

Productivity

Productivity is commonly defined as a ratio between the output volume and the volume of inputs. In other words, it measures how efficiently production inputs, such as labor and capital, are being used in an economy to produce a given level of output. Productivity is considered a key source of economic growth and competitiveness and, as such, is basic statistical information for many international comparisons and country performance assessments (Oyeranti, 2012). For example, productivity data are used to investigate the impact of product and labor market regulations on economic performance. Productivity growth constitutes an important element for modelling the productive capacity of economies. It also allows analysts to determine capacity utilization, which in turn allows one to gauge the position of economies in the business cycle and to forecast economic growth (Vilasini et al., 2012). Productivity is an average measure of the efficiency of production. It can be expressed as the ratio of output to inputs used in the production process, i.e., output per unit of input. When all outputs and inputs are included in the productivity measure it is called total productivity. Outputs and inputs are defined in the total productivity measure as their economic values. The value of outputs minus the value of inputs is a measure of the income generated in a production process. It is a measure of total efficiency of a production process and as such the objective to be maximized in production process. Productivity is defined as a measure of quantifying the output against the amount of input. It expresses the relationship between the quantity of goods and services produced (output) and the quantity of labor, capital, land, energy, and other resources to produce it (input) (Zandin, 2001). The only meaningful measure of industrial competitiveness is productivity (Vilasini et al, 2012). It is a process that receives various inputs and transforms it to the desired outputs. Productivity is a crucial factor in production performance of firms and nations. Increasing national productivity can raise living standards because more real income improves people's ability to purchase goods and services, enjoy leisure, improve housing, education and contribute to social and environmental programs. Productivity growth also helps businesses to be more profitable.

Operational Efficiency

Operational efficiency is defined as the ratio between the input to run a business operation and the output gained from the business. Inputs in this sense will include; money, people and time or effort. While output would be; new customers, innovation, quality, speed and agility etc. It is also defined by Leachman (1995) as “the capability of an enterprise to deliver products or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its product, service and support”. Operational efficiency is usually achieved by streamlining a company's core processes in order to meet up with market uncertainties. Improving efficiency has become a key objective for manufacturing firms in Nigeria and other developing countries. Oyeranti (2012) outlined its roles in economic growth and development all over the world. Several Authors have shown that higher operational efficiency among manufacturing firms is a sure means of boosting economic growth, enhancing firm growth and increasing standard of living of the people through large supplies of both consumer and capital goods at a lower costs and prices (Alao 2010).

Efficiency (which is defined as using minimal resources to achieve a target) has played significant roles in consolidating economies of both emerging and middle-income countries through higher real earnings, improvements in working conditions and improved returns on asset. Nto and Mbanasor (2011) observed that operational efficiency will equally contribute to the competitiveness of manufacturing firms in both domestic and foreign market which is what is required to put Nigeria back on the path of economic recovery and growth. This is imperative following the prolonged economic recession occasioned by the collapse of the world oil market from the early 1980 as well as global financial crisis that rocked all the manufacturing firms since 2007 (Oyeranti, 2012). Generally, it minimizes loss and maximizes capability of resources in order to maintain quality product and service to customer. It discovers loss-able processes and resources that drain company's profit. It helps in design of new work processes that improve quality and production. Operational efficiency has a direct impact on profit margin of a company. Operational Efficiency is a critical drive for business Excellency (Tulsian, 2013). It is systematic management of resource of the company to achieve maximum results.

Operating efficiently means implementing system that is appropriate and cost effective. These decisions will have long term effect on quality and profitability. To remain competitive, a company must boost operational efficiency wherever possible. Thus, Operational efficiency is defined as the ratio between the input to run a business operation and output gained from the business. In the above definition, inputs include money, people and time and output includes money, revenue and margin. Vig (2010) enumerated the objective of operational efficiency as follows: they specify a comprehensible and quantifiable outcome of a business operation or process to achieve over a given period of time. There are several factors influencing the operational objectives both interior and exterior. The internal factor constitutes issues related to human resource and market.

Theoretical Literature

Contingency Theory

Contingency theory is a theory developed by Lawrence and Lorsch (1967). Contingency theory postulates that there is no single best way for business enterprises to perform. Situations will create different environmental requirements for owners/managers of an enterprise. The solution to a managerial situation depends on the environmental factors that influence on the situation. Fiedler claims that if performance is to be improved, we must cope not only with the environment but also with the situational factors which influence performance. Performance can be improved either by the environment's fit to the situation or the situation's fit to the environment. For example, the theory relates to the independent variables in the logic of economic environmental factors, socio-cultural environmental factors and technological factors which the management of any SMEs can adopt for the business while the dependent variable relates to performance which is the result of the business environment adopted.

Economic, socio-cultural and technological environment which are the independent variables considered for the study are appropriate depending on the environment and the situation the organization finds itself. Though, there is need for the owner/manager to identify and comprehend the situation before choosing the suitable business environment. The adoption of economic, socio-cultural and technology environment has the capacity to enhance or decrease the performance of the SMEs and their result shall define the level of performance of the business. If the right environmental factors are adopted, SMEs performance will improve, if otherwise, performance of the organization will decrease. This study attempted to study the impact of external business environment (economic, socio-cultural, technology) on SMEs

performance. External business environment stands as the independent variables of the study while SMEs performance as the dependent variable.

2.3 Empirical Review

Abdissa and Fitwi's (2019) study recognized that, exterior and interior factors affect overall productivity of MSEs and their existence could improve the everyday operation of micro and small firms' productivity. The study indicates variables such as political, legal, financial, marketing, working premises, infrastructural, profitability seeking, persistence, commitment to the work, demand for affectivity and quality, goal setting, hazard taking, data seeking, and self-confidence are positively affecting the productivity of MSEs (profit) in the study area. Similarly, for capital, variables such as political, legal, financial, marketing, working premises, technological, profitability seeking, persistence, commitment to the work, demand for effectively and quality, risk taking, statistics seeking, and self-confidence positively affected the overall productivity of MSEs (capital) and significantly affect the productivity of MSEs.

Obasan (2014) examined the impact of business environment on the survival of small-scale businesses in Nigeria and found a significant relationship between business environment and the survival of small-scale businesses. The study concluded that, inflationary trends, competition, inadequate infrastructural facilities and poor government policies, changing consumer behavior are the major banes of small-scale business survival in Nigeria. Meanwhile, the major deficiency identified in the study is the methodological gap wherein the study fails to explain in detail the adequacy of the study sample size due to inadequate information about the study's actual population.

Oginni and Adesanya (2013) investigated business environmental factors and its implication on the survival of business organizations mostly in the manufacturing companies of Lagos metropolis among 550 respondents using random and purposive sampling and found that, one of the greatest challenges of organizational survival especially in the manufacturing industry is infrastructural facilities. They also identified electricity as one of the most important factors in the survival and growth of business organization from which its poor supply has constantly led to the relocation of manufacturing industries to neighboring countries. In general, the study found a significant relationship between business environmental factors and the survival and growth of business organizations. The major deficiency of the study is its inability to provide a strong justification for the combined use of random and purposive sampling techniques because the adoption of non-probability sampling approach in a descriptive survey has come under criticism in recent times.

Adeoye and Elegunde (2019) investigated the impact of external business environment on organizational productivity in the food and beverage industry in Nigeria and found that, macro environmental forces such as political, economic, socio-cultural and technological environment have a great and significant impact on organizational productivity. The study further concluded that organizational effectiveness, efficiency and increased sales can only be guaranteed through proper and continuous scanning of macro environmental forces and provision of enabling environment for the smooth running of businesses in Nigeria.

Essien's (2018) study on Nigerian business environment and growth constraints of micro and small-scale manufacturing industries in Akwa Ibom State, Nigeria, considered infrastructural facilities, high interest rate on loan, absence of monetary units in bank along with absence of credit facilities as the bane of MSMEs and revealed that, infrastructural facilities are a dominant factor among equals that hinders the growth of MSMEs in Nigeria.

Gado (2015) found that, successful productivity of business organizations lies in the provision of adequate infrastructural facilities such as water, road, electricity, transport and communication due to their direct bearing on day-to-day productivity of business organizations and further asserts that, organizational survival is predicated on government ability to stimulate economic growth through efficient management of foreign exchange, inflation and interest rate to encourage the ease of doing business

Dogara (2015) assessed impact of the Nigerian business environment on company performance: a case of twenty (20) most capitalized companies in Nigeria. The study shows the empirical standing of theoretical convergence with respect to the twenty (20) most capitalized companies in Nigeria. Using the Ordinary Least Square and simple multiple correlation methods, the study showed the impact of the Nigerian business environment on the performance of these companies. Collectively, the variables of the environment have significant and positive impact on the companies' performance. Government expenditure and inflation have positive impact while exchange rate and interest rate have negative impact but overall, there was a positive and significant impact. The study recommended that, Government should pay more attention to capital expenditure on vital sectors like infrastructures and education while maintaining fiscal stability, the private sector should partner with Government in infrastructural investment instead of each company providing its own infrastructures. The study failed to study small and medium enterprises which have the major contribution to Nigeria economy. This study will fill the gap by studying the small and medium enterprises.

None of this was carried out combining business environment and survival SMEs in Rivers State using technological environment, economic environment and socio-cultural as dimensions of business environment and productivity and operational efficiency as measures of survival and the researcher wish to fill this gap. Based on this backdrop, the researcher seeks to investigate the influence of business environments on survival of SMEs in Rivers State.

METHODOLOGY

This study adopted the descriptive survey design approach which is a dimension of the quasi-experimental design. A survey research design was adopted because the variables which the study adopted were outside and not within the control of the researcher. The design helped the researcher to examine the relationship between the business environment and survival of SMEs in Rivers State. The study used both primary and secondary data. The primary data to be used for the study was obtained using structured questionnaire with an open ended and multiple-choice format. The questionnaire used for this study was divided into two segments. The first segment dealt with demographics of the respondents. The second segment sought responses regarding the respondents' ideas as it relates to the independent and dependent variables. The secondary data for this study was obtained from relevant materials from the internet, journals and books.

Two hundred and eighty-seven (287) (see appendix 2) serves as the sample size for this study. This study adopted both probability and non-probability sampling technique. Purposive sampling techniques was used in selecting two hundred and eighty-seven (287) SMEs from the possible one thousand and sixteen (1016) given each firm's equal chance of being chosen. Two (2) copies of questionnaires were administered to each two hundred and eighty-seven (287) to give us a total of five hundred and seventy-four (574) respondents and filled by the directors/owners, general managers, account/finance officer etc. These selected respondents are drawn purposively and conveniently. This study adopted purposive and convenient sample

techniques in selecting respondents based on their in-depth knowledge about the phenomenon commitment and willingness

For this study, the target population is all the SMEs in Rivers State. The study focused on small and medium scales enterprises operating in Rivers State. According to Nigerian Directory (Yellowpage, Rivers State) (2022), they are one thousand and sixteen (1016) registered small and medium scale enterprises in Rivers State (see appendix). Directors/owners, managers and account managers etc of the one thousand and sixteen (1016) registered small and medium scale enterprises serves as our accessible population.

Data Presentation and Analysis

Univariate Analysis of Business Environment and Survival

4.3.1. Univariate Analysis of Business Environment

Table 4.7: Frequencies on Item of Technological Environment Responses

S/ N	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)	Total	Mean	Remark
TE 1	Information technology has helped build our firm's online presence	196 42.1%	188 40.3%	38 8.2%	35 7.5%	9 1.9%	466 100%	4.1	Agreed
		980	752	114	76	9	1931		
TE 2	Our firm is often to be first to try out new and technologies	239 52.3%	172 36.9%	24 5.2%	22 4.7%	9 1.9%	466 100%	4.3	Agreed
		1195	688	72	44	9	2008		
TE 3	Our firm frequently improves internal processes such as speed, reliability, and information management	167 35.8%	233 50.0%	33 7.1%	25 5.4%	8 1.7%	466 100%	4.1	Agreed
		835	932	99	50	8	1924		
TE 4	Our firm's policy is to adopt up-to-date technologies	244 52.4%	219 47.0%	0 0%	3 0.6%	0 0%	466 100%	4.5	Agreed
		1220	876	0	6	0	2102		
Total		846	812	95	85	26	1864	4.3	Agreed
		4230	3248	285	170	26	7959		

Table 4.7 showed that the respondents agreed on each of the four items of technological environment (mean scores greater than 3.0 mean criterion). The grand mean is equally greater than 3.0 grand mean. This revealed that the overall perception of the small and medium scale

enterprises operators about technological environment was high and in-turn affects the business survival of the nation. It further indicates that technological environment has a positive effect on survival.

Table 4.8: Frequencies on Item of Economic Environment Responses

S/ N	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)	Total	Mean	Remark
EE 1	Economic recession in the country affects our access to credit.	191 41.0 %	197 42.2 %	46 9.9 %	23 4.9 %	9 1.9 %	466 100%	4.2	Agreed
			788	138	46	9	1936		
EE 2	High inflation (general rise in price) rate indicates economic recession.	287 61.6 %	179 38.4 %	0 0 %	0 0 %	0 0 %	466 100%	4.6	Agreed
			716	0	0	0	2151		
			1435						
EE 3	You know the effect of inflation on the loans our firm borrow for the business growth	138 29.6 %	130 27.9 %	85 18.2 %	43 9.2 %	70 15.1 %	466 100%	3.5	Agreed
			520	255	86	70	1612		
			690						
EE 4	Reduction in workers' wages indicates recession caused by exchange rate	170 36.5 %	169 36.2 %	67 14.4 %	49 10.5 %	11 2.4 %	466 100%	3.9	Agreed
			676	201	98	11	1836		
			850						
Total		786	675	198	115	90	1864	4.0	Agreed
		3930	2700	594	230	90	7544		

Table 4.8 showed that the respondents agreed on each of the four statement items of economic environment (mean scores greater than 3.0). The grand mean is equally greater than 3.0. The various means on each item statements are greater than the mean criterion of 3.0; indicating that economic environment has a positive effect on SMEs' survival.

Table 4.9: Frequencies on Item of Socio-Cultural Environment Responses

S/N	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)	Total	Mean	Remark
SCE 1	SMEs owners/Managers allow employees time for religious activities	167 35.8 %	233 50.0 %	33 7.1 %	25 5.4 %	8 1.7 %	466 100%	4.1	Agreed
			835	99	50	8	1924		

		932								
SCE 2	SMEs owners/manager employ individuals with the same cultural background	191	197	46	23	9	466	4.2	Agreed	
		41.0%	42.2%	9.9%	4.9%	1.9%	100%			
		955	788	138	46	9	1936			
SCE 3	Owners/Managers of SMEs give priorities to employees during religious celebrations	239	172	24	22	9	466	4.3	Agreed	
		52.3%	36.9%	5.2%	4.7%	1.9%	100%			
		1195	688	72	44	9	2008			
SCE 4	Owners/Managers make it mandatory for employees to come to work on public holidays	259	207	0	0	0	466	4.5	Agreed	
		51.9%	42.9%	0%	0%	0%	100%			
		200	136	0	0	0	344			
	Total	856	809	103	70	26	1864	4.3	Agreed	
		4280	3236	309	140	26	7991			

The result in Table 4.9 showed the frequency, percentages, and mean scores of the respondents on four statement items of socio-cultural environment. These means that the respondents agreed on each of the four (4) items with mean scores greater than the mean criterion (3.0). The grand weighted mean was equally greater than 3.0. It further indicates that socio-cultural environment has a positive effect on survival.

4.3.2. Univariate Analysis of Survival

Table 4.10: Frequencies on Item of Productivity Responses

S/N	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)	Total	Mean	Remark
P1	I am very effective when doing my job	199	221	0	25	21	466	4.2	Agreed
		42.7%	47.4%	0%	5.4%	4.5%	100%		
		995	884	0	50	21	1950		
P2.	I work very efficiently	222	198	2	26	18	466	4.2	Agreed
		47.6%	42.5%	0.4%	5.6%	3.9%	100%		
		1110	792	6	52	18	1978		

P3.	We ensure profit maximization	165	162	28	62	49	466	3.7	Agreed
		35.4%	34.8%	6.0%	13.3%	10.5%	100%		
		825	648	84	124	49	1730		
P4.	We have zero debt profile	196	188	38	35	9	466	4.1	Agreed
		42.1%	40.3%	8.2%	7.5%	1.9%	100%		
		980	752	114	76	9	1931		
Total		782	769	68	148	97	1864	4.1	Agreed
		3910	3076	204	296	97	7583		

Table 4.10 showed that the respondents agreed on each of the four statement items of productivity mean scores greater than 3.0). The grand mean is equally greater than 3.0. The various means on each item statements are greater than the mean criterion of 3.0; indicating that productivity has a positive effect on business environment.

Table 4.11: Frequencies on Item of Operational Efficiency Responses

S/N	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)	Total	Mean	Remark
PO 1	Changes in asset turnover predict future profitability changes.	239	172	24	22	9	466	4.3	Agreed
		52.3%	36.9%	5.2%	4.7%	1.9%	100%		
		1195	688	72	44	9	2008		
PO 2	As the cash conversion cycle increases, it leads to decreasing profitability of the firm.	170	169	67	49	11	466	3.9	Agreed
		36.5%	36.2%	14.4%	10.5%	2.4%	100%		
		850	676	201	98	11	1836		
PO 3	Operating efficiency improves the profitability.	259	207	0	0	0	466	4.5	Agreed
		51.9%	42.9%	0%	0%	0%	100%		
		200	136	0	0	0	344		
PO 4	Efficiency changes predict future firm performance.	287	179	0	0	0	466	4.6	Agreed
		61.6%	38.4%	0%	0%	0%	100%		
		1435	716	0	0	0	2151		

Total	955	727	91	71	20	1864	4.4	Agreed
	4775	2908	273	142	20	8118		

Table 4.11 showed that the respondents agreed on each of the four statement items of operational efficiency (mean scores greater than 3.0). The grand mean is equally greater than 3.0. The various means on each item statements are greater than the mean criterion of 3.0; indicating that operational efficiency has a positive effect on business environment.

Testing of Hypotheses

As stated in chapter three, the hypotheses were tested using the Spearman's Rank Order Correlation Coefficient and Partial Correlation.

Accept the null hypotheses (Ho) and reject the alternate hypotheses (Ha) if the significant probability value (PV) > 0.05, that is, no significant coefficient exists. Reject the null hypotheses (Ho) and accept the alternate hypotheses (Ha) if the significant probability value (PV) < 0.05, that is, a significant coefficient exists. The strength of the influence is decided thus; -0.1 to -0.4 (weak negative influence), -0.5 to -0.7 (moderate negative influence), -0.8 to -0.9 (strong negative influence), -1 (perfect negative influence); +0.1 to +0.4 (weak positive influence), +0.5 to +0.7 (moderate positive influence), +0.8 to +0.9 (strong positive influence), +1 (perfect positive influence).

4.4.2 Bivariate analyses using Spearman Rank Order Correlation Coefficient

4.4.2.1 Model One

Table 4.14: Correlation Analysis showing the Relationship between Technology Environment and Productivity and Operational Efficiency

			Technological Environment	Productivity	Operational Efficiency
Spearman's rho	Technological Environment	Correlation Coefficient	1.000	.908**	.814**
		Sig. (2-tailed)	.	.000	.000
		N	466	466	466
	Productivity	Correlation Coefficient	.908**	1.000	.855**
		Sig. (2-tailed)	.000	.	.000
		N	466	466	466
	Operational Efficiency	Correlation Coefficient	.814**	.855**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	466	466	466

****.** Correlation is significant at the 0.05 level (2-tailed)

Table 4.14 above revealed the significant nexus between technological environment and measures of survival (such as productivity and operational efficiency). The results further showed that technological environment at a $P_v < 0.05$, significantly relate towards survival of small and medium scale enterprises in Rivers State. From the output, it showed that technological environment has a significant and positive relationship with productivity at a $\rho = 0.908$ and a $P\text{-value} = 0.000$; also technological environment has a significant relationship with operational efficiency at a $\rho = 0.814$ and a $P\text{-value} = 0.000$; These results ascertain that

technological environment has a significant and positive relationship with survival of small and medium scale enterprises in Rivers State.

We therefore rejected H_{01} , and H_{02} because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule.

4.4.2.2 Model Two

Table 4.15: Correlation Analysis showing the Relationship between Economic Environment and Productivity and Operational Efficiency

			Economic Environment	Productivity	Operational Efficiency
Spearman's rho	Economic Environment	Correlation Coefficient	1.000	.888**	.910**
		Sig. (2-tailed)	.	.000	.000
		N	466	466	466
	Productivity	Correlation Coefficient	.888**	1.000	.855**
		Sig. (2-tailed)	.000	.	.000
		N	466	466	466
	Operational Efficiency	Correlation Coefficient	.910**	.855**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	466	466	466

**** . Correlation is significant at the 0.05 level (2-tailed)**

Table 4.15 above revealed the significant association between economic environment and measures of survival (such as productivity and operational efficiency). The results further showed that economic environment at a $P_v < 0.05$, significantly relate towards survival of small and medium scale enterprises in Rivers State. From the output, it showed that economic environment has a significant and positive relationship with productivity at a $\rho = 0.888$ and a P-value = 0.000; also economic environment has a significant relationship with operational efficiency at a $\rho = 0.910$ and a P-value = 0.000; These results ascertain that economic environment has a significant and positive relationship with survival of small and medium scale enterprises in Rivers State. We therefore rejected H_{03} and H_{04} because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule.

4.4.2.3 Model Three

Table 4.16: Correlation Analysis showing the Relationship between Socio-Cultural Environment and Productivity and Operational Efficiency

			Socio-Cultural Environment	Productivity	Operational Efficiency
Spearman's rho	Socio-Cultural Environment	Correlation Coefficient	1.000	.911**	.856**
		Sig. (2-tailed)	.	.000	.000
		N	466	466	466
	Productivity	Correlation Coefficient	.911**	1.000	.855**
		Sig. (2-tailed)	.000	.	.000
		N	466	466	466
	Operational Efficiency	Correlation Coefficient	.856**	.855**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	466	466	466

**** . Correlation is significant at the 0.05 level (2-tailed)**

Table 4.16 above revealed the significant relationship between socio-cultural environment and measures of survival (such as productivity and operational efficiency). The results further showed that socio-cultural environment at a $P_v < 0.05$, significantly relate towards survival of small and medium scale enterprises in Rivers State. From the output, it showed that socio-cultural environment has a significant and positive relationship with productivity at a $\rho = 0.911$ and a P-value = 0.000; also socio-cultural environment has a significant relationship with

operational efficiency at a rho = 0.856 and a P-value = 0.000; These results ascertain that socio-cultural environment has a significant and positive relationship with survival of small and medium scale enterprises in Port Harcourt. We therefore rejected Ho₅ and Ho₆ because, p-value (0.000) is less than the level of significant at 95% (0.05) as established in the decision rule.

Table 4.18 Summary of hypotheses result for Business Environment and Survival

Hypotheses	Hypotheses Statement	Results	Decision
Ho ₁	There is no significant relationship between technological environment and productivity	0.908	Rejected
Ho ₂	There is no significant relationship between technological environment and operational efficiency	0.814	Rejected
Ho ₃	There is no significant relationship between economic environment and productivity	0.888	Rejected
Ho ₄	There is no significant relationship between economic environment and operational efficiency	0.910	Rejected
Ho ₅	There is no significant relationship between socio-cultural environment and productivity	0.911	Rejected
Ho ₆	There is no significant relationship between socio-cultural environment and operational efficiency	0.856	Rejected
Ho ₉	There is no moderating influence of business intelligence system on the relationship between business environment and survival	0.553	Rejected

Discussion of the Findings

After empirical analysis of data generated, the following findings were made on the relationship between business environments and survival.

- I. Technological environment significantly and positively correlates with survival and as such enhances indices such as productivity and operational efficiency
- II. Economic environment has a significant and positive influence on survival and as such enhances indices such as productivity and operational efficiency
- III. Socio-cultural environment has a significant and positive relationship with survival and as such enhances indices such as productivity and operational efficiency
- IV. The role of business intelligence system in the relationship between business environment and survival is not that of a moderator

Conclusion

From the result of the study, it has been revealed that business environment has significant impact on productivity and operational efficiency of SMEs in Rivers State. This was evidenced in positive and significant influence economic environment, technological environment and socio-cultural environment had on productivity and operational efficiency of SMEs in Rivers State. Considering this, the study therefore concludes that:

- i. The findings revealed that SMEs in Rivers State can improve on business survival.
- ii. Technological environment positively and significantly influences on survival through productivity and operational efficiency.
- iii. Economic environment of SMEs enhances business survival positively and significant with proxies like productivity and operational efficiency.
- iv. Socio-cultural outcomes produced a positive and significant relationship with the measures of survival such like productivity and operational efficiency.
- v. Business intelligence system moderately significant on the relationship between business environment and survival.

Conclusively, the studied dimensions of the predictor variables when effectively executed can significantly increase the level positive productivity and operational efficiency among SMEs in Rivers State.

Recommendations

The recommendations of the study are as follows:

1. SMEs should continue to watch out on favourable economic policies made by the State Government to cushion economic hardship in the State.
2. SMEs need to improve more on properties in other to create a more conducive environment that will influence productivity and operational efficiency positively.
3. SMEs should spend more money on relevant and trending technologies that will help improve their activities in Rivers State.
4. SMEs must develop an effective management and economic information system that will help her discover and respond to rapid changes in its environment (most especially the economic environment).
5. There is need for sound government policies to be implemented in order to have a hub of small, medium and skill-intensive enterprises spread across all nocks and crannies of Nigeria.
6. Government should formulate policies that will be very consistent in controlling or managing exchange rate fluctuations in the country.
7. SMEs should understand and know more on the socio-cultural diversities of the target markets of which they deal with. With this, the firm will witness more patronage and sustainability.
8. SMEs should from time to time scan the environment through business intelligence system, so that they will not be caught out on the happening within the business environment.
9. Government at the different level should give financial succor to SMEs, with this they can acquire any new technology in town and also survive the economic quagmire in post Covid-19 era.

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Social Capital Influence on the Financial Health of Micro and Small Businesses Operated by Graduate Students in South-Western Nigeria

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Abstract

The study investigated social capital influence on the financial health of micro and small businesses operated by University students in South-Western Nigeria. Four research questions and two hypotheses were answered and tested in the study. Mixed method approach was adopted in the study. Population of the study was all students and entrepreneurship lecturers in Universities in South-Western, Nigeria out of which 309 respondents (300 students and none lecturers) were sampled for the study using multistage sampling technique. Questionnaire and Interview were used for gathering data. The data gathered were analyzed using descriptive and inferential statistics namely; frequency, percentage, mean, binary logistic regression, chi-square and t-test at 0.05 level of significance. The result of the study revealed that the dimensions of social capital had positive effect on the financial health of the businesses operated by the students and the relationships were significant. It was revealed that the manufacturing and agriculture sector were underexplored by the students while the service sector had the higher proportion of entrepreneurs. The reforming of the curriculum was recommended to capture more of social capital development by the students.

Keywords: Social Capital, Financial Health, Small and Micro Business, University Students, South-Western

Introduction

Businesses in Nigeria have had a mixture of fortune and misfortune since independence particularly between the 1960s to 1980s with the discovery of oil and economic recession that affected business growth in Nigeria. There are some of these enterprises that have survived because they were able to remain financially afloat while others have wound-up. Several micro and small businesses were also affected in this process despite the fact that these enterprises play a significant role in the growth and development of the nation.

The role that the informal sector plays in the growth and development of the Nigerian economy cannot be overemphasized as they have contributed significantly to the growth of the Gross Domestic Product (GDP) and also assisted in the reduction of unemployment. Today, several youths are making effort to establish their own businesses as a way of addressing the rising case of youth unemployment in the country. However, some of these businesses which are operated by students undergoing different programmes in the University have both succeeded and failed. Several of the business idea nurtured by these students have been gained by participating in the entrepreneurship programme run in the University. Unfortunately, a few of these businesses have failed just like others in the past as a result of various socio-economic challenges.

Student entrepreneurs like other businesses owners have been exploring different avenues to keep their business afloat and financially healthy. Different forms of capital such as physical assets, financial capital and other material resources are often deployed into some of these businesses to keep the business running but attention is gradually being drawn to the need for social capital as a means of keeping the business successful. Social capital which has to do with the network of relationships established by a business owner has continued to influence the success of businesses as it does not only increase sales and customer attraction but also helps to grow revenue. Social capital has therefore continued to play important role like other forms of capital in promoting the success of businesses but how much contribution this type of capital makes to keeping a financially healthy is still an issue that is still gaining gradual attention among business owners.

Statement of the Problem

The South Western region of Nigeria remains the major hub for startups in Nigeria and students in some of the Universities in the region account for this development. There are several

students who intend to start up their own businesses following their participation in the entrepreneurship education programme implemented by their Universities. However, statistics has shown that over 80% of these students fail within the first five years of business and this does not only affect the economic fortune of the country but also adds up to the already rising cases of youth and graduate unemployment and increasing pressure on scarce national economic resources. Given the fact that financial capital has continued to dwindle in supply for meeting the business need of new entrepreneurs, the need to consider other forms of capital such as social capital is becoming increasingly essential. Given the poor financial condition of some of the businesses operated by these students, the role that social capital can play in improving the financial health of these businesses remains unclear. How social capital accounts for the financial health of micro and small businesses operated by University students is an issue that remains unclear and this forms the problem that this study intends to investigate.

Purpose of the Study

The main objective of the study was to investigate the contribution of social capital to the financial health of micro and small businesses operated by University students in South-Western, Nigeria. The specific objectives of the study were to:

1. determine the demographic outlook of micro and small businesses operated by students in Universities in South-Western, Nigeria.
2. describe the effect of social capital on the financial health of micro and small businesses operated by students in Universities in South-Western, Nigeria.
3. examine the perception of students on the entrepreneurship education programme in Universities in South-Western, Nigeria.
4. ascertain the challenges militating against the development of social capital for the financial health of Micro and Small Businesses Operated by University Students in South-Western Nigeria.

Research Questions

The following research questions were answered in the study:

1. What is the demographic outlook of micro and small businesses operated by students in Universities in South-Western, Nigeria?
2. What is the effect of social capital on the financial health of micro and small businesses operated by students in Universities in South-Western, Nigeria?

3. What is the perception of students on the entrepreneurship education programme in Universities in South-Western, Nigeria?
4. What are the challenges militating against the development of social capital for the financial health of Micro and Small Businesses Operated by University Students in South-Western Nigeria?

Hypotheses

The following hypotheses were tested in the study:

1. Social capital is not statistically significant to the financial health of micro and small businesses operated by students in Universities in South-Western, Nigeria
2. There is no significant difference between the mean ratings of male and female students on their perception on the entrepreneurship education programme in Universities in South-Western, Nigeria

Literature Review

Financial Health

Health is regarded as the state or condition of wellbeing. The World Health Organization defined health as not just the absence of disease but a states of complete physical, mental and social wellbeing. In the same way that anyone who is not physically, socially and mentally sound is said to be unhealthy so also businesses can be said to be unhealthy especially financial when the required financial perimeters of the business are not met. The Financial health of a business can refer to the State of financial balance following the business activities that are carried out in the enterprise. Explaining further, Sannikova as cited in Sabău-Popa *et al.*, (2020) stated that when a business is in good economic and financial shape and is not only using cutting-edge, high-performance tools and marketing to advertise its products and services but also maximizes profits, it is said to be financially healthy.

The financial health of a business is an important aspect of the lifespan of a business as a financially unhealthy business cannot meet its goals and objectives. It was outlined in Michalkova *et al.*, (2018) that any firm that is not financially healthy and facing deteriorating financial health will experience economic failure, business failure, technical insolvency, insolvency and bankruptcy. When a business is financially unhealthy and facing these symptoms, it will be difficult for it to meet its goals and contribute to national growth and development. However, there are certain indicators that are often used in determining a financially healthy business and these include the liquidity, profitability, solvency and

operating efficiency of the business. Any of these indicators can be used in ascertaining the financial health of business which invariably determines how long the business can live, the functions it can carry out and the contributions it can make to the society and national development.

Social Capital

Social capital is a term that has continued to gain attention in the business world as a result of its importance to the performance of businesses and entrepreneurs. Several studies have revealed that even when businesses have access to equal physical and financial capital, there are observed differences in their performance level and this suggests the presence, impact and contribution that other forms of capital make to the business. Social capital like other forms of capital are required for managing businesses and improving the performance of enterprises whether micro, small, medium or large.

In their opinion, Rutten *et al.*, (2010) noted that social capital is concerned with how people interact with one another. It is a form of resource or capital that is built when a group of people come together to form a social link or relationship with common expectations. Furthermore, Putman as cited in Webster (2013:1) noted that social capital refers to “networks, norms, and trust that allows members to work more effectively together to pursue common goals”. Similarly, Macke and Dill (2010:123) noted that “a set of unwritten rules and principles that all members of a particular group share that promote cooperation is known as social capital”. Social capital is an intangible wealth that is built among a group of people and can be expended to secure other resources that the business requires to succeed. This is why Acquah as cited in **Dar and Mishra (2020) stated that** the actual and potential resources rooted in the network relationships that various actors, such as managers and entrepreneurs, can access and use for conducting business operations are known as "social capital. Social capital is properly utilized can assist businesses to secure other essential resources that other forms of capital can attract to a business for improved performance and several dimensions of social capital such as the structural, cognitive and relational capital can be used for this purpose by entrepreneurs.

Social Capital Dimensions and Financial Health of Businesses

There are various dimensions of social capital that are often deployed to improve on the performance of different sizes of businesses both in terms of improved profitability, improving sales, attracting traffic among others. Each of the dimensions of social capital is significant not

only for enhancing the profitability of the business but also for sustaining the business. Expatriating on the importance of social capital dimensions in improving the profitability of businesses, Nahapiet and Ghoshal as cited in Boumlik *et al.*, (2021:143) stated that “social capital can be utilized to gain access to knowledge in an environment where information is a source of competitive advantage and to enable businesses to benefit from shared learning”. When the right network is built and relevant information and values are built, it becomes easy for a business whether new or old to stay financially afloat.

One of the essential dimensions of social capital is the structural social capital. Claridge, (2018) noted that the roles, rules, precedents, and procedures, as well as network ties (i.e., who knows who), are all tangible indicators of structural social capital and all of these are important for improving the performance of businesses. Social networks, participation in civic organizations, and other forms of participation are all examples of structural social capital, which is defined as the behaviors and modes of network participation that can be observed from the outside (Yuan *et al.*, 2022; Nyqvist *et al.*, 2012 & Agampodi *et al.*, 2015). Structural dimension of social capital is concerned with the characteristics of being a member of a societal unit as well as the network of relationships that exist inside that unit which enables the member to be able to have access to resources that belongs to the group.

There is also a relational dimension of social capital and Ozigi (2020) identified that this dimension of social capital includes trust, norms and values. Certain behavioral traits, like friendship, trust, and integrity, are developed during the social network-building process and are crucial business indicators. The ability to facilitate and influence business decisions and business relationships, which can also influence a business's ability to generate revenue, can be attained by developing trust, integrity, and other shared values. The intimate connections that grow over time as a result of constant human interaction are more important to relational social capital. Relational social capital is often built on personal grounds and this is why this dimension of social capital is essential especially for micro and small businesses which are often managed by one or few people.

Cognitive social capital also plays an important role in promoting the profitability and overall performance of businesses. Razak and Srinivasulu (2022) noted that cognitive social capital is more concerned about the shared norm and representation and other resources that organizations share through their social ties within their social involvement. In clearer term, Paunescu and Badea (2014) noted that this dimension of social capital focuses on the existence of shared and common meanings, interpretations, behaviors, attitudes, beliefs, norms and

values among actors, such as legitimacy, safety, reciprocity which are also essential in promoting the performance of a business. Cognitive social capital deals with the existence of commonalities such as related values, vision, goals etc. that organizations share which makes it easy for members to access resources from the other member all of which can be deployed in improving the profitability of one's business. The various dimensions of social capital have their unique attribute but if properly utilized, they can go a long way to enhance the overall performance of a business whether new or old.

Challenges in Building Social Capital for Financial Health of Businesses

The development of social capital has not experienced widespread acceptance as a means of transacting business like other forms of capital as a result of several challenges. Despite the importance of social capital in the success of businesses especially the new ones, some entrepreneurs have not been able to explore this form of capital as an essential resource needed for promoting the financial health of their businesses and this is due to several factors.

One of the limitations of social capital is that it is no static like other forms of capital (Battisti & McAdam, 2012) implying that it can change and take a different form within the shortest known time. In some cases, members of social groups can enter and exit at will and the attitude of members can also change as a result of several factors making the social capital built over time to be unpredictable for doing business. Furthermore, Battisti, M., & McAdam, M. (2012) noted that social capital can be peculiar to different environments. This implies that the kind of social capital build in one business environment may not be able to function effectively in other environment. This means that the capital developed may not be widely accepted and utilized like other forms of capital which can be tendered and utilized for business purposes irrespective of the location. This means that there could be environmental limitations to how far this kind of capital can be utilized for business purpose especially in enhancing the financial status of the business.

On the other hand, Karpovich *et al.*, (2019) noted that the use of social capital within institutional frameworks and legal systems is a practice that is still requiring greater attention and this means that for social capital to become an institutional resource that can be used for meeting organizational objectives, it must receive some level of institutionalization. This process is however often difficult to achieve especially among already established businesses and this makes it difficult especially for small businesses to use social capital to transact with established firms and improve on their financial status or profitability.

Empirical Reviews

Researchers have continued to carry out different studies to determine the relevance of social capital in business management. One of such studies was carried out by Effiom and Edet (2018) on the success of small and medium enterprises in Nigeria and whether environmental factors matter. The study showed that environmental factors were statistically significant at the 5% level of significance, according to the regression analysis' findings. However, the use of human resources was insignificant among the environmental factors. Rahim and Mukhtar (2021) conducted a study on perception of students on entrepreneurship education. 114 students pursuing a Bachelor of Business (Entrepreneurship) degree made up the study sample; they were chosen using the purposive sampling method. The study's findings demonstrate a significant relationship between entrepreneurial intentions and the teaching methods and curriculum used in entrepreneurship. The university's role variable, however, revealed the opposite findings, namely that there was no significant relationship with entrepreneurial intentions.

Akintimehin *et al.*, (2019) investigated social capital and its effect on business performance in the Nigeria informal sector. In 650 informal businesses in the Ikeja neighborhood of Lagos state, Nigeria, a cross-sectional survey was conducted. The structural equation model's partial least square method was used to analyze the data collected. The results showed that, in the absence of firm age as a controlling variable, social capital significantly influenced business performance, while internal social capital significantly influenced non-financial performance but not financial performance. External social capital, however, had no significant impact on either financial or non-financial performance.

Lekhanya (2016) also carried out a study on business characteristics of small and medium enterprises in rural areas in southern region of KwaZulu-Natal province of South Africa. In the Southern Region of the KZN province, the study was carried out in five communities: Umuziwabantu, Ubuhlebezwe, Sisonke, Zingolweni, and uMzimkhulu. A quota sampling technique was used to select the sample, which included 127 owners/managers of SMEs operating in the chosen areas. Both interviews and questionnaires were used to collect data. The research revealed that the majority of employees in the company are unskilled, that modern facilities are used to run business operations, that most business investment strategies are hampered by a lack of funding, and that the local market is very small for the sale of the goods produced by rural SMEs. Business traits of SMEs in rural areas were examined and found to be significant.

Adisa *et al.*, (2014) also investigated the characteristics and challenges of small businesses in Africa using an exploratory study of Nigerian small business owners. A thorough interview with 152 small business owners was conducted. The results demonstrate that Nigeria's small businesses are characterized by its unemployed population, which chooses small business as their last resort. Another finding identifies the main issues that small businesses in Nigeria face, including a lack of sufficient funding, poor record keeping and information management, the inability to distinguish between business and personal funds, a lack of essential infrastructure, and a lack of appropriate business and management skills. These studies have all demonstrated how important social capital is to business performance at all levels.

Methodology

The study adopted a mixed method approach. Population of the study consisted of all the undergraduate and postgraduate students and lecturers in the Universities in South-Western Nigeria. Multistage sampling technique was adopted in the selection of the respondents of the study. First, purposive sampling technique was used to select the best Federal, State and Private University in terms of entrepreneurship programme performance and business start-ups namely; Obafemi Awolowo University (Federal), Olabisi Onobanjo University (State) and Covenant University (Private). Secondly, snowballing technique was used to select 100 students (50 undergraduate and 50 postgraduate) who had a small or medium business (business with less than 50 employees) in each University totaling 300 students for the study and the sampling was considered saturated when no new entrepreneur was discovered. Thirdly, three lecturers of entrepreneurship education were also selected randomly for interview in each of the selected Universities totaling nine lecturers. The total respondents for the study was 309. The business used are categorized into micro (less than ten employees and small (10-50 employees) for the purpose of determining their financial health (profitability) which was used for the purpose of regression. Two instruments were used for data collection which were questionnaire for quantitative data collection and Key Informant Interview (KII) for qualitative data collection. The quantitative instrument was administered to the students while the qualitative instrument was administered to the lecturers. The instruments were face and content validated by two entrepreneurship experts while Cronbach alpha was used to determine the reliability of the instrument with an average index of 0.87. Data collected for the study were analyzed using descriptive and inferential statistics namely; frequency, percentage, mean, binary logistic regression, chi-square and t-test at 0.05 level of significance. The model specification for the binary logistic regression is as follows:

$$FH = f(SC) \quad (1)$$

where:

FH = Financial Health

SC = Social Capital

Social Capital is determined in terms of Relational Social Capital (RSc), Structural Social Capital (SSc) and Cognitive Social Capital (CSc) which agrees with the work of Kiprotich (2014) who applied same model in determining the growth of SMEs in Kenya. Hence, equation (1) becomes:

$$FH_i = f(RSc, SSc, CSc) \quad (2)$$

Where the dichotomous variable is presented as:

$$FH = \begin{cases} 1: \text{Financially Unhealthy} \\ 2: \text{financially Healthy} \end{cases} \quad (3)$$

The logistic regression model in its simplest form is written as:

$$\text{Log}(P_i/1 - P_i) = \beta_0 + \beta_i X_i + U_i \quad (i = 1, 2, 3, \dots, n), \quad (4)$$

The model to estimate the relationship between financial health and social capital is written as:

$$\text{Log(odds)} = FH = \beta_0 + \beta_1 RSC_i + \beta_2 SSc_i + \beta_3 CSc_i + \varepsilon_i \quad (5)$$

Results

Table 1: Type of Business Operated by the Students

Type of Business	Frequency	%
Manufacturing	19	6.8
Agriculture	12	4.3
Trading	90	32.4
Services	124	44.6
ICT	33	11.9
TOTAL	278	100

Table 1 showed that the students sampled were engaged in businesses that were categorized into Manufacturing, Agriculture, Trading, Services and ICT. Based on the data analyzed,

majority of the students sampled for the study (44.6%) were engaged in service related business such as

This was followed by those who were into trading where 90 of the students (32.4%) were into buying and selling of goods such as clothes, footwear, confectioneries, paint, cosmetics among others. Others were engaged in ICT related business such as data analysis, repair of phone and computer, graphic design, printing and publishing among others. Students who were engaged in manufacturing and agricultural business had the lowest proportion of 6.8% and 4.3% respectively indicating that majority of these students are yet to really engage in these areas. This finding agrees with the result of the study by Adisa *et al.*, (2014) on the characteristics and challenges of small businesses in Africa where it was revealed that Nigeria's small businesses are characterized by its unemployed population, which chooses small business as their last resort. This implies that students are yet to be intentional about being entrepreneurs and this accounts for why some other sectors remain largely unexplored.

Table 2: Source of Fund for Business

Source of Fund	Frequency	%
Family Members	18	6.5
Friends	59	21.2
Personal Savings	176	63.3
Government	4	1.4
Financial Institutions	6	2.2
Thrift Association	15	5.4
TOTAL	278	100

Table 2 showed that majority of the students sourced for the capital for their businesses from their personal savings with 63.3% of the students falling in this category. This was followed by 59 students representing a share of 21.2% who were assisted financially by their friends. There were 18 students with a share of 6.5% who got their business capital from family members while the least funding sources were from thrift association, financial institutions and government with a share of 5.4%, 2.2% and 1.4% respectively. It implies that sources of fund for these businesses were still majorly from immediate sources with very little financial assistance coming from institutions that in the real sense should be supporting strat-ups for the revitalization of the economy.

Table 3: Annual Profit made in the Business

Profit	Frequency	%
Less than 100K	83	29.9
Between 100K – 500K	116	41.7
Between 500K- 1M	53	19.1
1M – 5M	22	7.9
Above 5M	4	1.4
TOTAL	278	100

In table 3, there were 116 students with the highest share of 41.7% who reported that they make between 100 to five hundred thousand from their businesses annually and this was followed by 29.9% of the students who made less than 100 thousand annually from their businesses. In a similar manner, 19.1% of the students made between 500 thousand and one million annually while 7.9% made between one to five million. Only 1.4% of the students made above five million annually and this points to the need for expansion of some of the businesses managed by these students with majority of them appearing to still have a low financial base that will be required to keep them financially healthy and revitalize the Nigerian economy.

Table 4: Effect of Social Capital Dimensions on Financial Health of the Businesses

		Variables in the Equation					
		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^a	CognitiveSocialCapital	.195	.069	7.886	1	.005	1.215
	RelationalSocialCapital	.039	.068	.327	1	.568	1.040
	StructuralSocialCapital	.236	.067	12.430	1	.000	1.266
	Constant	-7.490	1.406	28.374	1	.000	.001

Overall Percentage 67.4

-2 Log-Likelihood = 334.577

Nagelkerke R² = .179**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	38.773	3	.000
	Block	38.773	3	.000
	Model	38.773	3	.000

Given the variables, the estimated logit model is:

$$\text{Log(odds)} = FH = -7.490 + 0.195CSC_i + 0.039RSC_i + 0.236SSC_i$$

The result in Table 4 above shows that all the dimensions of social capital have positive relationship with the financial health of businesses run by the students. However, the Cognitive, Relational and Structural Social capital dimensions had coefficients of 0.195, 0.039 and 0.236 indicating that an increase in Cognitive, Relational and Social capital will lead to an increase in the Financial Health of the businesses operated by the students by 0.195, 0.039 and 0.236 respectively with the Structural Social Capital contributing more to the financial health of the business and the reverse will be the case if there is a fall in any of the dimensions by one unit thereby agreeing with the outcome of the study by Effiom and Edet (2018) which also identified that environmental factors are important to the performance of SME's.. Similarly, with the significance level for the three dimensions all at 0.000, it implies that all the dimensions of social capital were significant contributors to the financial health of the businesses operated by the students.

Similarly, the test for the fitness of model was given as 67.4 which implied that 67.4% of the businesses were classified as either financially healthy or not healthy by virtue of the three dimensions of social capital.

The -2 log likelihood value (-2LL = 334.577) also supported that the model significantly fit the data, thereby indicated a reduction in the number of unexplained information about the financial health of the businesses operated by the students. This was confirmed by the associated Omnibus validity test of model coefficients, which is based on the null hypothesis that all the coefficients are zero led to the rejection of the null hypothesis at 5% significance level since $\rho < .05$. The result ($\chi^2 = 38.773$, $\rho = .000$) indicated that the three social capital dimensions provided a statistically significant improvement in financial health of the students' businesses. This aligns with the outcome of the study by Akintimehin *et al.*, (2019) which also established that social capital significantly affects the financial and non-financial performance of businesses at varying degrees. The Nagelkerke Pseudo R^2 , on the other hand, indicated that the model accounted for 17.9% of the total variance of financial health status of the businesses operated by the students.

Table 5: Perception of Students on the Entrepreneurship Education Programme in Universities in South-Western, Nigeria

STATEMENT	Male	Female
Course content in the entrepreneurship education programme addresses the need for students to build social capital	3.25	3.04
Students are assisted by the University to build social network for their businesses	3.12	3.19
Value education is addressed in the entrepreneurship course content	3.27	3.10
Students are able to connect with industry players from the programme	3.10	3.12
Students are organized in a business cluster before graduation to build a student's network base	2.99	3.00
Average mean	3.15	3.09

Entrepreneurship education is a programme implemented compulsorily across all the higher education institution in Nigeria as suggested by the Federal Government of Nigeria. This essential programme was enforced to equip students with the entrepreneurship abilities that will enable them not just become self-employed after graduation but also be able to create jobs for others. The responses of both male and female students in table 5, produced mean scores of 3.15 and 3.09 respectively that were above the criterion mean of 2.50 used for decision making implied that they both agreed on the items as their perception on the entrepreneurship education programme implemented in their Universities. From the responses of the students, it was revealed that the students agreed that the content of their entrepreneurship education course has section devoted to social capital development. They also identified that they were assisted to build the required social network for their businesses, the programme emphasized value education, provided a platform for connecting with industry and that the students are usually clustered to build business network. It implies that these Universities successfully implement some of the efforts required to assist the students build social capital and the students agree with this fact which is required to assist them improve in their various enterprises. This outcome largely agrees with the result of the study conducted by Rahim and Mukhtar (2021) on perception of students on entrepreneurship education which indicated that students' entrepreneurial intentions was largely significantly related to the teaching methods and curriculum but not with the university's role and this indicates that while some efforts have been made, there are still interventions that are required from the programme as it is being implemented by the Universities.

Challenges militating against the development of social capital for the financial health of Micro and Small Businesses Operated by University Students in South-Western Nigeria

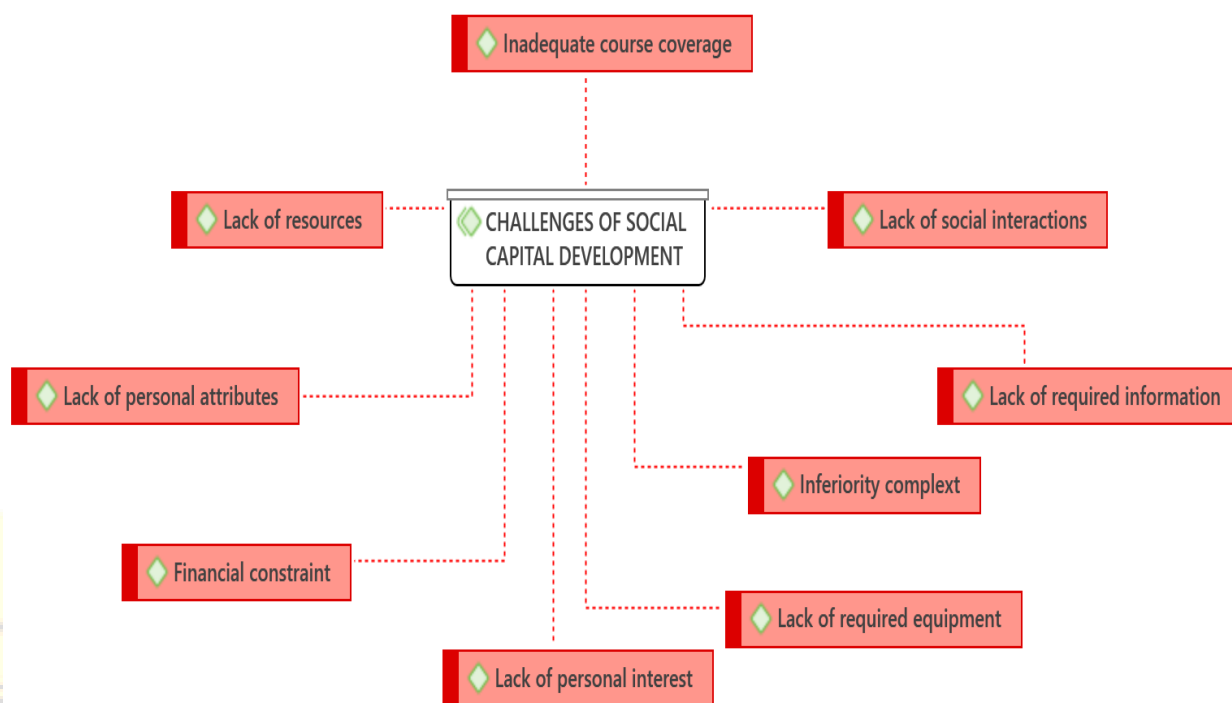


Fig. 1: Challenges to Social Capital Development

Following the interview with the entrepreneurship lecturers sampled from the different universities, the following themes were identified as the challenges to the development of social capital among the students:

- Inadequate course coverage
- Lack of resources
- Lack of personal attributes
- Lack of interest
- Financial constraint
- Lack of social interactions
- Lack of required information
- Inferiority complex
- Lack of required equipment

The need for social capital development across all aspects of life remains a necessity and entrepreneurs are expected to build this competence for improving the performance of their

business and achievement of other outlined objectives. However, student entrepreneurs like other entrepreneurs in different industries have not been able to maximize this essential resource and from the opinion of the lecturers of entrepreneurship in some selected Universities, the reasons for this are not far-fetched. First, it was identified that the entrepreneurship courses in the Universities have not been able to pay the required attention to social capital development in business like other capital used in business. This implies that the entrepreneurship courses taught in the Universities are more focused on how students can attract other capital such as physical and financial and less attention to the building of social capital for the success of their businesses. Similarly, the lack of other essential resources such as

The interest of the entrepreneur in building social capital was also identified as a challenge as it was pointed out that some of the entrepreneurs do not have time or the interest to build the required network for promoting their business and as such they cannot leverage the benefits that come with it. Financial constraints and lack of social interaction were also spotted as challenges to the development of social capital. This aligns with the outcome of the study by Lekhanya (2016) on business characteristics of small and medium enterprises in rural areas in southern region of KwaZulu-Natal province of South Africa which identified a lack of funding as a factor that hinders capital accumulation for improved business performance. This means that the entrepreneurs were unable to establish the right link and accumulate the right capital which makes their ability to develop social capital difficult. The lack of requisite information for developing social capital was also identified as a bane as well as inferiority complex among the students and lack of required equipment such as modern technology needed to build social ties in and outside the business world. It remains obvious that there are a mirage of issues that has made it difficult for entrepreneurs to develop the needed social capital and some are both student and institution induced but these impediments need to be addressed so that young entrepreneurs can be able to build the needed social capital that will enable their business to thrive across all sphere.

Table 6: Summary of z-test Analysis on the Difference Between the Mean Ratings of Male and Female Students on Their Perception on the Entrepreneurship Education Programme in Universities in South-Western, Nigeria

Variable	n	Mean	SD	df	z-cal.	z-crit.	Level of Significance	Decision
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Male Students	119	3.15	0.81					
				276	0.60	1.96	0.05	Not Rejected
Female Students	159	3.09	0.86					

Table 6 showed that at a significance level of 0.05 and 276 degrees of freedom, the z-crit. value of 1.96 was above the z-cal. value of 0.60 and as such, the null hypothesis was not rejected and this implied that there was no significant difference between the mean ratings of male and female students on their perception on the entrepreneurship education programme in universities in South-Western, Nigeria. This implies that both the male and female students share the same opinion and are equally affected by the manner in which the entrepreneurship education programme in their Universities is implemented.

Conclusion

The study concluded that the dimensions of social capital all have positive effect on the financial health of the businesses being operated by the students in the study area with the Structural Social Capital contributing more to the financial health of the businesses than the other two dimensions. Additionally, all the three dimensions of social capital are all significant contributors to the financial health of these businesses although the contributions differ. It was evident that most of these students are yet to be exploring other job opportunities available and this seem to account for the low profit made from their various businesses.

Recommendations

The following recommendations were made in line with the findings of the study:

1. The entrepreneurship education programmes implemented in the Universities and other higher educational institutions need to be overhauled to give more attention to the development of social capital especially in the area of social networking so as to enable students run businesses that will be able to thrive and contribute to national development.
2. The government needs to give incentives to graduates who are willing to invest in businesses that underexplored such as manufacturing and agriculture and this will include providing tax cut, credit facilities and adequate sensitization so as to enable students invest more in these sectors and contribute to the development of the nation.

3. The Universities need to ensure that students have the opportunity of interfacing more with successful entrepreneurs in their various areas of business interest and this will enable them develop the needed skill, knowledge and attitude that will enable them succeed in business.

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Entrepreneurship Education and Venture Creation: A Systematic Literature Review

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Abstract

Entrepreneurship education has flourished as a field of study attributed of its relevance/importance and role in accelerating the global economy's financial well-being. Despite its growing popularity, there is still much to learn about the nature of entrepreneurship education and its potential to change society. This study seeks to provide insight or knowledge about entrepreneurship education and venture creation by emphasizing current trends and areas for further research. The literature on entrepreneurship education gathered, assessed, and interpreted for this research between 2018 and 2022 came from a systematic review of published articles. The study looked at 25 studies from the literature on entrepreneurship training and business creation. Many distinct subjects have been examined, with entrepreneurship education and venture creation being the most thoroughly investigated area. The result established that entrepreneurship education programs had drawn growing interest. The findings of this research seek to assist decision-makers in entrepreneurship education by developing better solutions. However, this study recommends revamping current entrepreneurship education programs to encourage students to create innovative or creative ventures. Furthermore, this study has some restrictions, which point to potential directions for additional research. The study only employed four databases to examine the articles and only

considered works released between 2018 and 2023. Other research might cover a more extended period and use more databases.

Keywords: *Entrepreneurship, Entrepreneurship Education, Venture Creation, Systematic Literature Review*

1.0 Introduction

The term, "Entrepreneurship" and topics linked to it gained popularity academically and the corporation sector in the first part of the 20th century. The field has expanded significantly more recently. It has been investigated from various interdisciplinary angles and connected to multiple subjects, including politics, economic development, and education. Students today have access to entrepreneurship education, defined as courses and programs in entrepreneurship at most of the world's top institutions (Morris & Liguori, 2016). Economic downturns and research indicating that entrepreneurship is a significant force behind financial and social advancement have contributed to this broad interest. Another aspect is that one of the most progressive and cutting-edge teaching approaches is entrepreneurship education (Neck & Corbett, 2018). Action-oriented pedagogies are introduced to students, including practical learning exercises like creating goods, services, and business models, creating business strategies, and modeling the launch of real business operations. According to Ahmed, Chandran, Klobas, Lián, and Kokkalis (2020), entrepreneurship is a crucial driver of creation of jobs, poverty alleviation, innovation, social progress, and competitiveness. As a result, sustained company growth is necessary for both social and economic development.

Nevertheless, study on entrepreneurship education is still in its infancy stages, with scholars debating what type of curriculum should have (Jones, Matlay, Penaluna & Penaluna, 2014). Some recent studies addressing curriculum themes that fixate on start-up entrepreneurship and technique of venture creation (Lackeus & Williams, 2015). In contrast, others encompass diverse facets of operating and overseeing a small thriving industry, while others concentrate on fostering entrepreneurship life skills and abilities (Jones *et al.*, 2018). It should be noted that depending on how the research are conducted, entrepreneurship education might have a subtly different connotation. The word entrepreneurship education is used in this study to cover both entrepreneurship from a start-up perspective focused on the specific context of venture development and entrepreneurship from a broader enterprising perspective centered on individual attitude, skills, and abilities.

EE has proliferated regarding the number of programs made available globally and the variety of educational settings. There are various ways to implement educational strategies to address

these needs, suggesting that entrepreneurship education is still in its formative years. Moreover, real-world venture creation as a formal curriculum component using action-based approaches is still relatively common. One explanation for this is that entrepreneurship education, which includes a significant practical component, like the creation of new businesses, frequently uses a variety of unusual, novel, resource-intensive, and, therefore, expensive teaching techniques. To better understand how research on entrepreneurship education has changed regarding starting new businesses, this research aims to contribute to this study area. More specifically, this study will examine the emergence, evolution, and current research trends on entrepreneurship education and venture creation in academic journals over time.

1.1 Research Questions

1. To what extent does entrepreneurship education influence graduates' creativity?
2. What steps should be taken to encourage entrepreneurship education?
3. In what way does entrepreneurial mindset enhance the vision of graduates?

2.0 Methodology

Through a comprehensive and organized summary that adheres to accepted standards, SLRs give readers a deep understanding of the literature in an area (Tandon, Dhir, Islam, & Mäntymäki, 2020). The assessment also sought to identify underutilized themes and techniques and journals that publish more of these papers, as well as to identify the institutions and people who are most productive and quantify the impact of publications on this topic. This strategy is beneficial when dealing with several articles dispersed over a lengthy period. Additionally, as a research technique, the fundamental ideas of SLRs offer sufficient transparency and reproducibility.

2.1 Process of Selection

The two main tiers of the article selection strategy are as follows:

- Searching for keywords and index terms, and
- Selecting articles based on their titles.

The electronic databases Scopus, Web of Science, and Google Scholar were utilized to discover related publications. Despite the fact that some identified publications were also located in the Web of Science database, the key reason for using the Scopus database was its vast coverage

of globally indexed scientific journals of a caliber recognized by the academic community. The following were the selection process for the articles:

Inclusion Criteria

- Journal articles pertaining to Entrepreneurship Education and Venture Creation
- Articles that were published from 2018 to 2023
- And then journal articles are only publications articles that are authored in English.
- Also, articles that presented logical and well-structured conclusions added to existing knowledge.

Exclusion criteria

- The articles that do not fall between 2018 and 2023
- Papers that served as a tutorial or course material.
- Papers that were duplicated and articles that focused on other aspects of entrepreneurship

The key words selected were Entrepreneurship OR Entrepreneurship Education AND Venture Creation and the total number of articles reviewed were 65 in total but after further review only 29 journal articles were able to be selected as part of the systematic review. Also, the research was solely based on review paper, therefore books, conference papers and so on were not included and also thoroughly search was conducted during the review process in order to maintain academic integrity.

2.2 Bibliometric Analysis

The diagram in Figure 1 represents the papers published each year between 2018 and 2022 while that of figure 2 shows breakdown of the selection process using the PRISMA methodology.

Result

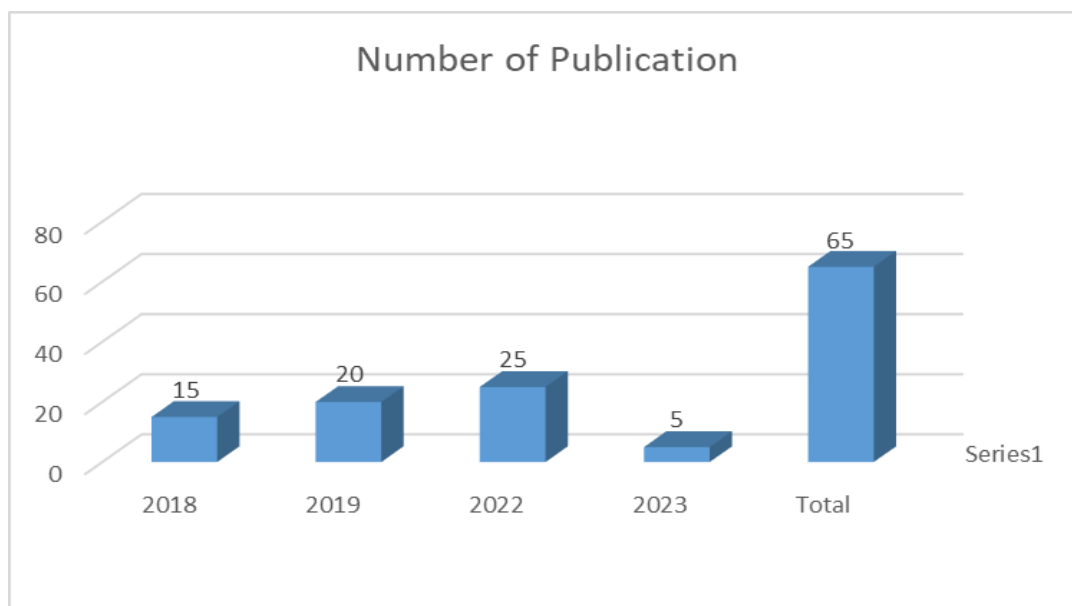


Fig 1: Number of Publication



PRISMA Flow Diagram

Identification

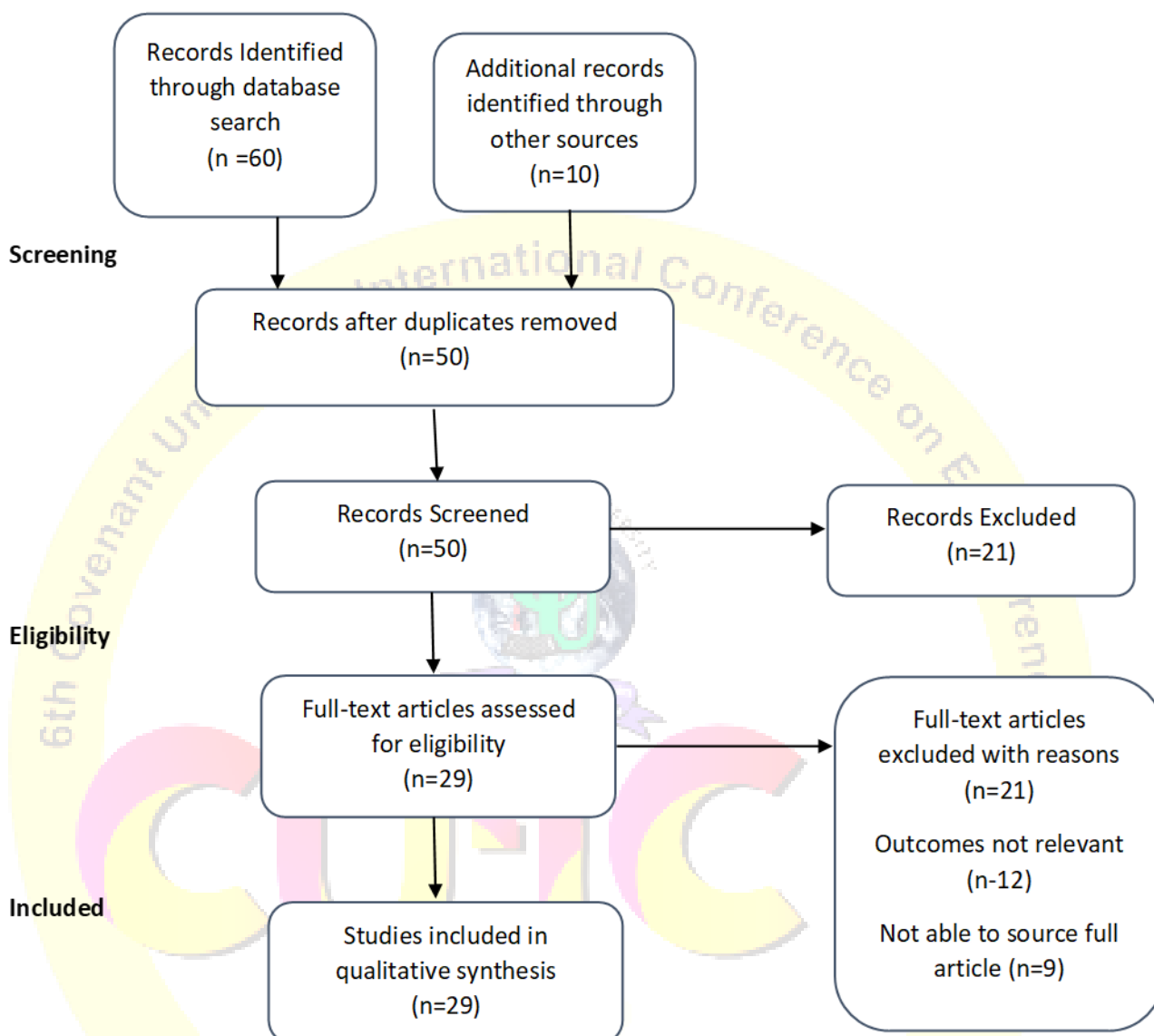


Fig 2. Flow diagram

3.0 Discussion of Findings

Figure 2 above indicates the number of articles considered during the review process and the different review processes each journal article was subject to finally selecting the correct number of research papers in line with this present study. Previous research has typically focused on the contextual elements that influence student entrepreneurship education. The review is expanded in this article section to include general evidence within the program's framework. The findings on student propensity will be the first to be thoroughly studied because research in this field often contributes to a more complex knowledge of the elements

influencing students' "perceptions toward" entrepreneurship. Studies on student propensity have taken many different approaches, from focusing only on personality traits to integrating social and environmental factors. It is feasible to infer from the SLR data that entrepreneurship education affects student intentionality.

Nevertheless, this still paints a candid picture. Such studies do not follow intentionality into "action," thus they cannot yet tell us if increased intentionality increases graduate entrepreneurship or whether such education affects students' "success" when they do decide to start businesses. Similarly, the image needs to be more balanced since studies frequently focus solely on student intentionality without considering general intentionality across a population.

Whilst entrepreneurship education might assist to shift cultural views, it cannot remove the financial and legal constraints that make launching a firm more difficult. In this context, sociological study on student intent that ties purpose to both environmental influences and actual "activity," as in what students ultimately "do," may be useful. Another finding from the review is that the teaching method varies extensively, and often they are linked to assumptions about what entrepreneurship education is and whether it can be taught. The study discovered that the numerous writers and works investigated were united in their belief that entrepreneurship is vital to the growth and evolution of nations and their areas in terms of the impact of entrepreneurship on economic, social, and political context. Other content is that entrepreneurship education promotes the growth of crucial personality traits in people, including more incredible initiative, creativity, decreased aversion to risk, and increased concern for society as a whole. This would appear bad considering that the express, albeit contested, the purpose of such education is to affect societal change through changes in individual behavior. Suppose studies are still being undertaken on the interplays between educational processes and their outputs. In that case, educational practitioners will need clarification on what types of activity work and for what goal, leading to changes in student behavior, activity, and choice. As a result of this SLR, more research in this area is needed, but it may require a different structure and framework of reference.

In terms of venture creation and employability, based on the review, it took much work to determine what influences the success of these businesses and whether graduate-led businesses are more successful than other non-graduate ventures. There is evidence supporting the idea that graduate entrepreneurship can be successfully encouraged. It is possible to infer from the evidence reviewed that some factors, such as having access to early-stage financing, mentoring,

and business support, have some bearing on the likelihood that a venture will succeed. However, it is difficult to determine to what extent these influence the process and whether or not other factors (such as proactive behavior) stand in the way of the investigated variables. All of the authors present evidence that EE is important in shaping young people's attitudes and mental processes, but Sanchez (2013) stands out. His findings backed up entrepreneurial programs by boosting students' improved discovery, assessment, and investigation of opportunities, as well as a more optimistic and proactive approach toward risk.

3.1 Entrepreneurship Education

Entrepreneurship Education (EE) can be described as the exercises portrayed at cultivating enterprising individuals, or specifically, as evolving the skill set, and mindset required for establishing new ventures (Wenninger, 2019). EE is the process of imparting skills and concepts to individuals to identify new ventures and achieve a high level of self-confidence to capitalise on such opportunities (Almahry, Sarea, & Hamdan, 2018). Van Gelderen *et al.* (2015) recognized entrepreneurship education as an important component of the entrepreneurial ecosystem for increasing intentionality and the stability of firm formation. It is a tool for increasing entrepreneurial activity (Bischoff, Volkman & Audretsh, 2018). A rising number of institutions are providing university courses, frequently at the postgraduate level, geared to impart particular information essential for the effective innovation and fruitful continuation of entrepreneurial endeavors, in addition to the general abilities required of all graduates. A curriculum that teaches people how to spot unusual chances, seize them and launch a business is known as entrepreneurship education (Egwakhe, Abdullahi, Akande & Umukoro, 2022). It serves as a platform that encourages students to build their entrepreneurial knowledge and skills and their emotional, intellectual, and person-specific resources. According to Kazmi and Nábrádi (2017), EE is linked to entrepreneurial self-efficacy, which strengthens entrepreneurial intentions. Entrepreneurial self-efficacy is the belief that one can successfully carry out the many functions and obligations of an entrepreneur. Entrepreneurship education provides students with the knowledge and skills required to begin and operate a firm. It is critical to underline the importance of entrepreneurial education in this context. It also provides students with opportunities to practice applying their knowledge, talents, and personal resources in value-creation activities.

In terms of entrepreneurship education, there are two points of view; the first is that there is a limited understanding of entrepreneurship education is believed to limit entrepreneurship to a

business subject that offers the chance to learn about marketing, finance, human resource, strategy, and capital acquisition (Hardie, Highfield & Kerry, 2020). An expanded understanding of entrepreneurial competencies calls for gaining knowledge through initiatives or styles that confront opportunities in a wider spectrum of subjects and problem-solving prospects in the local community and can pique the interest of students drawn to projects with significant social impact. The goal of entrepreneurship education is to change students' views on taking risks and adopting novel business strategies (Jones, Penaluna & Pittaway, 2014). Concentrating on entrepreneurial understanding in terms of emotive, cognitive, and mastery outcomes aids in determining whether or not entrepreneurship education has impacted student behavior. Affective consequences include shifts in attitudes toward starting a new firm or participating in innovation within an existing one. The critical analysis that results from knowledge is a component of cognitive outputs and is crucial in presently complex corporate environment. This involves understanding and knowledge of the motivations for beginning a firm, and the tools required to be an entrepreneur are part of skill-based outcomes (Ratten & Usmanij, 2021).

Assessing affective learning, cognition, and conation is another technique to gauge how effective entrepreneurship education is. Changes in feelings and perspectives resulting from educational experiences are affective learning. This could involve learning more about the benefits and drawbacks of being an entrepreneur. Acquiring new skills that can be applied in a professional setting is a component of cognitive learning (Koronios, Kriemadis, Dimitropoulos, & Papadopoulos, 2019). Conation refers to how individual feel concerning the entrepreneurship process, which might include considering it a beneficial aspect of company activity. Using all of these distinct entrepreneurship education methods in today's world is crucial. Furthermore, Entrepreneurship education has advanced from instructing students on launching a new firm to identifying business opportunities and launching digital companies (Nowinski, Haddoud, Lancaric, Egerova, & Czegledi, 2019). The shift in educational emphasis toward experiential learning is responsible for this variation in learning strategies. This entails assisting pupils in gaining specific abilities and information in a natural environment. A blended learning approach that combines several teaching methods, including case studies and business plan competitions, is employed to achieve this.

3.2 Venture Creation

According to Muhammad (2018), venture creation is a method for starting new businesses and bridging the gap between a capitalised company and an idea; it adds value to existing goods or services by developing a new company. According to Abdul (2018), venture creations identify business opportunities and should be taught hands-on. The continuous cycle of vision, change, and invention that makes up entrepreneurship gives venture creation its special qualities since it results in fundamental changes in both business and society. Venture creation is crucial to the growth of any nation's economy. Therefore, it is essential for college graduates to embrace an opportunity-oriented viewpoint. Promoting an entrepreneurial mindset among graduates has drawn a lot of attention. The aforementioned is true because entrepreneurship is frequently considered a gear in countries' socioeconomic success because of its ambition and ability to create job opportunities. Most business initiatives are started in response to market demand, a shortage of market supply, or when a new business prospect is identified (Egwakhe, Abdullahi, Akande & Umukoro, 2022).

After determining the wants of consumers for a particular good or service, the entrepreneur and investors move forward with developing, marketing, and selling the concept. Starting a new business entails prospective business owners discovering potential and seizing those opportunities by acting to launch a new endeavor. Entrepreneurs engage in activities that include finances and human resources. Starting new businesses is essential to being an entrepreneur. In actuality, entrepreneurship is concerned with new business ideas or opportunities that must be found, developed, assessed, and taken advantage of to add value. Venture creation is at the heart of entrepreneurship; innovative and entrepreneurial individuals or groups establish new enterprises, hence comprehending venture creation necessitates a comprehension of the function of humans.

3.3 Entrepreneurship Education and Venture Creation

According to Jeremiah and Taiwo (2016), exposure to an entrepreneurship education curriculum substantially impacted how young Nigerian entrepreneurs came up with new ventures. It supported the arguments made by Bell and Bell (2016), who underlined that educators might replicate an entrepreneurial center-like experience for pupils. Numerous authors have emphasized that entrepreneurial outreach programs, the scope of entrepreneurial education, career preparation, and experiential pedagogy are essential elements of entrepreneurship. These programs provide individuals with practical stimulation of their entrepreneurial skills (Agwu *et al.*, 2017). Additionally, training focused on developing

specific skills, such as leadership, innovative thinking, identification of opportunities and problem-solving have a big impact on venture creation.

Bae, Qian, and Fitt (2014) also examined the influence of entrepreneurship education on the growth of venture enterprises based on five factors: entrepreneurship education characteristics, individual factors, the cultural backdrop, entrepreneurship education application, and study quality. Whether courses are given in a semester-style structure or in workshops, the educational format setting or emphasized company planning or venture creation, was inferred to have minimal effect on altering the link between entrepreneurship education and inclinations. Additionally, variances between individual students did not significantly impact the association between entrepreneurship education and goals. The relationship between entrepreneurship education and entrepreneurial tendencies is, however, more beneficial when taking into account the cultural context in countries with (1) high in-group collectivism, (2) low masculinity / femininity, and (3) uncertainty avoidance index.

Galvão, Ferreira, and Marques (2018) also provided findings from the literature on entrepreneurship education and training as regional development drivers. The findings showed that training and entrepreneurship education can both be powerful tools for regional development and that it is crucial for the organisation to work together toward common objectives to strengthen society's entrepreneurial intent. Findings also show three groups as literary trends: entrepreneurial institutions, entrepreneurial spirit, and business creation process.

4.0 Conclusion and Recommendation

This in-depth study examined how the field of entrepreneurship education and business creation has altered since 2018. Our findings show how, over time, entrepreneurial education research has evolved into a unique scholarly area, guided by a practice-oriented research approach that has stressed the need of integrating classroom instruction to "real-world" contexts. Our review, however, has confirmed the internal conflicts that have worsened over the last ten years, where the impasse between a limited start-up perspective and a broad industrious view has sparked a fierce academic debate about the subject's origins and the best place to start when engaging in teaching and learning. This research also revealed that graduates are enthused and inspired to establish their own enterprises as a result of their entrepreneurship education. It boosts their attractiveness and confidence in their abilities to

begin the new firm. Enhancing entrepreneurial self-efficacy and desirability increases students' entrepreneurial goals and motivation to start firms.

It is critical to provide entrepreneurship education "for entrepreneurship." It can be managed effectively in order to boost economic growth and reduce unemployment. As a result, there is a demand for unbiased and distinct solutions that facilitate the adoption of global entrepreneurship education to assist in the creation of a more prepared and flexible society. By being coached and equipped to have a more active and forward-thinking attitude obtained through entrepreneurial skills, young people can be empowered to tackle and thrive in the (increasingly) tough world we live in (and will continue to live in). As a result, they will become productive people capable of contributing to the advancement of our social and economic prospects. The study also further recommends revamping current entrepreneurship education programs to encourage students to create innovative or creative ventures.

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CORPORATE ENTREPRENEURSHIP AND ORGANIZATIONAL EFFICIENCY A STUDY OF NIGERIAN BOTTLING COMPANY

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Abstract

Corporate entrepreneurship (CE) has no doubt been an immense contribution to the development of organizational activities in terms of innovation and employment generation. Thereby corporate entrepreneurship and organizational efficiency has positive effect in cutting cost and managing of resources (human and economic). This paper investigates the relationship between corporate entrepreneurship and organizational efficiency on how an organization will explore the environment for future expansion and growth for sustainability. Descriptive survey design was used and the population of the study was 2290 which was made up of entire employees of Nigerian Bottling Company Ikeja, Lagos State. Sample size for the study was 341 and this was determined using Taro Yamane's formula. The independent variable corporate entrepreneurship was operationalised as innovativeness, pro-activeness and risk taking on dependent variable organizational efficiency. Three hundred and forty one questionnaires were administered (341) while three hundred and five (305) was returned which represent 89% response rate. The data collected were analyzed using Pearson Product Moment Correlation via Statistical Package for Social Science (SPSS) version 21. The findings of the study reveals that there is positive correlation between corporate entrepreneurship dimensions (Innovativeness – 0.788, Pro-activeness – 0.750 and Risk taking - 0.682) and Organizational Efficiency in Nigerian Bottling Company Ikeja Lagos State. Hence the study

concludes that there is significant positive relationship between Corporate Entrepreneurship and Organisational Performance. It is hereby recommended that organization management should embrace corporate entrepreneurship as a strategy and also create an enabling environment that will promote its effectiveness in to order to facilitate organizational efficiency, expansion, growth and sustainability.

Keywords: *Corporate Entrepreneurship, Organizational Effectiveness, Innovativeness, Pro-activeness Risk Taking, Customer Retention, Customer Satisfaction and Interpersonal Relationship.*

1.0 Introduction

Corporate entrepreneurship is the concept of supporting employees to think and behave like entrepreneurs within the confines of an existing organizational structure i.e. employees with the right vision and skills are encouraged to identify opportunities and develop ideas which lead to innovative new products, services and or new lines of business (Kennedy 2018).

Huang and Sonny (2018) define corporate entrepreneurship as a process through which individuals in an established business pursue entrepreneurial opportunities to innovate, without regard for the level and nature of currently available resources. Abosede, Fayose and Eze (2018) look at corporate entrepreneurship as an emergent behavioral intentions or behaviors deviating from the customary way of doing business. Zahra (1991) viewed corporate entrepreneurship as formal and informal activities aimed at creating new business in established companies through product and process innovations and market developments.

Organizational efficiency (OE) is the ability put up by the group of people to managing the resources (human and economic) as necessary so as to cut cost and ensure optimal results for set objectives. Organizational efficiency can also be described as the process of using fewer resources, as well as less time and with the little amount of money to achieve a goal. Efficiency makes a difference not only for the business but also for employee engagement. Efficiency can best be improved in four ways: Management, Workforce, Production and Communication. According to Kovac (2007) described organizational efficiency as the positive result of the comparison between the inputs and the results obtained. Mandl, Dierx, Ilkovitz; (2008) and Sorber (1999) posited that efficiency is the relationship between inputs and effects to achieve the objectives.

Corporate entrepreneurship and organizational efficiency have to do with increase in productivity, innovativeness, pro-activeness and managing of resources to enhance maximum credibility and sustainability of firms which leads to expansion and development of entrepreneurial activity. Productivity in the sense of how input is rapidly turns into outputs like goods or services. Innovativeness as described as the heart of business introduces something new to a firm whether it is a new product, a new market strategy, a new method in order to reinvigorate the firm and promote new value and growth. Pro-activeness plays an important role in relation to superior performance because it implies customer focus, understanding customer needs; ascertaining and exploiting what customers need and actively deconstructing what competitors are offering so that they can produce better offers.

Following the introduction, the continuity of the paper is structured as follows: section two reviews extant literature; section three discusses the methodology adopted in the paper. In section four are the results analyzed while section five concludes the paper with relevant recommendations.

1.1 Statement of Problem

The ultimate aim of every organization is to achieve its set goals with the available resources within their reach and sustenance of their competitive advantage over a length of time. Achieving this purpose has been major challenge of every organization irrespective industries to which they belong. Most organization to overcome this challenge have adopted various measures such as training and development of employees, enhanced compensation package, introduction of career progression opportunities, talent management, flexible work arrangement to mention a few but most of this strategies has yielded little or no result. Literatures reviewed revealed that corporate entrepreneurship a process of creating mind set and entrepreneurial behavior among top management, managers and subordinates have not been given attention as one of the strategy to achieve organizational efficiency. Most of the past studies both foreign and locally (Gemechu, Abebe, Csaba & Anna, 2021; Salmanufarisi & Abubakar, 2019; Abosede, Fayose & Eze, 2018; Huang and Sonny 2018) on corporate entrepreneurship are conducted on organisational commitment, organizational culture, organisational, competitive advantage, organizational performance but little or none of this study has specifically carried on organizational efficiency. Hence this study examines the relationship between corporate entrepreneurship and organizational efficiency in Nigerian Bottling Company (NBC) Ikeja, Lagos State.

1.2 Objectives of the Study

The main objective of the study is to examine relationship between corporate entrepreneurship and organisational efficiency while sub objectives are as follows:

1. To examine relationship between innovativeness and organisational efficiency.
2. To investigate correlation between pro=activeness and organisational efficiency.
3. To examine relationship between risk taking and organisational efficiency.

1.3 Research Questions

This research was guided by the following research questions

1. Is there any relationship between corporate entrepreneurship and organisational efficiency?
2. Is there any correlation between corporate entrepreneurship and organisational efficiency?
3. Is there any relationship between corporate risk taking and organisational efficiency?

1.4 Hypotheses

The following null hypotheses were formulated for the study:

Ho_i. There is no significant relationship between innovativeness and organizational efficiency?

Ho_{ii}. There is no significant relationship between Pro-activeness and organisational efficiency?

Ho_{iii}. There is no significant relationship between risk taking and organisational efficiency

2.0 LITERATURE REVIEW

Corporate entrepreneurship (CE) has been defined in several ways as a process by which individuals pursue opportunities independent of the resources they control (Stevenson & Jarillo, 2015). According to Soininen, Martikainen, Puumalainen & Kylaheiko (2012) posited that corporate entrepreneurship is a concept with innovative elements as key ingredients: product extensions or re-reformulations, process re-engineering and cost-cutting, the search for untapped markets, new applications for existing products/services, new businesses. Corporate entrepreneurship has been characterized as productive and unproductive. Productive corporate

entrepreneurship contributes to economic growth while unproductive corporate entrepreneurship results in net reduction in social income and wealth. Unproductive corporate entrepreneurship is viewed as the manifestation of rent seeking behaviours that add no positive value to society. Thus, only when corporate entrepreneurship is productive can it make positive contribution to a nation's output (Oladele, Akeke & Oladunjoye, 2016). CE becomes a significant source of innovation, revitalization and improvement of productivity for organisations. Corporate entrepreneurship has been characterized as productive and unproductive. Productive corporate entrepreneurship contributes to economic growth while unproductive corporate entrepreneurship results in net reduction in social income and wealth. Unproductive corporate entrepreneurship is viewed as the manifestation of rent seeking behaviours that add no positive value to society. Thus, only when corporate entrepreneurship is productive can it make positive contribution to a nation's output (Oladele, Akeke & Oladunjoye, 2016). Therefore, CE becomes a significant source of innovation, revitalization and improvement of productivity for organizations. Thus, efficiency in an organization which are categorized into four types: management, workforce, production and communication. According to Bain (2016) viewed that efficiency mindset is a powerful tool to unlock growth and make profits more sustainable. Successful companies talk about efficiency as a big part of "who we are", as opposed to "what we did". He also explained that efficiency reduces complexity and frees up the funds required to invest in new offerings and innovation. Therefore, management is the strong executive sponsorship as the single most important factor for success and the most cited reason for failure when things go off track when it comes to organizational efficiency (Bain, 2016). Workforce is regarded as cross-functional teams where efficiencies can be leveraged. They have the power to develop well-informed strategies that address all elements of the business, and which are based on the unique needs and perspectives of each group. These sets of group can also help maximize workforce efforts by eliminating redundancies that occur when departments don't communicate. Production is an illustration of processes in a way that allows an organization to produce more using the same resources; using the time required between design and production. Communication efficiencies are an essential way to gain alignment and ensure the adoption of your major programs. Efficient communication is based on employee demographics, tenure and roles. When the message is personalized and segmented, it allows for a unique employee experience. Efficient messaging provides clear direction about how employees can take action and empowers decision making throughout the organization.

Risk taking

Risk taking involves the outcome of uncertainty either for success or failure; borrowing heavily and /or committing significant resources to ventures in uncertain environments (Zahra and Garvis (2000).

Eze (2018) asserted that risk taking can be described as a company's disposition to support innovative projects, even when the payoff from these activities is not known. Similarly, (Segun et al, 2018) stated that firms allow individuals and teams to act independently and exercise their creativity by taking risks in coming up with new ideas of products and services.

Innovativeness

This reflects a firm's tendency to engage in and to support new designs, uniqueness, experimentation and creative processes that may result in new products, services, or technological processes (KahKha, Kahzeh and Armeh, 2014 and Eze 2018). Innovative firms have capabilities to take a follow-up in market changes and respond quickly, thus capitalizing on emerging opportunities (Clark 2010). Innovations also transform firm's knowledge base,

allowing it to develop new competitive approaches, which can be exploited in new foreign markets to achieve growth and profitability (Zahra and Garvis, 2000).

Pro-activeness

Pro-activeness depicts a firm's aggressive pursuit of market opportunities and a strong emphasis on wanting to be among the very first to implement innovation in the industry according to (Brizek, 2017). Pro-activeness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competitors and acting in haste for future demand (Ibrahim, 2018). Abosedo, Fayose and Eze, (2018) defines pro-activeness as an indication of a company's determination to pursue promising opportunities, rather than merely responding to competitors' moves. Eze (2018), postulated that pro-activeness refers to how a firm relates to market opportunities in the process of new entry. They added that pro-activeness involves pursuing opportunities and the will to respond aggressively to competitors. Organizational performance is described as the actual output of an organization as measured against its standard output (Kahkha, Kahrazeh & Armesh, 2014) or compared by the output of another organization under the same conditions. Madeni, Oke and Ajagbe (2015) citing Daft (2000) define organizational performance as the organizations ability to ascertain its objective through the use of resources in an appropriate manner. To this regard Moss (2000), state that in emerging global markets, characterized with rapid technological developments organizations are compelled to devise strategies using the available resources to increase their performance. Compare to this, some firms with high level of performance are flexible to environmental dynamics or change, making it easier to identify new opportunities caused by disequilibrium (Kuratko, Ireland and Hornsby, 2001). Dimensions of organizational performance (non financial) are viewed differently by researchers, for example productivity (Moss, 2000); sales and market share (Abdulrahman, 2010, and Solomon and Robinson, 2008), employee satisfaction (Abdulrahman, 2016), customer satisfaction and interpersonal relation (Ahmed, 2003 and Sanni, 2009). Other factors includes; quality of management in the industry, achievement goals (Dyek, Frese, Baer and Sonnentag , 2005 and Eze, 2018).

3.0 Methodology

3.1 Research Design

Descriptive survey research design was used in this study due to the nature of the concept that is variable under investigation.

3.2 Instrument for Data Collection

The data collection instrument used in this study was closed ended questionnaire which contains twelve (12) items for the independent variable corporate entrepreneurship. This was adapted from Lumpskin & Dess 1996 and Hornsby 1996. Also four (4) items of the dependent variable organizational efficiency was self developed. The instrument was found usable based on the high reliability result the Cronbach Alpha result was 0.83. The four-point Likert scale was used for all the research questions in this study. Three hundred and forty one (341) questionnaires were proportionately distributed among the top, middle and the lower level employees in Nigeria Bottling Company Ikeja and three hundred and five (305) questionnaires were returned and correctly filled which represented 89.4% of the total distribution.

3.3 Population, Sample size and Sampling techniques

The population for this study was Two thousand two hundred and ninety (2290) which is made up of employees of Nigerian bottling company Ikeja Lagos State. The sample size was Three hundred and forty one (341) which was determined using Taro Yamane’s formula.

Equationi

The sample size was derived from the formula below;

$$N = \frac{N}{1+N(B)^2}$$

Where N = Sample size

N = Population of study

B = Maximum acceptable margin of error or margin of tolerable error

1= A constant value

(Margin of error is assumed to be 5%)

$$N = \frac{2290}{1+2290(0.05)^2}$$

$$N = \frac{2290}{6.725}$$

$$N = 340.52 \quad \text{Approximately 341}$$

4.0 Hypotheses Testing and Discussion of Findings

Hypothesis One

There is no significant relationship between innovativeness and Organisational efficiency in Nigerian Bottling Company Ikeja. Lagos State.

Table4.1 : Summary of Pearson Product Moment Correlation Test Showing relationship between Innovativeness and Organisational Efficiency

		Innovativeness	Organisational efficiency
Innovative ness	Pearson Correlation	1	.788**
	Sig. (2-tailed)		.000
	N	305	305
Organisational. Efficiency	Pearson Correlation	.788**	1
	Sig. (2-tailed)	.000	
	N	305	305

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data 2023, (SPSS output

version 21.0)

From the result in the table above, the correlation result shows that there is a significant and positive relationship between innovativeness and organizational effectiveness with correlation coefficients of 0.788 which confirms the strength and magnitude of this relationship and it is significant at $p\ 0.000 < 0.01$. The correlation coefficient represents a high correlation indicating

a strong relationship. Therefore, based on findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between Innovativeness and organizational efficiency in Nigerian Bottling Company.

Hypothesis Two

There is no significant correlation between Pro-activeness and Organisational Efficiency in Nigerian Bottling Company Ikeja, Lagos State.

Table 4.2 : Summary of Pearson Product Moment Correlation Test Showing correlation between Pro-activeness and Organisational Efficiency.

		Pro-activeness	Organisational Efficiency
Pro-activeness	Pearson Correlation	1	.750**
	Sig. (2-tailed)		.000
	N	305	305
Organisational Efficiency	Pearson Correlation	.750**	1
	Sig. (2-tailed)	.000	
	N	305	305

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data 2023, (SPSS output version 21.0)

From the table above, the result shows that there is a significant and positive correlation between Pro-activeness and Organisational Efficiency with coefficients of 0.750 which confirms the strength and magnitude of this relationship and it is significant at $p < 0.000 < 0.01$. The correlation coefficient represents a very high correlation indicating a strong relationship. Therefore, based on findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant correlation between Pro-activeness and Organizational Efficiency in Nigerian Bottling Company Ikeja, Lagos State.

Hypothesis Three

There is no significant relationship between Risk Taking and Organisational Efficiency in Nigerian Bottling Company Ikeja Lagos State.

Table 4.3 : Summary of Pearson Product Moment Correlation Test Showing relationship between Risk Taking and Organisational Efficiency

		Risk Taking	Organisational Efficiency.
Risk Taking	Pearson Correlation	1	.682**
	Sig. (2-tailed)		.000
	N	305	305
Organisational Efficiency	Pearson Correlation	.682**	1
	Sig. (2-tailed)	.000	
	N	305	305

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data 2023, (SPSS output version 21.0)

From the result in the table above, the correlation result shows that there is a significant and positive relationship between Risk Taking and Organizational Efficiency. The correlation coefficient 0.682 confirms the strength and magnitude of the relationship and it is significant at $p < 0.000 < 0.01$. The correlation coefficient represents a very moderate correlation indicating a moderate relationship. Therefore, based on findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between Risk Taking and Organisational Efficiency in Nigerian Bottling Company Ikeja, Lagos State.

4.4 Discussion of Findings

The test of hypotheses revealed that there is a significant positive relationship between corporate entrepreneurship dimensions (Innovativeness, pro-activeness and Risk Taking) and Organisational Efficiency in Nigerian Bottling Company Ikeja, Lagos State.

5.0 Conclusion

From the tested hypotheses it was revealed that there is a significant relationship between corporate entrepreneurship dimensions and organizational efficiency. This study as shown that for organization to achieve its set goals, to remain competitive, as well as saving time and cost, Corporate entrepreneurial strategy needs to be adopted in the organization, that is a situation where every stakeholders imbibe and entrepreneurial mind set and spirit which is demonstrated in their behavior while performing their duty. It has been established in the study that through introduction of new innovation, pro-activeness and by taking calculated risk organization can promote organisational efficiency and organisational performance on the long run.

5.2 Recommendation

The followings are hereby recommended in line with the findings in this study:

1. Corporate entrepreneurship is to be given more attention as it facilitates organization efficiency and competitiveness.
2. Organisation management should create enabling environment that will enhance practice of corporate entrepreneurship in their organization.

3. Organisation members as a whole are to be provided with proper orientation on the need for introduction of corporate entrepreneurship strategy into the organization process and system.

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ENTREPRENEURSHIP ORIENTATION AND INNOVATIVE CAPABILITY ON SMALL AND MEDIUM SCALE ENTERPRISES PERFORMANCE

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Abstract

Small and Medium Enterprises (SMEs) is a major sector that contributes to employability, development, and non-oil trades. Furthermore, these sorts of organizations are capable of confronting and withstanding emergencies and can further recuperate more rapidly than bigger businesses. As one of the essential models of poverty reduction, the determination of the elements driving the outcome of SMEs should be decided to effect development and growth. This research utilized explanatory design, which attempts to analyze the connection between exogenous constructs (entrepreneurial orientation, and innovation capability) and endogenous constructs (SMEs performance). The populace is the selected small and medium-scale enterprises in Lagos State, Nigeria. Measures and considerations for the ventures are in view of trade volumes. The information was examined utilizing multiple linear regression analysis. The outcome shows that entrepreneurial orientation and innovative capability influence small and medium enterprise's performance cumulatively and selectively.

Keywords: *Innovative capabilities, Entrepreneurial orientation, Performance, Small and Medium Enterprises (SMEs), Growth*

Introduction

Small and medium enterprises (SMEs) is a major contributor to employment and the geometric progression of economic value of indigenous products. This paradigm of business can adapt to volatile economic echelons and further recuperate easily than larger organizations. These circumstances and realities are in line with the outcome of the empirical exploration by Moses, Olokundun, Akinbode, and Agboola (2016) which stated that the outcome of small and medium-scale enterprise is connected to the economic performance, especially in an underdeveloped country i.e Nigeria. The presence of SMEs today is crucial as a result of the principal qualities it has. One of them is the ability to engage labour multi-dimensionally (Salau, Osibanjo, Igbino, Joel, Atolagbe, Adegbuyi, Dada, & Adeniji, 2022). Albeit quantitatively, small ventures are predominant in the Nigerian business space however, this sector from an objective view has a minimal position. This can be traced to the stiff competition small ventures face under volatile circumstances with larger organizations in terms of information, input, and market stake.

Extant studies show that the small-scale business sector experienced slow growth, especially in the production sector that produces specific predominant items. Hence, endeavours to recognize speculated investment in small-scale business operations that produce better items and services should be optimized. As well as having a sufficient value likewise adapting to the dynamics of client demand. Consequently small ventures contribute essentially to the Nigerian economy, like other businesses in the Nigerian economic space. Given this, small-scale businesses encounter different impediments like the absence of innovativeness, absence of entrepreneurship orientation, and flexibility, which add a significant cause that hamper the

development and performance of small-scale businesses (Oreagba, Ogunnaike, & Kehinde, 2021). The eruption of issues in small-scale companies is brought about by several imperatives.

Such imperatives that affected human personnel in small-scale businesses incorporate the degree of entrepreneur orientation, and innovative capabilities, particularly those connected with sales. Entrepreneurs with sufficient capacities in terms of innovation will be able to foster innovative dynamics and procedures, including item improvement, valuing strategies, advancement, and appropriation (Ogunnaike, Borishade, & Jeje, 2014). One of the reasons for Nigeria's small-scale venture performance being a lot lower than similar businesses in nations like the United States is because of the low level of innovativeness and entrepreneurial orientation. Furthermore, in the period of free commerce and globalization, innovation and entrepreneurial orientation are two predominant elements in deciding the degree of competitiveness of an organization. Objectively, organizational heads and entrepreneurs/administrators tend not to understand the business sphere, because of the absence of innovativeness in potential markets (Adedugba, Ogunnaike, Adeyemo, & Kehinde, 2021). Thus, product competitiveness tends to be rigid and narrow, both regarding item enhancement, and quality. This happens on the grounds that the orientation and the innovativeness of the entrepreneurs/directors of small-scale companies are as yet feeble in addition to the absence of market data (Baranauskas, & Raišiene, 2022).

A major bottleneck encountered by small ventures is innovation and entrepreneurial orientation. Innovation is an essential instrument and developmental procedure to introduce a product and service, and provide competitiveness (Inegbedion, Asikhia, & Adedugba, 2022). It is a method of optimizing competitiveness and performance via entrepreneurial orientation effectiveness (Wojcik-Karpacz, Kraus, & Karpacz, 2022). Consequently, if an organization is focused on innovation, it will help in surviving rivalry and gaining critical advantages. Many studies have established the connection with performance. Furthermore Girling (2022) posited that innovation is an important echelon to sustain competitiveness. Innovation via the paradigm of entrepreneurial orientation is likewise a reaction to dynamic circumstances, and the state of the business climate that is evolving quickly (Lex, Gielnik, Spitzmuller, Jacob, & Frese, 2022). This can only happen if entrepreneurial orientation through the tool of innovation is considered on the grounds that it provides a major effect on the outcome of the organization.

Therefore, entrepreneurial orientation is a mechanism of innovation making it to an entrepreneurial system (Lévesque, Obschonka, & Nambisan, 2022). Entrepreneurial orientation and innovation are intertwined in the paradigm of entrepreneurship that births optimal performance (Adedugba, Asikhia, Inegbedion, & Ogunnaike, 2023). Consequently entrepreneurial orientation and innovation capability are fundamental keys to concocting new concepts. Hence, the principal contribution of this study is to empirically explain the role of entrepreneurial orientation and innovation on small-scale business performance which has received little consideration. Furthermore, the investigation will likewise explore the dynamics of entrepreneurial orientation and innovation.

Literature Review

Entrepreneurial Orientation

Entrepreneurial orientation as indicated by Zubair and Olaolu (2021) is an organization's subjective innovativeness, proactive operations, and risk-taking operations typified in support of ventures connected and interdependent. Furthermore, Al-Shami, Alsuwaidi, and Akmal (2022) stated that an organization with a pioneering entrepreneurial orientation is first in market item development, risk-taking, and innovation. Hence the paradigm of entrepreneurial orientation is a cycle of practices, and exercises that utilize item advancement, take up challenges, and maximally improve performance. As indicated by Upadhyay, Upadhyay, Al-Debei, Baabdullah, and Dwivedi (2022) entrepreneurial orientation is an organizational ability to catalyze hierarchical resources and market advantage that influence outcomes, especially in the small-scale industry. In the interim Kesinro, Adenugba, & Ademilua (2018) stated that the idea of entrepreneurial orientation is the propensity of employees to enhance, optimize, and face challenges within any business sphere. According to Oludayo & Ibidunni (2019), entrepreneurial orientation is a top administrative propensity to take determined, innovative, and calculated risks.

Zina, Soumeiya, and Mohamed (2021) asserted that entrepreneur-oriented organizations can attain their market objective and be in a better business position than their rivals. The organization continually screens market changes and reacts rapidly to achieve profitability. Innovation places small and medium-scale firms in front of contenders, and market advantage will bring profit optimality. The paradigm proactively gives organizations the capacity to present new items or services before competitors. Silva, Vale, and Moutinho (2022) contrived a scale of empirical estimation of entrepreneurial orientation. Arabeche, Soudani, Brahmi, Aldieri, Vinci, and Abdelli (2022) altered the estimation instruments in the study of entrepreneurial paradigm. An examination by Seyed (2022) recommended that the estimation instrument is an instrument that can be utilized to quantify the degree of entrepreneurial framework. Albeit it is also an effective model of estimating the degree of innovation.

Innovative Capability

The paradigm of innovative capabilities is the primary component of entrepreneurial orientation that mirrors an organization's inclination to utilize and uphold novel thoughts, new things, tests, and innovative flows that will bring result in new items, new administrations, and new technological cycles. Business dynamics and rivalry force organizations to become innovative in business advancement and foster learning conduct (Ferdinand, & Zuhroh, 2022). The significance of administrative accentuation in establishing an inward business climate favorable to exercises innovativeness (Falola, Adeniji, Adeyeye, Igbinnoba, & Atolagbe, 2020). Maldonado-Guzmn, Garza-Reye, Pinzn-Castro, and Kumar (2018) posited that innovation capabilities are characterized as a thought, practice, or material considered new by the applicable reception unit. Khraim (2022) characterized innovative capabilities as the effective utilization of imaginative thoughts within any business. Despite the fact that innovation inclinations can change any organization significantly Al-Dulaimi, Al-Marzooqi, Lubis, Siren and Kassim (2022) stated the concept is an essential readiness to leave old and existing procedures and seek new ways to improve things.

There are few techniques that can be characterized in the paradigm of innovative capability, however, there are different levels of innovative capabilities that can be tailored towards products and services. In the entrepreneurial system, Zastempowski (2022) asserted that managers with entrepreneurial orientation are significant for organizational improvement due to the fact that it provides a significant roadmap that leads to opportunities not discovered. By executing procedures and innovativeness there is a possibility of endurance and advancement that will further develop business outcome (Lopez-Vega, & Lakemond, 2022). The study also stated the importance of organizational proactiveness as an efficient system of increasing market stakes. By taking advantage of the variance of market randomness, the principal and first initiator can gain an unusual advantage. Thus, taking initiatives through the means of forecasting and anticipation of market demand is closely connected to entrepreneurship. Aas, & Breunig (2022) explained the paradigm of innovation capabilities in the context of proactiveness and risk that directs entrepreneurial orientation. This implies the course of entrepreneurship venture and its implication. In the first place, proactive, creative, and risky moves taken by an organization might influence different variables within and outside the organizational chain. Secondly, emphasis is placed on the implementation of an entrepreneurial framework with the organizational chain.

Small and Medium Scale Enterprise(SME'S) Performance

Grundow (2022) stated that the metrics of performance is proportionate to the accomplishment that has been attained in terms of profitability, environment, etc by an organization that is estimated per timeframe. The organization outcome is the accomplishment of a business, especially the small and medium scale organization as the objective of the organization is based on profit optimality and sustainable growth. Abubakari, Abdulai, and Adam (2022) further asserted that the elements of performance metrics estimation is utilized in research in terms of development, productivity, and effectiveness. According to Gemechu, Ayalew, Dunay and Illés (2022) performance is output related that is proportionate to the input of an organization in view of specific roles. Therefore, performance can be viewed in terms of input rate. Huang, Yin, Choi, and Muhammad (2022) in their study measured the paradigm of performance of an organization through the percentage of the market stake, sales progression, and the significance of accomplices that turns out this aspect can likewise be utilized to gauge organizational outcome.

Clampit, Lorenz, Gamble, and Lee (2022) posited a two-approach model to estimate organizational performance that is holistic and subjective. The holistic model is a concept that utilizes information objectively in terms of economic information, while the subjective model is a procedure that estimates performance in view of the employee's opinion. Hamsal, Darsana, and Zulhelmy (2022) characterized organizational performance as an effective deployment of a new item and market improvement, where the performance can be estimated through sales rate and market stake. Zhang, Soh and Zhao (2022) recommended that, sales optimization, work development, income growth, and market stake improvement as the main variable of estimation. It was also based on the maximization of growth appropriation is a fitting indicator to estimate performance. It is also proper to view economic performance as an integral aspect of performance. Together, economic pointers provide a robust depiction of the actual state of an organization when contrasted with projected constructs. Different studies stated that both quantitative and subjective pointers have specific limits, further suggesting the use of both. Quantitative estimations like Return on venture (ROI), profitability, deals, etc. While

subjective estimation is alluded to as a performance construct utilizing a specific scale model for example, information and business experience, the capacity to offer quality items or administrations, and the organization's liability to its current circumstance. Organizational firms can gauge performance by utilizing monetary and nonfinancial measures. Subsequently, monetary outcome is typically profitability, while non-financial measures are consumer loyalty, turnover, and efficiency (Hewitt-Dundas, & Roper, 2018). To gauge organizational performance and its viability of resources is based on four models such as the overall objective, framework approach, partners approach, and competitiveness assessing the organizational performance in view of its capacity to address the issues and needs of clients.

Olughor (2015.) gauged the outcome of small-scale businesses by utilizing a proportional scale of profits. The technique of estimating the performance of small and medium-sized organizations by Baumann-Vitoliņa, Woschank, Apsalone, Šumiloa & Pacher (2022) incorporated the Likert-scale respondents' evaluation of ten monetary measures including sales, development, income, net profits, operational cost, discount rate, recompense rate, and the overall outcome. Claudiu, Ion, Marinescu and Cătălina (2019) measured the outcome of small and medium-scale enterprises (SMEs) utilizing two estimations; profitability, and efficiency.

Innovative Capability, Entrepreneurial Orientation, and Small and Medium Scale Enterprise (SME'S) Performance

Small and medium-sized firms (SMEs) assume a significant and pivotal part in economic optimization, especially in an underdeveloped economy like Nigeria. Globalization, however, has reduced economic scales and expanded the development potential for SMEs (Alam, Salleh, Masukujaman, Al-Shaikh, Makmor, & Makhbul, 2022). Small and medium-sized firms in non-industrial nations put up with random, changing, and haphazard institutional conditions because of their size and the absence of production prospects, SMEs innovative capabilities is reliant and connected to the entrepreneurial orientation model that preludes performance. Entrepreneurial orientation and innovative capabilities are constantly treated as an independent construct of performance. This is on the grounds that performance is proportionate and an estimate of accomplishment accepted by Kiyabo and Isaga (2020) because of the emphasis on organizational orientations (entrepreneurial orientation). Past studies, for example Xiaobao, Rui, Jiewei, & Xiaofan (2022) established the connection between entrepreneurial orientation and performance. The study found that entrepreneurial orientation (EO) develops and optimizes performance. Other studies, for example, Nuong (2022); Octasyva, Yuliati, Hartoyo and Soehadi (2022) distinguished a positive connection between entrepreneurial orientation, innovative capabilities, and performance in small and medium scale firms. Given this, many studies focused on entrepreneurial orientation, innovative capability, and the linear connection to performance. This shows that little consideration has been given to the connection between entrepreneurial orientation and innovative capability and its harmonic impact on performance in the context of small and medium-scale enterprises in Lagos State, Nigeria.

Theoretical Review

Among the constructs that impact innovative capability and, entrepreneurial orientation a theoretical model of resources based view (RBV) provides specific consideration to the significance of resources in small and medium scale enterprise (Ahn, Kim, & Lee, 2022). The

model of RBV is applied to SMEs. This envelops different resources, capacities, techniques, and attributes, as well as information and data utilized to accomplish a business objective. Resources empower the preparation and utilization of systems. These assets are valuable (important), scarce, and inaccessible to contenders (uncommon), it is matchless and can be exchanged (nontradable / nonsubstitutable), addressing unique properties. Therefore, resources based view (RBV) was utilized in this study to retain and improve explicit resources in the context of innovative capability and entrepreneurial orientation.

Methodology

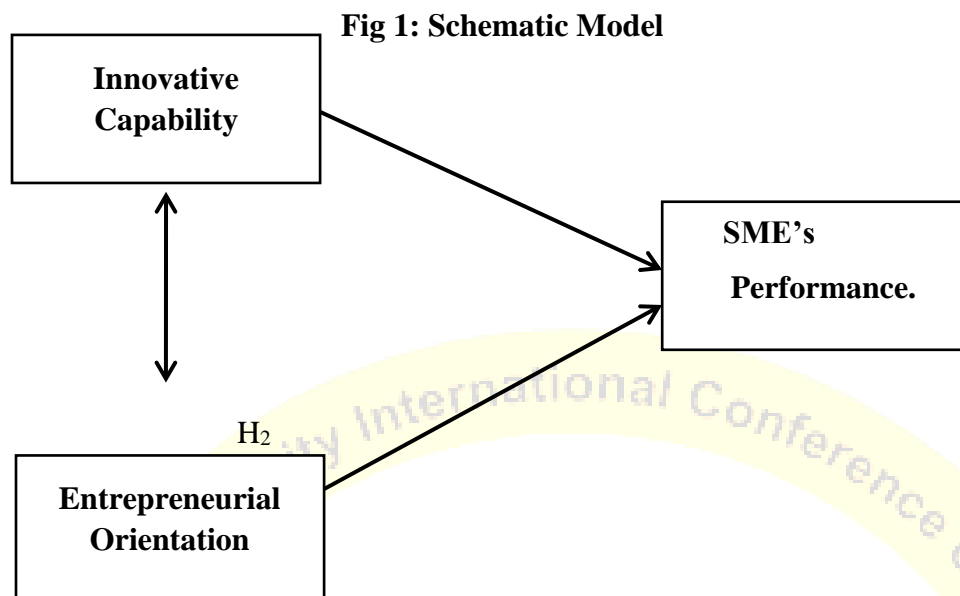
The study was conducted in Lagos State, Nigeria with the thought that Lagos State is a commercial hub with a focal point of economic exchange in Nigeria. Explanatory research was utilized to examine the role of constructs formulated. The objective populace of this study were the small and medium-scale enterprises (SMEs) situated in Lagos State that produces shoes and bags. The basis of selection was based on the low trade volume and lopsidedness of the sector. To decide the quantity of minimal sample standards in multivariate analysis such as multiple linear regressions was utilized. Upon this premise, the sample should be 10 times bigger than the research constructs (Isaac, Odiri, Oboreh, & Akpoyibo, 2022). Hence 60 small and medium-scale enterprises (SMEs) were selected in Lagos State. This was based the trade volume. A purposive sampling model was utilized in accordance with the study constructs and needs. Questionnaires were utilized to harvest information from the top management level of the organizations being the employees that drives the organizational objectives. The study utilized a Linkert scale of five, and the two constructs utilized in this study were entrepreneur orientation and innovative capabilities that leads to performance.

Furthermore, entrepreneur orientation was segmented into three constructs: innovativeness, foresight, and risk decisions. While, innovative capabilities were arranged into three constructs: market capacity, adaptability, and dynamism. Validity examination was utilized via corrected variable overall correlation that achieved the value of each construct. A result higher than 0.30 (Huang, Yin, Choi, Muhammad, 2022) is utilized as the validity of each indicator. Reliability test was utilized through the means of Cronbach alpha however, Cronbach alpha estimate more prominent than 0.70 was utilized as a minimal. To evaluate the causality connection between study constructs multiple linear regression analysis was utilized via SPSS 21.

Hypotheses

Hypothesis 1: Innovation capability has a considerable effect on SMEs' Performance.

Hypothesis 2: Entrepreneurial Orientation has a considerable influence on SME's Performance.



The formulation approach is based of $Y = f(Z)$, where Y is the reliant variable or construct(SME,s Performance) while, Z is the independent construct or variable(Innovative Capability and Entrepreneurial Orientation)

Discussion of Results

The outcome of reliability and validity of research constructs indicate that all constructs utilized in this study are substantial. Therefore, it is based on the corrected variable overall correlation outcome above 0.3 which implies that all constructs are substantial models for estimation (Munir, 2005). Given this, Cronbach's alpha outcome above 0.70 demonstrates the dependability of the variables.

Table 1: Formulation Summary of Construct Z₁,Z₂

Formulation	R	R ²	Remodeled R ²	Std. Error
1	0.713	0.701	0.811	0.51234

Table 2: Anova

Formulation	Sum	df	Average Square	F	Estimate
Regression	28.112	2	6.1234	32.771	0.000
Residual	5.319	28	0.291		
Outcome	33.431	30			

Table 3: Coefficients Outcome of Reliant construct Y

Formulation	α	Error	Alpha	T	Estimate
Integer	-0.380	0.641		0.000	1.000
Z ₁	0.412	0.119	0.412	2.451	0.002
Z ₂	0.341	0.119	0.341	2.100	0.007

Based on the outcome of Table 1,2,3 the formulation of Entrepreneurship Orientation and Innovation capabilities considerably influences small and medium enterprises' outcomes. Therefore, the precision count of $F = 6,120$ which is critical at 0.000. While the t-test outcome to evaluate the linear impact, all show critical numbers beneath 0.005 in this manner each construct on Orientation of Entrepreneurship, and Innovation capability on SME's Performance is ok. Consequently, the coefficient (R²) of 0,713 confirms that the vacillation of 71.3% of Performance was affected by Entrepreneurial Orientation and Innovation capability constructs.

Table 4: Participants profile

Segment	Total	Percentage
Senior Manager	318	93.5%
Male	130	40.8%
Female	188	59.2%

Based on Table 4, 340 questionnaires were appropriated however, 318 of them were valid for analysis.

Conclusion

There is an impact of innovative capability on small and medium enterprise outcome. Therefore, the result indicates that a harmonic increase in innovative capability will be trailed by the optimization in performance. Subsequently, the utilization and implementation of innovative capabilities can be intertwined with entrepreneurial orientation through the organizational objective. Therefore, an effective hierarchical culture of innovation and entrepreneurial paradigm can accomplish an adjusted control by giving productive feedback from employees. The execution of innovative capabilities is one of the principal elements sustaining market advantage and further developing organizations. There is also an impact of entrepreneurial orientation on small and medium-scale enterprises (SMEs) outcomes. This outcome demonstrates that entrepreneurial orientation is a requirement for accomplishment, sustenance, and reliability.

Subsequently, the development of the business relies on the inspiration of the management. As such, entrepreneurial orientation decides performance. These outcomes show the importance

of optimizing small and medium enterprise outcomes by its management in view of innovation and entrepreneurship. Therefore, this paradigm is a mechanism of flexibility to adjust to the dynamics of business operations. In this way, the organization is expected to have the option to create new evaluations, concepts, and propositions for new items and services. The conclusion of the outcome based on the study is that the paradigm of entrepreneurial orientation is a construct that can decide the innovativeness of small and medium organizations. Subsequently, a cumulative entrepreneurial orientation should be the concern of the management of the organization. Innovative capabilities is also a construct that can essentially optimize performance because it is a vital driver for organizational competitiveness. The theoretical ramifications of the study with regards to RBV explains the linear linkage between innovative capability and entrepreneurial orientation that influences resource optimality that leads to maximal performance. Managerial ramifications was also gotten from the study that was based on extant literature. Optimal innovative capability implies an entrepreneurial orientation with the aim of maximizing performance in terms of market stake, profitability, viability, rivalry, and the number of clients. The outcome of this study is critical for small and medium-scale enterprises and partners to focus on factors that can optimize performance by aligning operational mechanisms in terms of entrepreneurship orientation and innovative capabilities.

The study is therefore significant on the grounds that it recognized a fundamental variable that helps shape performance. Thus, innovation capabilities in the extent of small and medium organizational undertakings should be improved and become a part of the goal that must be implemented by the management of the small and medium enterprises to decide unrivaled products and be sustainable. There are other constructs that determine performance in small and medium scale enterprise that the study did not consider. This shows the limitation. However, future studies can consider other constructs that determine performance in view of the mentioned constructs.

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Women Entrepreneurship and Sustainability:

A Systematic Literature Review

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Abstract

Women entrepreneurs who have the power to positively impact the environment and society at large are rising to the forefront of the business world and developing cutting-edge sustainability ideas; despite this achievement, there are concerns about the sustainability of the businesses women engage with and how various factors contribute to the success or failure of these businesses. This study considered literature on women in entrepreneurship and also examined the uncertainty that sustainable women entrepreneurs experience over how they may develop successful firms based on their innovations despite the many obstacles they may encounter. The study revealed amongst many findings, how much women contribute to entrepreneurship in their capacity and how they can do much more if measures are taken to ensure they have the right leverage to remain relevant in their different niches. The findings

also reveal the need for intervention from authorities to better aid and facilitate better business practices for women to ensure continuous sustainability.

Keywords: *Women, Women Entrepreneurship, Entrepreneurship, Sustainability, Systematic Literature Review*

1.0 Introduction

Women have fast become key players in the execution of entrepreneurial activities. The 2019 GEM Global Economic monitor study estimates that 231 million women worldwide have founded or are already running their businesses (Raman, Subramaniam, Nair, Shivdas, Achuthan, & Nedungadi, 2022). However, the survey also shows that the rate of women's entrepreneurship varies greatly throughout economies and is intrinsically linked to cultural norms and expectations. Most researchers focus on the entrepreneurial profile, psychological traits, push and pull factors, educational background and experiences, constraints faced, leadership style, and start-up activities. Highly creative and opportunity-sensing qualities are often attributed to women. These traits are believed to allow women to take on innovative, socially conscious business leadership positions that benefit them and society at large.

In most societies, women are expected to place high importance on their duties as homemakers and careers for their families, including their children, their closest relatives, and other close friends. This norm is altered to achieve sustainable growth for many economies by aggressively investing in education for women, health, and well-being. As a byproduct of these efforts, women's services to industry, society, and policymaking are becoming more vital than ever before. This has become more obtainable with the adoption of sustainable development goals. Although a good level of systematic review work on women's entrepreneurship and a general study covering various aspects of women's entrepreneurship has been conducted, there remains a gap in how sustainable women's entrepreneurship truly is. Additionally, there is evidence that women entrepreneurs are becoming more conscious of concerns related to sustainable development. Women connect their entrepreneurial activities to long-term development goals including reducing communal hardship in communities, advancing equality, and employing ecologically friendly techniques. However, the research intensities and patterns in this field are unknown. This study shall carry out a systematic review of literature relevant to the case at hand, seeking to make inferences from past works and making conclusions from findings made.

1.1 Research Questions

The study's objective is to conduct a thorough literature review to provide insight into women's entrepreneurship and sustainability. This systematic literature review seeks to answer the following three questions:

1. How much relevance does women's entrepreneurship have on a nation's economy?
2. Do women entrepreneurs possess the ability to drive sustainability on their own?
3. What steps do authorities need to take to ensure sustainability for women entrepreneurs?

2.0 Methodology

The study's main objective was to conduct a systematic literature review of women entrepreneurs' efforts to advance sustainability goals. The systematic literature review is helpful when examining articles across a specific period. Additionally, this strategy is effective in examining topical trends and is well-recognized by academics and scholars for performing studies on entrepreneurship (Poggesi, Mari, & De Vita, 2016). This strategy is rigorous and

allows for a review of the literature that is evidence focused. The following criteria were used in this systematic literature review:

- Scopus was the database used to find pertinent publications (Core Collection).
- Only peer-reviewed works that were published in English were eligible for selection.
- The selection spans the years January 2018 to Early 2023. A major effort was made to cover every article that had been written about the subject.
- In the search, the phrases "women" OR "women entrepreneurship" AND "sustainable" AND "entrepreneurship" was used. However, the search was restricted to the title, keywords, and abstract.
- This analysis does not include any publications, book reviews, book chapters, conference proceedings, reports, working papers, etc. There were only items present.
- To ensure its applicability, the article's abstract was read.
- Following the preceding step's confirmation that the article was pertinent to the study, it was retrieved and thoroughly read.

It is worth noting that no publications with a noteworthy impact factor were excluded, and the data site used was regarded to be among the most existing scholarly search systems. The search yielded 1,166 different publications; after employing the exemption options, 85 publications were searched

within the subject matter.

2.1 Process of Selection

The flowchart in Figure 1 shows the selection process of the relevant literature using the PRISMA methodology. In January 2023, a search was conducted on the Scopus database with the keywords above.

After filtering the search results for language, type of document, and years, the number of papers was reduced to 79 out of 1,166. The criteria for filtering included the English language, type of document (article, review paper, and conference paper), and years included from 2018 to early 2023. Next, the duplicates were removed. The final step was to read the title, keywords, and abstracts to check if a publication was pertinent to the study. At the end of the entire process, 79 studies were available for further reading. For the papers published, only those with at least one citation were considered. This resulted in a total of 59 published studies being included in the synthesis.

2.2. Bibliometric Analysis

The diagram in Figure 2 represents the papers published each year between 2018 and 2022. While the diagram in Figure 3 represents the distribution of papers by subject area with social sciences and business management being the highest.

PRISMA Flow Diagram

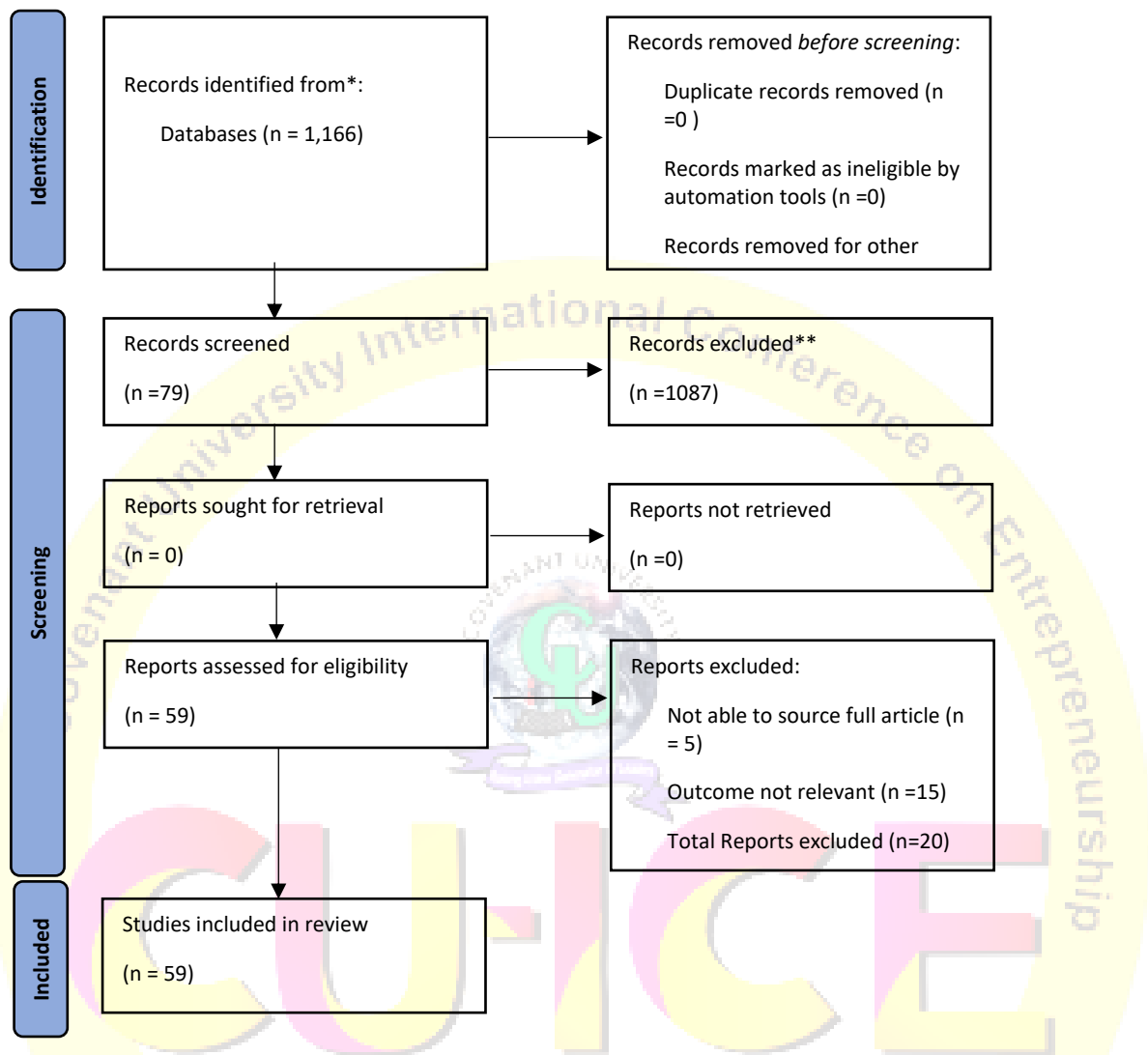


Fig 1. Flow diagram

Documents by year

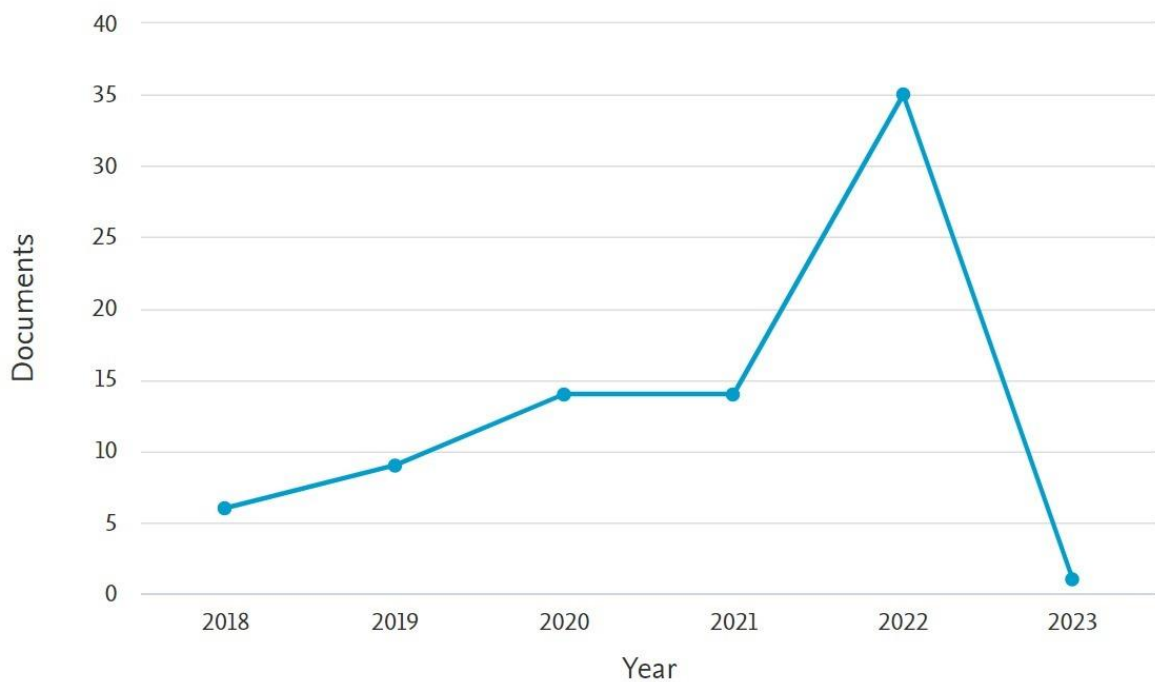


Fig 2. Document by year

Documents by subject area

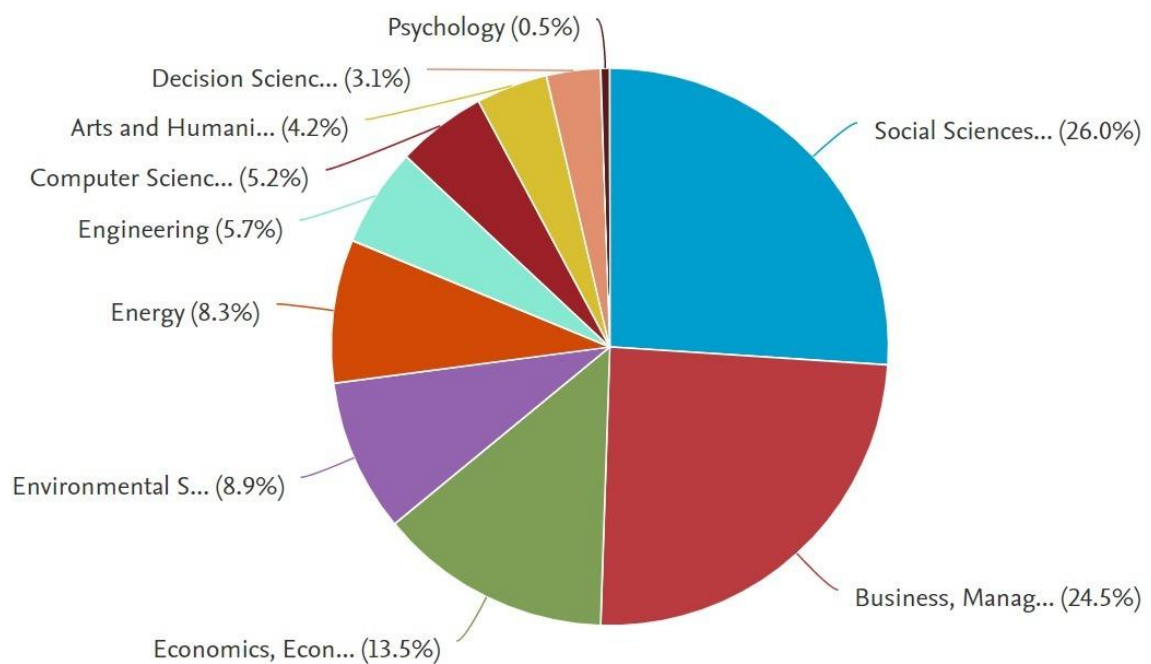


Fig 2. A document by subject area

3.0 Discussions

In light of the study's novelty, the research on women entrepreneurship and sustainability is still in its early stages. However, sustainability is an important topic in the activities since data suggests that women are concerned about the state of the world. When assessing the industry and sustainability, the articles take four different approaches: the inequality-related variations and how women develop business owners while contemplating the viable future, compared to men; the influence of women working in the workforce in entrepreneurship development and its applicability to sustainability practices; and the impact of the female workforce actively participating in entrepreneurship development and its applicability to green practices. It is critical to highlight gender differences in establishing entrepreneurial activities and their importance to sustainability, given that the research indicated that corporations with more women CEOs are mostly ecologically sensitive. This critically affirms that female entrepreneurs operate as stimuli for a nation's socioeconomic and economic development.

Women invent ventures based on past experiences, expertise, service provided, and environmental influence, according to examined literature. Men, on the other hand, often base their business initiatives on potential profits. Because women's skills (innovation, creativity, and resilience, for example) are shared inside the profession and increase the likelihood of crafting schemes to ignore pollutants and support sustainability practices, having women entrepreneurs is responsible for making sure sustainability is beneficial for the surroundings. This is critical to accomplishing the SDGs' goals and building the economy in a secure and long-term manner. Women's entrepreneurship traits, such as motivation, principles, expertise, and social orientation, should be developed and encouraged to inspire women to pursue green entrepreneurship. When developing a viable post-carbon future, international and national government support will be vital.

Furthermore, the extant study should be expanded to address the domain of SE, taking into account emerging entrepreneurs, experienced entrepreneurs, and the sector that creates entrepreneurship education.

3.1 Women Entrepreneurship

Individual and group entrepreneurial efforts can effect long-term change in financial, social, and universal domains that extend further than the development of high-growth, tech businesses, and increased profitability (Welter, Baker & Wirsching, 2019). In this regard, entrepreneurial efforts frequently entail overcoming environmental limitations and escaping the control and influence of others to achieve both personal and group development. Therefore, starting a business enables individuals to interact with the required social networks and resources to realize entrepreneurial ideas that involve social transformation and freedom from established power structures. Furthermore, Alkhaled and Berglund (2018) defined entrepreneurship as a tool for social change. Supporting the formation of more inclusive and equal societies is a key factor in eradicating poverty and advancing human development. The idea of entrepreneurship contains an intrinsic component of empowerment linked to advancing human welfare through developing individual skills (Ng, Wood, & Bastian, 2022). Women who are entrepreneurs are those who identify, develop, and implement a vision to generate opportunities with a more efficient method of doing things (Sutcliffe-Braithwaite, & Lawrence,

2019), as well as those who independently make business decisions linked to managing a business (Setini, Yasa, Supartha, Giantari, & Rajiani, 2020).

Women entrepreneurs' perspectives emphasize having the power to run their company, develop products that meet market expectations, learn as much as possible, and foster better connections with other companies, suppliers, and customers. Characteristics of women in business suggest that they be acknowledged as equal partners in business due to the importance of their talent, knowledge, and capability (Vivek, Saranya, & Chandrasekar, 2020). According to Georgieva, S. (2022), women who start and build enterprises are key drivers of inclusive growth and contribute towards economic and social growth. These are the motives why institutions, researchers, and the media are interested in them. Furthermore, they are making an increasingly substantial contribution to employment, quality of life, and national economic growth. The economic and social dynamics and ramifications of this phenomenon generate academic interest in female entrepreneurship. Women are a key and readily available resource that governments can exploit to accomplish economic success, as entrepreneurship is highlighted as a major source of employment, income production, poverty alleviation, regional development, and innovation. According to research, female entrepreneurs are less successful in comparison to their male counterparts, in profit, sales, number of employees, asset value, and survival periods.

3.2 Entrepreneurship Sustainability

The successful development of a new business is not the single most important factor in determining whether or not an entrepreneurial endeavor will be successful in the long run. Instead, the most important and challenging objective for a business startup is to ensure that it can remain in business in the long term. Sustainable entrepreneurship is considered a unique approach that prioritizes the welfare of future generations by balancing the development of environmental, social, and economic values (Terán-Yépez et al., 2020). In the realm of entrepreneurship study, sustainable entrepreneurship is a novel idea. It combines the concepts of sustainability and entrepreneurship and refers to the incorporation of environmental goals into the heart of corporate goals and actions (Samantroy, Tomar, & Women, 2018). Sustainable entrepreneurs create innovative techniques and types of organizations that considerably lessen negative environmental and societal effects while satisfying commercial objectives and ethical imperatives. It has been pointed out that the primary focus of an entrepreneur's activities should not be on amassing wealth because the notion of sustainable development has recently emerged as an urgent problem that is affecting the current system of the global economy.

This stemmed from the development of SE as a practice. Tang (2020) identified influencers of sustainable entrepreneurship to be positive psychological capital which is beneficial for a sustainable entrepreneurship experience, and according to him, the environment of the entrepreneur largely influences this psychological construct. The capacity of entrepreneurial endeavors to be sustained throughout time is an indication of more robust entrepreneurial intent. Furthermore, the recognition of chances for sustainable growth presents the entrepreneur with greater challenges than the recognition of the potential for non-sustainable development that is driven merely by the pursuit of economic gain. To create economic, social, and ecological value sustainably, entrepreneurs need to strike a balance between goals that are frequently in competition with one another. This is more conflicting for women entrepreneurs who have a lot more to consider at stake in their decision-making process.

Individuals, entrepreneurial teams, and the environment in which ventures are carried out all have a significant role in the success of sustainable entrepreneurship. Certain personal characteristics including previous understanding and motivation, as well as an orientation toward sustainability and perpetual reasoning, have an effect on entrepreneur activity as well as the results of those efforts. In contrast hand, the creation of environmentally conscious businesses and the acceleration of environmental innovation all depend on the market environment, regulation, and government and private support systems for entrepreneurship.

3.3 Women Entrepreneurship and Sustainability

Sustainable development cannot be accomplished unless equitably today and in the future: current inequities are highly gendered. Understanding and acting on this is a critical element for attaining sustainable development. Considering women's needs, concerns, knowledge, and skills will result in a better understanding of the societal dynamics that create and reinforce gender inequality, allowing policymakers and other transformation agents, such as employers and civil society, to create suitable policy responses and actions. Inclusion in decision-making and balanced participation of men and women at all stages of execution will ensure that men and women share equal responsibility for today and future generations. Some authors believe that women's participation in business positively affects a nation's economy because it fosters innovation and environmentally friendly corporate practices, which increases GDP value creation. However, Stefan, Vasile, Oltean, Comes, Stefan, Ciucan-Rusu, & Timus (2021) contend that "gender disparity" could adversely impact and damage entrepreneurship while the edge of women entrepreneurs is doubtful to have a large macroeconomic or social impact. Neumeyer, Santos, Caetano, and Kalbfleisch (2019) also noted that gender inequalities in entrepreneurship persist.

According to Coleman (2007), women-owned smaller businesses that operate in highly competitive industries with lower profit margins usually operate in sectors with slower economic growth. Regarding business, profitability, education, and experience are significantly more important for women-owned businesses, whereas, in the case of man-owned firms, the capital market is more significant. There is a strong need to include women in management, as seen by the rise in the number of female entrepreneurs. However, social and psychological reasons may cause women to be less actively involved in business ownership, such as challenges with gender stereotypes and gender segregation. Panda (2018) analyzes 35 research articles that discuss women's entrepreneurship in 90 nations. The paper revealed seven main obstacles to women's business development: Work-family problems that result from attempting to balance social and personal standards; gender discrimination brought on by conventional gender roles that impair women's employment trustworthiness; Inadequate infrastructure support makes it harder to access technology and related business services, which hurts women more than men; and unfavorable business, fiscal, and political contexts that penalize women more than men. According to research on women entrepreneurs, several motivating aspects can be considered when deciding to start a business. These reasons are frequently strongly tied to professional and personal growth chances.

4.0 Conclusion and Recommendations

This paper proposed a comprehensive survey to find and assess the most recent literature on women's entrepreneurship and sustainability. This study gave a comprehensive perspective to find commonalities, disparities, and inadequacies in these areas. This review complements the existing research in a variety of facets. The first finding of the review is that women entrepreneurs might have more opportunities for environmentally friendly business ventures, but authorities should support this trait to build a future that depends on sustainable fuels. Furthermore, new policies and initiatives are required to motivate women to start their businesses and, as a result, promote long-term endeavors. Lastly, Additional research is required to examine the influence of entrepreneurship in the green economy, as well as more data to assess the impact of having more female entrepreneurs in the profession on the viability of practices. Due to the lack of empirical studies in the literature. This study also discovered that female entrepreneurship statistics are low in business, implying that female entrepreneurship has a significant, untapped economic potential.

In general, female enterprises differ from those of males in that they are smaller, have a higher failure rate, and are often limited to low-value areas such as tourism, retail, and service industries. Many scholars discovered a link between masculinity and entrepreneurship, leading to the conclusion that female entrepreneurs must adhere to masculine ethics, while feminine values of caring and love are viewed as flaws in entrepreneurship theory. This report also found that women's contributions to the business are significantly devalued, as the majority of labor in the informal sector and their commercial activity is not reflected in government statistics, especially in developing nations. As a result, female entrepreneurship can be thought of as invisible entrepreneurship. Furthermore, the study suggests that there should be policies backing female entrepreneurs and also measure in place to encourage them to practice more sustainable or environmentally friendly business or ventures. This study enhances the field of female entrepreneurship research by categorizing and analyzing a large number of publications from 2018 to 2022 and identifying gaps within each of these classifications. This condition indicates that there is still a large space for female entrepreneurship studies.

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Entrepreneurship and Poverty Eradication in Akwa Ibom State: An Appraisal

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One of the major challenges facing Akwa Ibom State is poverty. This is due to the high rate of unemployment especially among the youths. Although more than 5000 young entrepreneurs have been trained and certified through My Entrepreneurship Goal Programme (MEGP), majority of citizens live in extreme poverty. Despite the state's relative oil wealth, reports from the National Bureau of Statistics (NBS) (2022) pegged the state's unemployment rate at 51 per cent and the misery index indicated that 71.3 percent of Akwa Ibom citizens are economically backward. Being an oil producing state, there is little employment of manpower

due to her capital-intensive nature. The oil sector contributes less than five percent to employment with high rural populations and low business attractions for investors. With over 52 percent of the youth in the State unemployed and poor, entrepreneurship becomes an alternative means to not only traditional economic development strategies and policies but also as the best strategy for eradicating poverty. This is because, entrepreneurial skills are require to create income and employment opportunities, promote sustainable business environment as well as build institutional and human capacities that will encourage and support sustainable development. This paper aims at examining the importance and challenges of entrepreneurship in poverty eradication as well as strategies for promoting entrepreneurship among Akwa Ibomites. Data was gathered from secondary sources such as relevant books and internet materials. Findings indicated that entrepreneurship have significant effects on poverty eradication. The paper concluded that poverty goes beyond lack of resources. It extends to malnutrition, poor sanitation, lack of access to safe drinking water, education, health care, social inequality, insecurity, total lack of opportunity for personal growth and self-realization. These problems can only be remedied through the development of entrepreneurship skill among the citizens. The study recommended among others that entrepreneurship development should be inculcated into the school's curriculum to promote human empowerment and development through entrepreneurial education and training.

Keywords: *Entrepreneurship, Poverty, Eradication, Unemployment, Poverty Eradication*

1. Introduction

Entrepreneurship has increasingly gained the attention of many governments as an alternative strategy for poverty eradication. This is due to the believed that entrepreneurial development does not only have direct positive impact on the masses but equally generates greater returns to the public than other alternative strategies such as industrial recruitment, or retention and expansion. According to Umoh (2022), entrepreneurial skills are require to reduce poverty, create income and employment opportunities, promote sustainable business environment as well as build institutional and human capacities that will encourage and support sustainable development. In support of this argument, Ogundele (2007) held that the promotion and development of entrepreneurial activities would aid the dispersal and diversification of economic activities and induce even development which plays significant roles in poverty eradication. Entrepreneurship development equips the people with skills for constant improvement and innovation. It is therefore, universally acknowledged that entrepreneurship is an important stimulant of economic growth, poverty reduction and sustainable development.

Akwa Ibom State is face with the challenges of high rate of poverty although the state is naturally endowed with several entrepreneurship opportunities. This has been attributed to the high rate of unemployment that characterizes the state. The realization of the full potential of these opportunities has driven successive governments to come out with many industrial intervention policies aimed at stimulating and promoting entrepreneurship development. Between the year 2015 and 2022, over 85,000 entrepreneurs have been trained, certified and empowered with start-up funds through entrepreneurship empowerment programmes like Women Agro Entrepreneurship Development Programme (WAEDEP), My Entrepreneurship Goal Programme (MEGP) and Akwa Ibom State Covid-19 Action Recovery and Economic Stimulus (AK-CARES) Programme. Despite these efforts, there is still widespread of poverty in the state especially among the rural dwellers. The situation keeps on deteriorating up to this moment (Evans, 2019). It is therefore imperative at this point in time to critically evaluate not

just the principles of entrepreneurship but the practice and its crucial role in fostering economic growth and development.

Presently, the state's economy is characterized by low industrial capacity utilization, deteriorating infrastructural facilities, rising level of unemployment and poverty (Bale, 2017). *With over 51 percent of the citizens in the State unemployed and poor*, entrepreneurship programmes need to be properly harnessed to positively engage school leavers while providing employment opportunities to the masses. This study is therefore undertaken to appraise the relationship between entrepreneurship and poverty eradication in Akwa Ibom State.

2. Statement of the Problem

One of the major challenges facing Akwa Ibom State is poverty. This is due to the high rate of unemployment especially among the youths. Although more than 85,000 young entrepreneurs have been trained and certified in Akwa Ibom State between 2015 and 2022 through Women Agro Entrepreneurship Development Programme (WAEDEP), My Entrepreneurship Goal Programme (MEGP) and Akwa Ibom State Covid-19 Action Recovery and Economic Stimulus (AK-CARES) Programme, majority of citizens still live in extreme poverty. Despite the state's relative oil wealth, proceeds from the monthly allocation from federation account, excess crude oil and internally generated revenue, reports from the National Bureau of Statistics (NBS) (2022) pegged the state's unemployment rate at 51 per cent and the misery index indicated that 71.3 percent of Akwa Ibom citizens are economically backward. This was calculated by adding the seasonally adjusted unemployment rate to the May, 2022 inflation rate (Nigeria Multidimensional Poverty Index (MPI), 2022). Being an oil producing state, there is little employment of manpower due to her capital-intensive nature. The oil sector contributes less than five percent to employment with high populations and low business attractions for investors (Ndidi, 2018).

Although the governments have adopted various measures to address the high poverty incidence in the state, there is always the problem of government's nonchalant attitude towards the funding of entrepreneurial training. Whenever fund is approved, it is sometimes diverted or it is not released on time, and when released at all, the corrupt officials will demand for certain percentage resulting to insufficient funds for the implementation of the programme (Kara and Potter, 2008).

There is also the issue of lack of access to capital for entrepreneurial programmes. Worst still, banks are reluctant to grant credit facilities to entrepreneurs without adequate collateral or securities. The lack of fund to start business places limitation on entrepreneurship development in the state. This capital will aid registered and trained people to develop their businesses, thereby creating employment in the process (Como, 2018). This is also couple with the inconsistencies and unfavourable government policies which equally constitute major setbacks to entrepreneurial programmes. New administrations always come with new policies which, sometimes adversely affect the profitability of business owners. Also the processes of getting permits, carrying out registrations, and obtaining licenses can be needlessly tedious due to protocols in place or corruption (Kelvin, 2008).

Entrepreneurs need training and regular orientation to innovate always. This should happen in a conducive operating environment (Lucas, 2015). If basic infrastructural facilities that aid training are still in poor state as they are, the trainers cannot do anything about entrepreneurial training. For example, power supply is epileptic in the state and at times, power is completely out for days. On the basis of this, this paper examines the major challenges to the roles of entrepreneurship in poverty reduction.

3. Theoretical Framework

This paper adopts the Max Weber “theory of social change” to explain the relationship between entrepreneurship and poverty eradication in Akwa Ibom State. The central figure of this theory consists in his treatment of the protestant ethic and the spirit of capitalism. Max Weber contended that entrepreneurial growth is dependent upon ethical value system of the society concerned. According to Weber (1964), the spirit of rapid industrial growth depends upon rational use of technology, acquisition of money and its rational use for productivity and multiplication of money. These elements of industrial growth depend upon a specific value orientation of individuals, i.e., the tendency of acquisition and rational attitude towards actions which are generated by ethical values.

Weber analyzed his theoretical formulation by the relationship that he found between protestant ethic and the spirit of capitalism. He found his thesis true about other communities also. He held that Protestants progressed fast in bringing capitalism because their ethical value system provided them with rational economic attitude, while the Jews failed to develop industrial capitalism because of the value of ‘partita’ (the restriction on having any contact with other communities). Furthermore, the ‘spirit of capitalism’ shapes attitudes towards the acquisition of money and the activities involved in it. This spirit of capitalism can be generated only when mental attitude in the society is favourable to question of wealth and protestant ethic provides this mental attitude. For people who believe in this belief (Protestant ethic), hard-work in life is not only to enable them to have their worldly desires met but also to have their spiritual needs satisfied (Tutor, 2023).

This paper adopts this model on the assumption that no entrepreneurship programme or an entrepreneur can succeed with proper orientation and training in line with the ethical values of such programme. This is the only means the entrepreneurs can develop positive mental attitude towards the entrepreneurship programme for poverty reduction. However, societal values play significant roles in the success of any business. The orientation or training given to the entrepreneurs by the Akwa Ibom State government practically brought out the values of the programmes in line with the agenda of the government to eradicate poverty.

4. Conceptual Clarification

4.1 Entrepreneurship

There is a consensus among entrepreneurship scholars that entrepreneurship is not just running a small business that already exists rather, it is change management, creative thinking, opportunity seeking, and innovativeness. It is summarily considered as self-employment perpetuated by an entrepreneur. According to Imaga (2002), an entrepreneur is someone who brings things like money, materials and labour together in new business, productive process or improved organization to ensure business success by perhaps creating something new. Patti (2018) views an entrepreneur as someone who creates new combinations of production factors such as new methods of production, new products, new markets, finds new sources of supply and new organizational forms and is someone who is willing to take risks, or a person who, by exploiting market opportunities, eliminates disequilibrium between aggregate supply and aggregate demand, or as one who owns and operates a business.

Entrepreneurship is the ability and readiness to an entrepreneur to develop, organize and run a business enterprise, along with any of its uncertainties in order to make a profit. The entrepreneur is defined as someone who has the ability and desire to establish, administer and succeed in a startup venture along with risk entitled to it, to make profits (Byjus, 2023).

Entrepreneurship is also conceptualize as the identification of a new business opportunities and the mobilization of economic resources to initiate a new business or regenerate an existing

business, under the conditions of risks and uncertainties, for the purpose of making profits under private ownership. It involves a process which may develop a single entrepreneur or enterprise with the main objective of making profit by using scarce resources (Evans, 2019).

Entrepreneurship is also concerned with creating long term value and regular cash flow streams on an individual or the group of individuals for the future through the process of imagination, initiative and innovation for the purpose of maximizing profits and minimizing risk with the view of long term expansion. With this, entrepreneurship remains the key to the growth and development of local industries through the processing of local raw materials into finished and semi-finished goods for the domestic and foreign markets. It also promotes the utilization of improved and cost-effective technology in small and medium-scale enterprises which enhances higher factor productivity at the local level especially in low-income countries where the traditional rural economy is predominant (Ali and Ali, 2017).

According to Havert (2021), entrepreneurship is a dynamic process of vision, change and creation. It include a process whereby an individual or a group of individuals use organized efforts and means to pursue opportunities to create value and grow by fulfilling wants and needs through innovation and uniqueness, no matter what resources are currently controlled.

To Abonahor (2009), entrepreneurship is the willingness and ability of an individual to seek out investment opportunities, establish and run an enterprise successfully. It is the effective manipulation of human intelligence, as demonstrated in a creative performance and an unrehearsed combination of economic resources instigated by the uncertain prospect of temporary monopoly profit.

Tijan – Alaniye (2016) defines entrepreneurship as the process of increasing the supply of entrepreneurs or adding to the stock of existing small, medium and big enterprises available to a country by creating and promoting many capable entrepreneurs who can successfully run innovative enterprises, nurture them to grow and sustain them, with a view to achieving broad socio – economic development goals.

For Ossai (2008), entrepreneurship is the process of creating some new or different values by devoting the necessary time, assuming the accompanying financial, psychic and social risks and receiving the resulting rewards of most personal satisfaction. It is the process of bringing together creative and innovative ideas and coping them with management and organizational skill in order to combine people, money and resources to meet an identified need and thereby, creating wealth.

It is therefore, universally acknowledged that entrepreneurship covers immense potentials that can stimulate economic growth and sustainable development.

4.2 Poverty

Poverty is among the most familiar and enduring of human conditions. Umoh (2022) pointed out that despite the rising discovery of natural resources and unprecedented prosperity of nations, mass poverty continued to exist especially in areas such as Africa. As contain in Britannica Dictionary (2023), poverty is seen as the state of one who lacks a usual or socially acceptable amount of money or material possessions. It exists when people lack the means to satisfy their basic needs. In this case, the identification of poor people first requires a determination of what constitutes basic needs. These may be defined as narrowly as “those necessary for survival” or as broadly as “those reflecting the prevailing standard of living in the community.” The first criterion would cover only those people near the borderline of starvation or death from exposure; the second would extend to people whose nutrition, housing,

and clothing, though adequate to preserve life, do not measure up to those of the population as a whole. Poverty is about not having enough money to meet basic needs including food, clothing and shelter. However, poverty is more, much more than just not having enough money.

The World Bank Organization (2009) describes poverty in this way:

“Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action -- for the poor and the wealthy alike -- a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities. Extreme poor are those living on less than \$1.90 a day.”

The World Bank defines those living on under US\$2 a day as living in poverty, and those living on under US\$1.25 as living in extreme poverty internationally. The nature of poverty differs in all societies. But generally, the poor in every society are those which of the prevailing standards are found to be deficient in means of subsistence and privileges of life. Poverty is related to deprivation, want or lack, suffering and denials of even the basic things of life. It then follows that a poor man cannot be said to have peace since he has to work hard to earn a living, sustaining anxiety, frustration and despair. Salem (2015) refers to poverty as a lack of command over basic consumption needs, which means that there is an inadequate level of consumption giving rise to insufficient food, clothing and/or shelter, and moreover, the lack of certain capacities, such as being able to participate with dignity in society.

Furthermore, Olayemi (1995) refers to the poor as those having no access to the basic necessities of life such as food, clothes and economic obligation, they lack skillful employment, have few, if any economic assets and sometime lack self-esteem. In the opinion of CBN (1999), attributes of poverty may be classified into structural, economic, social and cultural deprivation. These dimensions of poverty exhibit a vicious cycle and account for the recurring decimal of poverty. Thus, poverty mean living on less than a dollar per day or the inadequacy of opportunities for access to education, health, transport and productive employment.

To Misango and Ongiti (2013), poverty is categorized as both absolute and relative. It is absolute because it is describe as lack of resources to meet the physical needs for survival, a lack of basic security, the absence of one or more factors that enable individuals and families to assume basic responsibilities and to enjoy fundamental rights. On the other hand, relative poverty can be categorized in relation to particular groups or areas in relation to the economic status of other members of the society which is interpreted as a lack of resources to achieve a standard of living that allows people to play roles, participate in relationships, and live a life that is deemed normative of the society to which they belong. Poverty results from and even consists of a lack of basic securities, which not only include financial resources, but also education, employment, housing, health care and other related aspects leading to deprivation.

5. Empirical Literature

Adofu, I. and O. Akoji in 2013 assessed the impact of entrepreneurship skill acquisition on poverty in Kogi State of Nigeria. They used structured questioners for collecting primary data from six Local Government Area of the state and used descriptive statistics like frequencies and percentages. They found that 65% of the respondents accepted that lack of entrepreneurship skills among youth is responsible for the high rate of poverty in Nigeria. The result also revealed that at least 60% of the people that benefitted from the skill acquisition programme can afford the basic necessity of life.

Kanitkar in 1994 conducted case studies from 86 village-based entrepreneur and micro enterprise owners in different regions of rural India. He examined the process of emergence of successful entrepreneurs and owners of micro-enterprises in rural areas. He used case survey method for collected data with a semi-structured questionnaire followed by an open-ended interview from the entrepreneur. He found that based on socio economic profile of entrepreneurs, they were motivated for shifting from an agriculture-based occupation to a non-farm activity, raising resources for their enterprises and entry of the village-based entrepreneurs into a business activity.

Kodithuwakku, S. S. and P. Rosa in 2002 based on a qualitative case study of Sri Lankan villagers they tried to examine the nature and role of entrepreneurial processes in the success of the Mahaveli rural entrepreneurs. They found that after 10 years most of the commercially successful farmers had succeeded in adding new ventures to their portfolio of income-generating activities engaging in an average of 3.7 ventures each. They also found that the successful farmers were not only successful as farmers, but had also diversified into other business ventures.

Ezeanyej, Imoagwu and Ejefobihi in 2019 conducted a research on the synergy of entrepreneurship development and poverty reduction in Nigeria. Both the quantitative and qualitative measurements attest to the growing incidence and depth of poverty in the country. The paper concluded that, government and its agencies should focus on ways of encouraging entrepreneurial culture and skill in order to reduce poverty level in Nigeria and bring about more equitable distribution of income and wealth thereby leading to sustainable economic growth.

Hussain, Bhuiyan and Bakar (2014) conducted an empirical review on entrepreneurship development and poverty alleviation. The study was a general search to accumulate empirical literatures by the name of entrepreneurship development and poverty alleviation in different online database sources such as Google Scholars, Springer Link, Wiley, Science Direct, JSTOR, Emerald full text, Scopus, and EBSCO HOST etc. it was found that innovation, entrepreneurship training and education, family background, government support program, social entrepreneurship, women participation, individual entrepreneurial characteristics, participation of micro, small & medium enterprises, youth empowerment, collaboration of government-university-industry is the key tool for entrepreneurship development which is stimulating employment are eventually alleviating poverty. Training in entrepreneurship and provision of other facilities could give poor owners of micro and small enterprises opportunities to grow their businesses and get themselves and other out of poverty.

6. Appraisal of Entrepreneurship Programmes and Poverty Eradication in Akwa Ibom State

6.1 Akwa Ibom State Poverty Profile

Data published by the Global Data Lab (GDL) (2022) and the Nigeria Multidimensional Poverty Index (MPI) (2022) are used for the analysis of poverty rate in Akwa Ibom State. Global Data Lab (GDL) is an independent data and research center at the Nijmegen School of Management of Radboud University with the mission of bringing together all available household surveys for low- and middle-income countries and integrating them into one encompassing data infrastructure.

Global Data Lab conducted an assessment on wealth, poverty and assets of households in Nigeria to provide an overview of the major social and economic characteristics of the country and states. The results of the assessment on Akwa Ibom State are presented thus:

Global Data Lab Assessment on Wealth, Poverty and Assets of Households in Akwa Ibom State

INDEX INDICATOR	2015	2016	2017	2018	2019	2020	2021
% of mean international wealth index	48.6	49.2	50.4	51.0	51.6	52.3	52.9
% of poor household (with IWI value under 70)	85.8	85.3	84.2	83.7	83.2	86.6	82.1
% of poorer households (with IWI value under 50)	53.3	52.9	52.0	51.5	51.0	50.6	50.1
% of poorest households (with IWI value under 35)	24.3	22.9	20.1	18.8	17.4	16.0	14.6
Percentage on Household Items							
% of households with TV	64.2	62.8	59.9	58.5	57.1	55.6	54.2
% of households with refrigerator	27.2	27.7	28.7	29.1	29.6	30.1	30.5
% of households with cell phone	83.1	84.3	86.6	87.8	88.9	90.1	91.2
% of households with electricity	69.2	70.4	71.5	72.6	73.7	74.8	77.1

Global Data Lab (2022)

From the data in the table above, seven years assessments of people affected by poverty were done in three categories- poor poorer and poorest. Those under the poor category are those who can take care of their basic needs. The young entrepreneurs with micro business may fall here. The poorer are those who cannot satisfy their basic needs always. The poorest are those who lean on others for their survival.

Regarding the household items, very few persons are able to purchase refrigerator from the assessment made for the seven years.

Data published by the Nigeria Multidimensional Poverty Index (MPI) (2022) from the reports of the survey coordinated by the National Social Safety-Nets Coordinating Office (NASSCO), contained in the National Social Register (NSR) indicated 51.0% unemployment rate and 16.7% underemployment rate in Akwa Ibom State (MPI, 2022). The multidimensional indicator of poverty among households in the state using education, water, housing and assets are presented in the table below:

Poverty Survey in Akwa Ibom State by Nigeria Multidimensional Poverty Index (2022)

S/N	Indicator	Not Deprived	Deprived
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1	Deprivation in education attainment for people aged 10 years and above who have not completed six years of school	74%	26%
2	Deprivation in school attendance for school-aged children	82%	18%
3	Distribution of households deprived in sanitary facilities	30%	70%
4	Distribution of households by deprivation in access to clean drinking water	36%	64%
5	Distribution of households by deprivation in housing materials—roofing	45%	55%
6	Distribution of households by deprivation in housing materials—flooring	32%	68%
7	Distribution of households by deprivation in cooking fuel	1%	99%
8	Distribution of households by deprivation in ownership of assets	15%	85%

Nigeria Multidimensional Poverty Index (2022)

From the table above, apart from the educational attainment in which children are not deprived of, citizens are deprived of other items for assessment- example, sanitary facilities, access to clean drinking water, housing materials (roofing and flooring), cooking fuel and ownership of assets.

6.2 Programmes for Entrepreneurship Development and Poverty Reduction in Akwa Ibom State

Efforts have been on-going in the state to fashion some programmes for entrepreneurship development and poverty reduction. A number of these programmes have been in place to improve basic services, like infrastructural facilities for all, extending access to credit facilities and creating employment. This paper will consider three major entrepreneurship programmes for poverty reduction in Akwa Ibom State such as women agro entrepreneurship development programme (WAEDEP), my entrepreneurial goal programme (MEGP) and Akwa Ibom covid-19 action recovery and economic stimulus programmes (AK-CARES).

Women Agro Entrepreneurship Development Programme (WAEDEP)

WAEDEP is a policy established in 2013 by the administration of Governor Godswill Obot Akpabio to encourage boost women entrepreneurship as a means of eradicating poverty in the state, especially among women. The aims of this programme are to empower women economically and increase their strength as well as position; contribute to increased capacity for improved entrepreneurship to reduced poverty for women in a sustainable way; improve entrepreneurship skills; build capacity in entrepreneurship and technical skills for living standard improvement.

Records by Umanah (2014) have shown that since its start, the government have committed over N2 billion to thousands of women at the rate of N250,000 each. As a confirmation, the State Ministry of Agriculture and Natural Resources through Obop (2014), who was the Head of Information, said that government had given N250, 000 to each beneficiary under Women Agro Entrepreneurship Development Programme (WAEDEP). 70 percent of the beneficiaries of the programme who were given the grants are involved in animal husbandry while others are into crop production, marketing and processing.

Despite the achievement of this programme, problems such as nepotism, lack of follow-up and change of government administration hinder its end target.

My Entrepreneurial Goal Programme (MEGP)

MEGP is an entrepreneurial development training programme whose focus is to identify, train, certify and empower entrepreneurs with a start-up capital. The government through MEGP train and empower new and existing entrepreneurs in basic business tools, information and communication technology and entertainment to define clear goals for their businesses, providing the right network for partnership and educate them on basic business tool which can guide them in making decisions for their businesses (Anwana, 2022).

From its creation, MEGP has helped Akwa Ibom start-up and growing entrepreneurs define their goals and objectives, rather than stay afloat without prerequisite knowledge and mentorship. As such, it has identified the business needs of thousands of Akwa Ibom youths and offered lasting solutions to them. It further creates innovative and scalable business by offering continuous learning, networking and providing access to funding which entrepreneurs require to succeed in global market.

Currently in Akwa Ibom, MEGP has train more than 600 entrepreneurs. After trainings, the entrepreneurs are expected to effectively communicate the ideas behind their business brands to qualify for business grants ranging from N500,000 to N150,000. In the last batch of the training in which the government introduced Business Strategy Simulation game where all participants were expected to share what and how they will invest their grants, a donation of twenty thousand naira (20, 000NGN) was given to all participants in the competition apart from the winning group who received two million naira (2,000,000 NGN) (Anwana, 2022).

At the programme, entrepreneurs have an access to MEGP training, mentorship opportunities, network and the ability to raise capital. They are able to browse through mentorship request and connect with founders to support them, as well as program partners and are also able to discover great companies, opportunities and follow up with the founders directly (Anwana, 2022).

Unfortunately, even if the programme is still progressing, it still suffers from nepotism, lack of follow-up and insufficient funding. The process of selecting participants are somehow rigid and in most cases, on recommendations.

Akwa Ibom Covid-19 Action Recovery and Economic Stimulus Programmes (AK-CARES)

The AK-CARES programmes which were officially launched in Akwa Ibom state on 29th August, 2022 has been on-going across various platforms such as social transfer, FADAMA, AKROIMA, CSDA, and SMEs. The AK-CARES is an emergency operation, designed to support budgeted programme of expenditure and interventions at the state level. The target is on the existing and emerging vulnerable and poor households, agriculture value chains, entrepreneurship and Micro and Small Enterprises (MSEs) affected by the Covid-19 pandemic.

At the start, Akwa Ibom state government disbursed 20, 000 covid-19 action recovery and economic stimulus to 1,950 beneficiaries. This is to be done bi-monthly to help many citizens to come out of poverty. In addition, government also disbursed N31 million to 401 entrepreneurs in Small and Medium Enterprises (SMEs), to support their businesses affected by the COVID-19 pandemic. The funds were to revive entrepreneurs who suffered the adverse effects of the COVID-19 scourge on their businesses (Etim, 2022).

According to Udonquak (2020), the federal government has disbursed over N993 million to 24,929 vulnerable households in 9 local governments (Eastern Obolo, Ikono, Mkpato Enin, Nsit Atai, Nsit Ubium, Onna, OrukAnam, Ukanafun and Uruan) in Akwa Ibom state under its Conditional Cash Transfer programme. Beneficiaries received between N30,000 and N40,000. The programme is still on-going but many entrepreneurs are not succeeding due to lack of follow up on the part of the government. Also, the amount disbursed to each entrepreneur is not sufficient to meet up with the present economic and market realities.

6.3 Challenges of entrepreneurship in Poverty Reduction in Akwa Ibom State

Entrepreneurship is one of the essential pillars whose roles enhance trade balance, job employment and tax revenue generation. The services of an entrepreneur play significant role in poverty eradication. For enterprises to succeed, adequate infrastructural facilities such as good road networks, reliable electricity, and adequate water supply must be provided. Unfortunately, these are lacking in most areas of the state. Most businesses are not accessible, which most times leads to spoilage of perishable goods and limits the reach of service providers (Ekong, 2017).

Businesses survive in an environment where policies are consistent and favourable. Regimes are known for overturning policies put in place by previous regimes. This tends to put business ventures in a state of confusion which adversely affect the profitability of business owners. Example is the present policy on newly design naira cash swap which has made many entrepreneurs to fold their businesses because of scarcity of naira (Odeh, 2016).

Many young entrepreneurs lack patience and commitment to the growth of their businesses even when grants are given to them. A successful enterprise calls for a lot of patience and resilience. Entrepreneurs need to be regularly reoriented and invest some commitment into their new ventures.

For any entrepreneurial venture to take off, there must be sufficient capital to cater for the wide-ranging start-up costs. Initial start-up costs most times include premise fees, licenses, opening stock, logistics, business registration, hiring, etc. making it difficult for the available resources to be effectively used (Ossai, 2008).

To become an entrepreneur is one thing, but to have the require skill to boost the enterprise is another. A successful entrepreneurial service largely depends on its founders' understanding of numerous aspects of the modern-day business environment- how to place and promote product or service, who to hire, where to market, what to charge, where to source materials, and so on (Benjamin, 2017).

7. Methodology

The paper employed the narrative – textual case study (NTCS) method. NTCS is a social science research method that employs intensively the information, data and academic materials made available and easily accessible by information and communication technology facilities such as internet, World Wide Web, online databases, e. libraries et cetera. The choice of this method is informed by the fact that NTCS combines the use of quantitative and qualitative observation, text content analysis and available official statistics in different proportions for problem–solving or problem–identification depending on the objective of the research (Abouzeedan and Leijon, 2007).

8. Findings

Findings indicated that entrepreneurship have significant effects on poverty eradication. This is because entrepreneurship development is a key tool for poverty reduction, stimulation of employment and economic growth in the state.

Motivation and skills is the important driver of the entrepreneurial behaviour and the entrepreneur needs certain skill to sustain. This is why government of Akwa Ibom State also starts the entrepreneurial empowerment with training of the entrepreneurs. The training in entrepreneurship and provision of other facilities gives poor owners of micro and small enterprises opportunities to grow their businesses and get themselves and others out of poverty. The level of innovation and orientation given to the entrepreneurs help them develop the necessary skills needed to boost their businesses.

Government policies have no significant effect on the development of entrepreneurial activities in the country and mostly the beneficiaries do not derived maximum satisfaction from government programs and policies.

Most times funding for entrepreneurship are provide but due to government's nonchalant attitude, some of the funds are either diverted or not released on time or even when released, the corrupt officials will demand for certain percentage.

Government capitals for entrepreneurial programmes are not enough. This places limitation on entrepreneurship development in the state. Excessive processes with high interest rate in banks for credit facilities also made most entrepreneurs to avoid loans from the bank.

Uniform problems such as nepotism, lack of follow-up in government entrepreneurial services, insufficient funding and lack of basic infrastructural facilities continue to hinder the implementation of entrepreneurial programmes in the state. These are observed in programmes such as WAEDep, MEGP and AK-CARES.

9. Conclusion and Recommendations

Poverty goes beyond lack of resources. It extends to malnutrition, poor sanitation, lack of access to safe drinking water, education, health care, social inequality, insecurity, total lack of opportunity for personal growth and self-realization. These problems can only be remedied through the development of entrepreneurship skill among the citizens. The number of those living in poverty has continued to increase despite many entrepreneurial programmes for poverty reduction implemented in the state.

Entrepreneurship development is a key tool for poverty reduction, stimulating employment and economic growth in the state. It boosts economic growth, enhances educational attainment and increases the rate of economic growth and for the state to move out of the disturbing high level of poverty, adequate attention must be given to the growth of entrepreneurship.

Poverty deprives someone the opportunity for personal growth and self-realization. This state of deprivation can only be remedied through the development of entrepreneurship skill among the citizens. Through this way, the issue of self – employment and job creation will increase, the menace of unemployment which have been the cause of poverty will reduce, economic growth ensured and poverty reduced to the barest minimum. This paper therefore recommends that:

- a. Government should assist the entrepreneurs financially through provision of quick credit facilities and through regular workshops and seminars where experts in different fields

will be commissioned to train the young entrepreneurs on the latest technique in entrepreneurship.

- b. New and existing entrepreneurs should be regularly trained with provision of adequate facilities to grow their businesses and get themselves and others out of poverty. Entrepreneurship development should be inculcated into school's curriculum at all levels of education to promote human empowerment and development.
- c. Measures should be put in place to ensure that start-up capitals and grants provided by the government to entrepreneurs are released on time and freed from corrupt officials. Government should partner with banks to grant credit facilities to entrepreneurs with low interest rates.
- d. Government should set up an institution to ensure that the uniform problems such as nepotism, lack of follow-up in government entrepreneurial services, insufficient funding and lack of basic infrastructural facilities are eradicated.

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Adult Education and Entrepreneurial Sustainable Development in Nigeria: A Study of Akwa Ibom State Agency for Adult and Non Formal Education (2007 – 2022).

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ABSTRACT

Education is the key to human and national development in modern globalized and highly technological world of the 21st Century. Through education, information, communication, technology, innovation, entrepreneurial skills are developed and transfer across the globe for sustainable development. Adult education is one aspect of education introduced in Nigeria to tackle the problem of high rate of illiteracy particularly amongst the adults who could not afford formal education. Adult education is targeted at ensuring education for all in line with goal 4 of sustainable development. It involves basic literacy, post-literacy and vocational training programmes, which helps to add values to entrepreneurship development in Nigeria. In 2022, a total enrolment of 30220 adult learners (Males 14109 and females 16,111) was recorded. The study examined the impact of adult and non-formal education on entrepreneurial sustainable development in Nigeria with specific reference to Akwa Ibom State Agency for Adult and Non Formal Education (AKSAANFE). Descriptive research and Survey of 9 selected centres, 3 from each senatorial districts out of 888 adult education centres with sample size of 126, and stratified sampling techniques employed to administered 10 items questionnaire on the respondents. Simple percentage and tabular presentation was adopted for data presentation and analysis while secondary data analyzed contextually. The study among others revealed the strengths of AKSAANFE in building individual skills for self-empowerment, job creation, increase employment opportunities, per capita income/ standard of living, infrastructures and transfer of knowledge/technology for sustainable Micro, Small and Medium Enterprises, and outlined challenges/weaknesses of AKSAANFE to include: inadequate funding of the programme, policy inconsistency at the implementation stage, lack of teachers' qualification, low learners enrollment, lack of learning materials and infrastructures etc. It concluded that there is need to strengthen Adult and non-formal education for effective entrepreneurial sustainable development in Akwa Ibom State and by extension Nigeria. It recommended proper funding of Adult and non-formal education, training of teachers and facilitators to meet minimum national teachers' qualification of NCE, proper monitoring and evaluation of the programmes, provision of permanent buildings, teaching aids and facilities for learners, empowerment and employment opportunities for Adult learners by various level of governments.

Keywords: Adult Education, Development, Entrepreneurship, Sustainable Development, Entrepreneurial Sustainable Development.

Introduction

Education plays significant role in entrepreneurship, infrastructures development, industrialization and socio-economic development of many countries. Obviously, education is the key to human development, measured in terms of improved health care services, education and per capita income/ standard of living of the citizens. Adult education is necessary tool for skills acquisition, entrepreneurial development and establishment of businesses for self-sustenance and societal development.

According to Onyenemezu and Okanezi (2013) the goal of education is to develop capabilities/potentialities for individual survival in the environment, and the overall development of the state. To this effect, Adult education also known as mass literacy was developed to address the problem of high rate of illiteracy in Nigeria especially among adult members of the state. Hence, adult education is one of the Sustainable Development Goals, particularly the goal 4 which is targeted at ensuring inclusive and equitable quality education, and to promote lifelong learning opportunities for all (UN Department for Economic and Social Affairs, 2015). Therefore, the essence of adult education is to improve mass literacy and limit illiteracy in the society through teachings, mass literacy campaign and vocational training.

On the other hand, entrepreneurial sustainable development is a process of acquiring skills and knowledge through education or vocational training for business startup in order to make profit, enhances self-sustenance and job creation to meets the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, building entrepreneurship through adult and non-formal education is sure way to curb youth restiveness, criminalities such as armed robbery, fraud, prostitution and insecurity in the state. When the adult are trained to acquire skills and empowered to meaningful business venture, then the result will lead to reduction in crime rate, youth restiveness, poverty and unemployment in the society.

The established of National Mass Literacy, Adult and Non-formal Education (NMEC) in 1990 came with responsibility of organization, monitoring and evaluation of the adult and non-formal education to curb high rate of illiteracy in Nigeria. In addition, states government were also encouraged to establish Adult and Non-formal Education Agencies (ANFEA), and this gave birth to the establishment of Akwa Ibom State Agency for Adult and Non-formal Education to develop programmes and policy guides for smooth implementation and management of Adult Education in Akwa Ibom State.

Statement of the Problem

The main problems of the ANFE programme in Akwa Ibom State is inadequate funding to meet up with the 26% budget baseline requirement for education as advocated by UNESCO, and this have posed various challenges to the agency and they include: poor teachers' salary, low teachers motivation, inadequate qualified teachers, low community mobilization, low leaners enrollment, lack of learning materials and infrastructures like functional libraries, workshops, laboratories, equipment and recreational facilities etc. In addition, past and present governments in the state have made several efforts in terms of policy reforms and financial budgeting to improve adult education and entrepreneurial development in the state, but the result in terms of productivity is still below average. Hence, poor supervision, monitoring and

evaluation of the programmes by AKSAANFE has also contributes negatively to the performance of the agency in terms of service delivery. For this purpose, the relevant questions considered are: To what extent does adult education impact on entrepreneurial sustainable development in Akwa Ibom State? What are the strengths of adult education towards entrepreneurial sustainable development in Akwa Ibom State? What are the weaknesses of adult education towards entrepreneurial sustainable development in Akwa Ibom State? What are the possible solutions to the problems of Adult education and entrepreneurial sustainable development in the State? The main objective of the study is to examine the impact of adult and non-formal education on entrepreneurial sustainable development in Nigeria with specific reference to Akwa Ibom State Agency for Adult and Non-formal Education, Uyo.

Review of Related Literature

The Concept of Adult Education

Adult education is defined in many ways according to scholars' perceptions. Inyang (2017) sees adult education as the type of education programme design to enable an adult individual (men or women) to possess the ability to read, write and communicate in known languages as well as the ability to do basic mathematical computations far beyond basic literacy level. To him, adult and non-formal education is a tool that equip individuals with skills to improve and empower himself intellectually, economically, socially and politically in order to be relevant in the society.

According to UNESCO (1976) adult education is conceived as:

The entire body of organized educational processes, whatever the content, level and method, whether formal or otherwise, whether they prolong or replace initial education in schools, colleges and universities as well as in apprenticeship, whereby persons regarded as adult by the society which they belong develop their abilities, enrich their knowledge, improve their technical or professional qualifications or turn them in a new direction and bring about changes in their attitudes or behaviour in twofold perspective of full personal development and participation in balanced and independent social, economic and cultural development. Adult education, however, must not be considered as an entity in itself, it is subdivision, and an integral part of, a global scheme for lifelong education and learning.

UNESCO (2007, as cited in Inyang, 2017), maintained that adult and non-formal education is more broaden term than the literacy or remedial education to 'fill the gap'. Omolewa (2015) sees adult education as "all forms of education providing for adult men and women, housewives and others who for one reason or the other are willing to improve the quality of their education in order to add to the socio-economic development of the nation". He added that, it is also called mass education which involves acquisition of reading and writing skills which is applied for self-reliance, community development, and such education programmes include basic literacy, post literacy and vocational training (FGN, 2008, cited in Oyenemezu and Okanezi, 2013).

The Concept of Development

Rodney (1969, as cited in Okereke and Ekpe, 2002) sees development as multifaceted process. At individual level, it implies increased skills and capacity, greater freedom, creativity, self-discipline, responsibility and material wellbeing. At the state level, it refers to economic growth and socio-economic development of the state which is measured in Human Development Index (HDI), to include improved education, healthcare and per capita income/standard of living of the citizens. In the opinion of Umo (1989, as cited in Eminue, 2009), development is defined

as “a process by which there exist a higher degree of self-reliant economic growth in a society, sustained over a long time and associated with substantial reduction in poverty, unemployment, inequality and external dependence”. Thus, economic growth is at the heart of development, and growth must be generated in the economy. From the above definitions, it is clear that development centers on human, because the fundamental aim of development is to extend the frontiers of human lives or advances the welfare of the people.

Concept of Entrepreneurship

The word entrepreneurship and entrepreneur is often misconceived to mean the same thing among people, but there is disparity between the two concepts. An entrepreneur is any person who coordinates other factors of production and bears the risk of uncertainty as he invests his scarce resources in the business venture with the hope of making profit. Such a person is creative, confidence and innovative in starting business to give reality to his ideas. Entrepreneurship education is a form of education that focuses on inculcating in the learners relevant business knowledge, creative ideas and entrepreneurial practices that will make them to be able to generate business ideas, identify business opportunities and take risks to invest in a business to make profit and become self-reliance.

In that same vein, United Nations report (1987, cited in Onyenemezu and Okanezi, 2013) defines sustainable development as “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. The International Institute for Sustainable development (IISD), conceived it to mean activities or actions taken to improve the environment, economic and social well-being of persons for today and tomorrow to include such elements as equality between ages, gender, classes and races; social development, inclusiveness of everyone, human and environmental harmony that promotes environment’s interdependency and transfer of technology; and cooperation among developing and developed countries (Onyenemezu and Okanezi, 2013).

In order words, Entrepreneurial Sustainable Development (ESD) is a process of acquiring skills and knowledge through education or vocational training for micro, small and medium enterprises in order to make profit, and enhance self-sustenance and job creation to meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Adult education and vocational training system in modern world, is adopted as sustainable educational approach to learning, teaching and research so that the individuals graduating from such adult education programme can adopt sustainable business life styles for survival. To achieve the goal of adult education, the programmes of action should be geared towards educational approach for sustainable entrepreneurial development in Nigeria and particularly Akwa Ibom State.

Empirical Framework

Inyang (2017) investigates the goals of mass literacy, adult and non-formal education in Akwa Ibom State, Uyo LGA as the reference point. He sampled 2016 adult learners and 3278 non-formal adult and youth vocational workers using stratified sampling technique and simple percentage to analyze data in Uyo. The study revealed that Akwa Ibom State government have not provided sufficient and effective vocational centres for adult learners in Uyo. The study concluded that the goal of mass literacy, adult and non-formal education is not fully achieved in Uyo and indeed, Akwa Ibom State. It recommended proper supervision and evaluation of adult education centres by government to achieve the goal of mass literacy in Uyo; employment of trained and skilled teachers and facilitators to help the implementation of Adult Education programme in Uyo.

Umoinyang and Effiong (2018) X-rayed the objectives of the Mass Literacy, Adult and Non-formal Education and its impact on family planning, national development and

entrepreneurship education in Nigeria. The study outlined its challenges to include poor programme implementation, inadequate teachers and lack of infrastructures, but recommended the programme should use teaching and learning demonstration forms, provision of permanent structures for Adult learners; proper funding to meet up UN recommended 26% budgetary allocation to education.

Adult Education and Entrepreneurial Sustainable Development in Akwa Ibom State

Adult education is managed and coordinated by AKSAANFE in collaboration with National Mass Literacy, Adult and Non-formal Education (NMEC), department of Social Development, Education, Information, Sports and Culture (SDEISC) in the 31 LGAs in the state, NGOs and Centre Basic Management Committee comprises of the centre coordinators, facilitators, the village head or representative, representatives of the youth, men and market women in the community. They helps in creating awareness for enrolment and assist in driving the adult education and vocational trainings by carrying out needs assessment, design short or long term programmes to attain such needs. For example, adult learner who is interested in knowing how to read and write in order to obtain certificate for further studies may enroll in long term programmes such as basic literacy and post literacy while those interesting in acquiring specific skills such as how to send text messages, soap making, catering, paint making etc. may enroll in short term training for 3 to 6 months to acquire skills for self-empowerment. However, adult learners are more often interested in short term programmes that can easily enhance their well-being such as soap making, catering, sewing, craft work, hair dressing, barbing etc. The categories of adult learners in Akwa Ibom State include: adult (men and women) of age 18 above who had no opportunity of attaining formal education due to poor financial background, loss of parents, early child birth, and it is also open to young persons who are less privilege, particularly the disadvantage groups such as disabled, women, orphans, destitute and Internally Displaced Persons (IDP) etc.

According to AKSAANFE blueprint, adult education is for everyone, and programmes of adult education in Akwa Ibom State include: Functional literacy education which involves skills acquisition such as soap making, sewing, hair dressing, catering, craft work, paint making, ICT and Agriculture etc; Literacy education which involves the teaching of reading, writing, and arithmetic; Non-Formal education design to take care of the less privileges, destitute and disadvantage persons to restore their hope and dignity in the society; Workers' education to enable workers to update their skills and knowledge for better performance on the job; Extension education based on the social needs of the communities aim at improving individual and community life; Liberal education targeted at update of skills, knowledge, values, and ideas about new development, for instance learning how to make used of phone to send texts messages and internet banking; Life-Long education/learning process for adult learners who desire to advance in formal education (NMEC, 2014).

Adult education goal is to boost both the formal and informal sectors of the state economy. It serves as an instrument for eradication of illiteracy as well as provision of functional literacy programmes to include: adult basic literacy, literacy by radio, girls child education, out of school youth education, women vocational education and workers' education and host of other programmes designed to eradicate illiteracy and empower the citizens for increase productivity and sustainable entrepreneurial development in the state in terms of self-employment, empowerment and job creation. Other important role played by the agency are: recruitment of instructors, facilitators and other personnel and organizing training programmes such as seminars, workshop and conferences to boost their skills and competence; sensitization campaign for enrolment of adult learners into adult education programme for self-development; provision of teaching aids and other facilities for learning (Umoinyang and Effiong, 2018).

Furthermore, the NMEC state coordinator for Akwa Ibom State, Mr. Charles Onwuchekwa during our interaction in Uyo, opine that adult and non-formal education in modern time is geared towards entrepreneurial sustainable development, and it equip learners with skills that enables them to Micro, Small and Medium Enterprises (MSMEs), thereby boosting job creation and increase per capita income for individuals and GDP of the state. He also maintained that adult education helps to curb youth restiveness, criminalities such as armed robbery, prostitution and insecurity, and at the same time reinstitute juvenile children in the street to become meaningfully engage in vocational training to acquire skills for self-development in the state. He recommended proper funding of adult education programme in order to limit the numerous challenges of the programme. He called for proper monitoring and evaluation of the programme to ensure that the goal is achieved while also advocating for availability of credit facilities and empowerment programmes for the adult learners to provide them with the needed equipment such as hair dressing and sewing machines, barbing clippers, generations and shops etc. to make practical entrepreneurship possible.

Theoretical Framework

The study adopts Structural Functional and New Public Management (NPM) theories as theoretical framework of analysis. Structural Functional Theory (SFT) is associated with the works of Emile Durkheim (1917), Robert K. Merton (1968), Gabriel Almond (1960) and Talcott Parson (1979). It was first adopted to analyse political systems and processes, and subsequently applied in management of organization. It sees organization as a living organism made up of component parts which function interdependently for the survival of the whole system. It stipulates the performance of specific functions as requisite to the maintenance of the whole system (Eminue, 2001).

On the other hand, NPM theory is attributed to the works of Pollitt (1990); Hood (1991); Pollitt & Bouckaert (2004), and it is a paradigm shift from the traditional approaches of Webber's bureaucratic model (1946), Wilson's politics and administration dichotomy (1887), and Taylor's scientific management model (1911) which emphasizes formal rules and procedures, to a modern public administration model that is result-oriented and based on efficiency in performance of public servants. The theory sees citizens as customers, while public servants as managers of public businesses and call on accountability for job results. It's centers on result-oriented public sector which is based on effectiveness, efficiency, economy, increase productivity, performance and the devolution of management control with improved reporting and monitoring mechanisms (Bale and Dale, 1998, cited in Dike, 2019). Therefore adopting NPM approach enables the study to evaluate the performance and efficiency of the state agency. NPM demands for proper transparency and accountability in public expenditure, good governance, technological innovation and democratization as watch words for effective service delivery. Obviously, the AKSAANFE is still facing challenges of bureaucratic bottleneck and this in most cases contributes to performance below expectations.

In applying these theories to the management of AKSAANFE, it is clear that every system including AKSAANFE has structures that involve people performing certain functions, with the power to effect actions/policies that can affect the adult education in Akwa Ibom State. While functions connote duties and responsibilities, structures refers to organs. The structural functionalism and NPM theory were adopted because they offers the best explanation of the ways the various structures perform their functions aiming at effective service delivery to the populace. AKSAANFE as a system is made up of interrelated roles, structures and functions which must be performed to satisfy the needs of the people in the state. The question is, does the management and facilitators of adult education in the state conform to the tenets of structural functional and New Public Management theories? The answer is yes, because they know their functions and perform same but not efficiently. Managers/facilitators of the

programme in Akwa Ibom seem not to be result- oriented but rather tends to be inconsistent in services delivery to the masses, and this manifest in lackadaisical nature of service delivery. Survey revealed that many centres in the state are only functional on paper but not in reality. Thus, the theories help us to understand who initiates and implements education policies and for whose interest. Hence, to attain the goal of adult education for sustainable entrepreneurial development by AKSAANFE, there is need to adhere to the tenets of structural functional and NPM theories.

Method and Materials

The study adopted survey and descriptive research methods in order to achieve its objectives. survey questionnaire was used to elicit primary data from the projected population of the study estimated at about 35,220 people (State Agency for Adult and Non-Formal Education, Uyo as at November, 2022), comprises of Adult learners, facilitators and other staff of AKSAANFE. Survey of 9 selected centres, 3 from each senatorial districts out of 888 adult education centres in the 31LGAs, with sample size of 126, and stratified random sampling techniques employed to administered 10 items questionnaire on the respondents. Simple percentage and tabular presentation was adopted for data presentation and analysis. Secondary data from textbooks, Government publications, Journals and internet materials etc. were analyzed contextually.

Data Presentation and Analysis

In this section, data obtained from literature (secondary) and survey (primary) methods are presented in tables, and the analysis based on the research questions that guided the study.

Table 1. Number of Adult and Non-Formal Education Centres in Akwa Ibom State by Local Government Area 2007/2008 – 2021/2022.

(Table may be available on request)

Source: Akwa Ibom State Agency for Adult and Non- Formal Education, Uyo.

Table 1 above showed the LGAs with the least establishment of adult education centres are Ibeno with only 4 centres, followed by Udung Uko with 8 centres and Eastern Obolo with 12 centres respectively. On the other hand, LGAs with highest centres were Mkpat Enin with 57, 2nd position with 40 include: Ikot Abasi, Ukanafun, Ikono, Etim Ekpo; while 3rd highest is Ibiono Ibom with 38 centres. This implies that there is need to establish more centres across villages especially in those LGAs with the least number of Adult education centres in order to achieve the goal 4 of sustainable development goal by ensuring education for all by 2030 in Akwa Ibom State.

Table 2. Enrolment of Learners by sex and number in Adult and Non- Formal Education in

Akwa Ibom State 2007 - 2022

Year	Male	Female	Total
2007/2008	12,040 (39.75%)	18,246 (60.25%)	30,286 (12.08%)
2008/2009	11,460 (40.40%)	16,905 (59.60%)	28,365 (11.32%)
2009/2010	11,460 (40.40%)	16,905 (59.60%)	28,365 (11.32%)
2010/2011	10,452 (40.84%)	15,138 (59.16%)	25,590 (10.21%)
2011/2012	17,245 (34.60%)	32,593 (65.40%)	49,838 (19.88%)
2015/2016	13,520 (46.99%)	15,254 (53.01%)	28,774 (11.48%)
2020/2021	14,112 (48.27%)	15,123 (51.73%)	29,235 (11.66%)
2021/2022	14,109 (46.69%)	16,111 (53.31%)	30,220 (12.05%)
Total	104,398 (41.65%)	146,275 (58.35%)	250,673 (100%)

Source: Agency for Adult and Non-Formal Education, Uyo, Ministry of Education, Uyo

Table 2 above illustrate enrolment of Learners by sex and number in Adult and Non- Formal Education programme in Akwa Ibom State from 2007 to 2022. Data revealed that the highest enrolment (1st) position in the table above was 2011/2012 session which recorded 49,838 adult learners, thereby constituting 19.88% of the total enrolment, followed by 2007/2008 session (2nd) position with 30,365 learners making up 12.08% while 2021/2022 was ranked 3rd position with 30,220 learners thereby constituting 12.05% of total adult learners of 250,673 enrolled in the programme based on the available data. The session with least enrolment were 2008/2009; 2009/2010 and 2015/2016 with 11.32%, 11.32% and 11.48% respectively. However, years that the study could not have information about the numbers of adult learners' enrolment are not included in the study. The study observed serious decline in enrolment for the programme from 19.88% in 2011/2012 session to 11.48% in 2015/2016, before a slide improvement in adult learners' enrolment in 2021/2022 session to 12.05%. The implication is that much is still needed to be in terms of community enlightenment and sensitization of people for improve enrolment, and to reduce illiteracy rate among adult citizens in the Akwa Ibom State.

Table 3. Socio-Demographic Data of Respondents

Source: Field Survey, 2023 (table may be available on request)

Table 3, contain the sex, occupation/position and academic qualification distribution of respondents. It shows 43.65% of respondents were male while 56.35% female. In the occupation/position distribution of respondents, data revealed that facilitators constitutes 34.13% and the highest respondents, closely followed in 2nd position were volunteers with 24.60%, and 3rd in that order were the Adult learners with 19.05%. In the academic qualification distribution, WASSEC/GCE/Equivalent category scored the highest with 35.71%, ND/NCE category in 2nd position with 29.37% while FSLC/Others category in 3rd position with 23.81%. The interpretation of the above data shows that respondents with ND/NCE and above sum up constituted 40.48% while respondents with below ND/NCE qualification sum up constituted 59.52%. The implication is that majority of facilitators possess qualification below NCE stipulated by national policy on education.

Table 4. Respondents' perception of Adult education on entrepreneurial sustainable development in Akwa Ibom State.

S/N	Questions	Responses/Percentage (%)	
		Yes	No
1	ANFE is a tool for ESD in Akwa Ibom State?	121 (96.03 %)	5 (3.97%)
2	AEP of AKSAANFE encourages MSMEs startup?	94 (74.60 %)	32 (25.40 %)
3	Are you satisfied with AE and VT of AKSAANFE in AKS?	73 (57.94%)	53 (42.06%)
4	ANFE reduces illiteracy, poverty and unemployment through ESD in AKS?	109 (86.51%)	17 (13.49%)
5	50% and above of adult learners in your centre also acquire vocational skills for self-reliance and MSMEs startup?	115 (91.27%)	11 (8.73%)
6	50% and above of the teachers and facilitators in your centre obtained minimum qualification of NCE and above?	57 (45.24%)	69 (54.76%)

7	Poor salary of teachers and non-payment of facilitators, and other staff of ANFE hinders ESD of Adult learners in AKS?	113 (89.68%)	13 (10.32%)
8	Low enrolment of Adult learners in AEP in AKS is due to low community sensitization and literacy campaign?	89 (70.63%)	37 (29.37%)
9	Inadequate funding of adult education and lack of credit facilities to the entrepreneurs hinders ESD in the State?	119 (94.44%)	7 (5.56%)
10	Lack of teaching facilities, industries and infrastructures impact negatively on learners' skills acquisition for ESD?	123 (97.62%)	3 (2.38%)

Source: Field Survey, 2023.

Moreover, to achieve the objectives of the study relevant questions were asked, and survey method adopted to gather data for analysis.

Research Question One

To what extent does adult education impact on entrepreneurial sustainable development in Akwa Ibom State?

In table 4 above, the perception of respondents to Q1, 2 & 3 provides answer to extend to which adult education impact on entrepreneurial sustainable development in Akwa Ibom State, as 121 respondents which constitutes 96.03 % agreed that Adult and Non-Formal education is a tool for entrepreneurial sustainable development in Akwa Ibom State while 5 respondents, representing 3.97% disagreed. In the same vein, 94 respondents which represented 74.60 % agreed that Adult education programmes of AKSAANFE encourages micro, small and medium businesses startup while 32 respondents, representing 25.40 % disagreed. To determine the level of satisfaction with adult education and vocational training of AKSAANFE in Akwa Ibom State, 73 respondents which constitutes 57.94% shows satisfaction while 53 respondents which represented 42.06% expressed dissatisfaction with performance of AKSAANFE. Data above revealed that adult education have significant and direct impact on entrepreneurial sustainable development in Akwa Ibom State.

Research Question Two

What are the strengths of adult education towards entrepreneurial sustainable development in Akwa Ibom State?

The perception of respondents to Q 4 & 5 provide answer to the strengths of adult education towards entrepreneurial sustainable development in Akwa Ibom State, 109 respondents which represented 86.51% agreed that Adult education reduces illiteracy, poverty and unemployment through entrepreneurial development in Akwa Ibom State while 17 respondents which made up 13.49% disagreed. In line with this, 115 respondents which made up 91.27% agreed that 50% and above of adult learners in their centres also acquire vocational skills for self-reliance and micro, small and medium business startup while 11 respondents which represented 8.73% disagreed. Data revealed that adult education for entrepreneurial sustainable development helps to reduce the high level of illiteracy, poverty and unemployment in the state, and enhances skills for businesses startup for self-reliance, job creation and employment opportunities, which in turn improve the standard of living of the citizens and per capita income/GDP of the state.

Research Question Three

What are the weaknesses of adult education towards entrepreneurial sustainable development in Akwa Ibom State?

The perception of respondents to Q6 to 10 were adopted to assess the weaknesses of entrepreneurial sustainable development in Akwa Ibom State. Concerning issues of minimum qualification for teachers and facilitators, 57 respondents which made up 45.24% maintained that 50% and above of the teachers/facilitators in their centre obtained minimum qualification of National Certificate of Education (NCE) and above while 69 respondents which constitutes 54.76% disagreed, thereby, indicating that about 54.76% and above teachers/facilitators in AKS do not possess minimum qualification of NCE for adult education as stipulated by National policy on education. 113 respondents which constitutes 89.68% opine that poor salary of teachers and non-payment of facilitators, and other staff of Adult education hinders entrepreneurial development of Adult learners in Akwa Ibom while 13 respondents representing 10.32% did not agree. The implication is that the high percent of 89.68% is enough to prove that poor salary of teachers and non-payment of facilitators, and other staff of Adult education hinders entrepreneurial development of Adult learners in Akwa Ibom State. In addition, 89 respondents which represented 70.63% agreed that low enrolment of adult learners in adult education programme in Akwa Ibom State is due to low community sensitization and mass literacy campaign while 37 respondents which represented 29.37% did not agree. The result showed 70.63% agreement which revealed that there is a link between low enrolment in adult education and low community sensitization and campaign for mass literacy in the state. Moreover, 119 respondents which made up 94.44% agreed that inadequate funding of adult education and lack of credit facilities to the entrepreneurs hinders entrepreneurial development in the State, whereas 7 respondents which constitute 5.56% disagreed. The high percent of 94.44% shows that inadequate funding is a major challenge to the implementation of adult and non-formal education in the state, and lack of access to credit facilities by learners who want to become entrepreneur hinders entrepreneurial development in the state. Lastly, 123 respondents which represent 97.62% opine that lack of teaching facilities, industries and infrastructures impact negatively on learners' skills acquisition for entrepreneurial development while 3 respondents which constituted 2.38% did not agree. The implication is that high percent of 97.62% shows that lack of teaching facilities, industries and infrastructures impact negatively on the learners' skills acquisition/entrepreneurial development in Akwa Ibom State.

Results and Discussion

Adult education for entrepreneurship development is the new way/strategy adopted by many states towards human and national development, since adult citizens are the major productive force of the economy. Hence, training of over 250,673 adult learners from 2007 to 2022 in order to acquire skills and knowledge for self-reliance, startup of MSMSE, has been recorded as strength for AKSAANFE and indeed Akwa Ibom State. In the year 2022, Akwa Ibom State government in collaboration with AKSAANFE successfully trained over 40,000 adult (men and women) and youths in various skills including ICT, solar installation, agro-based ventures and SMEs (Explore Akwa Ibom, 2022). Akwa Ibom State Agency for Adult and Non-Formal Education (AKSAANFE) in collaboration with the National Commission for Mass Literacy, Adult and Non-Formal Education (NMEC) has help to establish 888 Adult education centres and develop programmes of Adult education to address entrepreneurial sustainable development such as sewing, soap making, craft work, carpentry, clothes waiving, agriculture etc in the state with the goal to achieve global standard of education as encapsulated in the Sustainable Development Goal 4 which is targeted at ensuring education for all in the state.

The conversion of the former technical college Ikot Ada Idem to a state of the art entrepreneurial and skills acquisition centre, and the establishment of high profile, well equip and modern adult education centre in Udo Udoma Avenue in Uyo to provide vocational training for adult learners shows the importance of Adult education for entrepreneurial development in the state. Also the enrolment and training of 30220 adult learners (Males 14109 and females 16,111) as reported in 2022 in basic literacy, post literacy and vocational training to acquire skills for small business startup is seen as strength (Explore Akwa Ibom, 2022).

On the other hands, adult education was established in order to achieve the goal 4 of Sustainable Development Goals targeted at ensuring education for all by 2030 in Akwa Ibom State. Despite the implementation of adult education programmes by AKASAANFE in the state, the illiteracy rate is still high, Unemployment rate of 67.69%, making Akwa Ibom to be ranked 1st in unemployment amongst south-south states, followed by Rivers State 2nd with 63.50% while Delta became 3rd with 60.40%. (NBS, 2021, cited in BudgIT, 2021). In poverty rating, Akwa Ibom recorded 26.82%, and ranked 2nd highest in poverty rate in south-south after Cross River which was ranked 1st with 36.90% as reported by (BudgIT, 2021), it shows that these factors also act as drawback to entrepreneurial sustainable development in Akwa Ibom State. Nevertheless, Adult education through AKSAANFE assist to equips the learners with the skills needed to startup businesses such as: retail trade, transport, repair services, restaurants, local financial services like Osusu and private money lenders, craft works, domestic works, farming, sewing, carpentry, clothes making and waiving, barbing and hair dressing, traditional medicine and Traditional Birth Attendance (TBA) etc. (Akwa Ibom Impact, 2022, Explore Akwa Ibom, 2022).

In addition, entrepreneurial sustainable development is a concept in line with goal 9 of the Sustainable Development Goals, emphasizing sustainable development of industry, innovation and infrastructures. The study point of reference is from section 9.3 of SDG, targeted at increasing the small scale industries and other enterprise mostly in developing countries to financial services, including affordable credit, and their integration into value chain and markets (UN Department for Economic and Social Services, 2015). The study observed that although MSMEs are encouraged through government policies and programmes of AKSAANFE in regards to adult education and vocational training for entrepreneurship, but lack of adequate funds, empowerment programmes and inaccessibility to credit facilities such as loan, subsidies and grants for adult learners is a major setback to entrepreneurial sustainable development in the State. Data revealed that where the loans are made available, the high interest rate discouraged the adult learners from taking the loans. Consequently, absent of viable industries to support Adult learners who ventured into small businesses by providing markets for them to sale their products is also a major challenged, as the study observed that Akwa Ibom State is a civil service state, and the effort of the government to industrialized the state is yet to meet the standard of the SDGs target aimed at 2030.

The strengths of Adult Education on entrepreneurial sustainable development in Akwa Ibom State.

Adult education is a veritable tool for entrepreneurial sustainable development in the state in the sense that it equips adult learners with skills and knowledge aimed at development of adult person's potentials for productive venture in the economy such as agriculture, sewing, carpentry, catering, ICT, soap making etc. these activities constitutes part of entrepreneurship and helps to improve per capita income of persons as well as living standard of people in the society. Sustainable development emphasizes the development of the entire human being to include the physical, intellectual, skills, emotional, behavioural patterns and ideas needed to solve individuals or societal problems without causing any harm to the present or future generations. Sustainable development and entrepreneurship are integral parts of education,

therefore, innovation, creativity and technology can be enhanced in individuals through adult education and use in effecting environmental changes the add values to lives, improve adult learners participation and exploration of development processes towards human and national development in Nigeria. Adult education is necessary tool for skills acquisition and decision making to limit risk and encourage success in business venture. An entrepreneur is concern with the establishment of business for profit making and job creation, therefore, improving entrepreneurial development through adult and non-formal education would add values to the citizens' lives in the society in the following ways:

Job creation and employment generation for adult citizens in the state: In 2022, about 3500 adult learners engaged in Agriculture for self-help and to boost food sufficiency in the state, about 50 youth were trained in carpentry/furniture work in partnership with private firm in Eket while 2000 women adult learners were linked to skills acquisition in hair dressing, fashion design, make up, decoration, Gele tying, soap marking, craft work etc (Akwa Ibom Impact, 2022, Field Survey, 2023).

It helps in extension of education opportunities to the disadvantage groups such disabled, women, orphans, destitute and Internally Displaced Persons (IDPs). For instance, establishment of special education centres to carter for the blind, deaf and dumb and mentally retard persons, helps to give meaning to their lives and make them more useful in the state. It also increase the rate of literacy while decreasing illiteracy rate in the state. Education avail us with knowledge and skills for effective harnessing of resources and taking inform actions/decisions for innovative and creative business venture for profit maximization.

It encourage empowerment programmes in the sense that at the end of the vocational training, some learners are empowered by NMEC and AKSAANFE with equipment such as sewing and hairdressing machines, generators, clippers etc. to start up small businesses.

It act as a medium of advancing infrastructures: The sitting of adult education centres in the communities propel the provision of facilities such as electricity supply, potable water, access road and transportation, hospitals, etc. whereby an entrepreneur can also benefit from in the course of his business.

It improve standard of living and per capita income by using acquire skills to start micro and small businesses for purpose of self-development and profit making.

Constraints/Weaknesses of adult education and entrepreneurship development in Akwa Ibom State

They include:

- i. Policy inconsistency: It is observed that a well-developed programmes of actions by AKSAANFE often failed at the implementation stage. The failure of the programme in most centres and LGAs is attributed to lack of leadership with vision and political good will to deliver services to the people, poor funding of the programme by LGAs as a result of the State-Local Government Joint Account which constraint LGAs ability to access fund to deliver on the assigned responsibilities is drawback. Also inadequate supervision, monitoring and evaluation of adult education programmes by State Agency, SDEISC department at local government level and CBMC in the communities.
- ii. Shortage of professional and trained facilitators and teachers with the acceptable minimum national qualification of NCE, as most facilitators and teachers lacks basic qualifications, competency on special education and poor communication skills to teach the physically challenged persons in the state.
- iii. Poor enrolment, attitudes of facilitators and awareness campaign for mass literacy: The decrease in the number of adult learners that enrolled in the programme in year 2022 were attributed to so many factors ranging from lack of interest on the part of learners, withdrawal of services by facilitators due to backlog of unpaid stipend, low community

mobilization, sensitization and enlightenment campaign about the programme as the study observed that many whom the programme was designed for, are not even aware of the existence of the adult education centres and programmes in their communities. Lack of teaching aids and facilities, non-payment/irregular payment of facilitators contributes to poor motivation to work, lack of interest, low attendance to work, poor performances and in severe case withdrawal of learners and facilitators from the programme. It was observed that facilitators in all the LGAs visited were owed stipend ranging from 2 to 4 years, this act as a drawback to the programme implementation in the state. This situation caused many to withdraw their services from the programme, thereby making the purpose of the programme to be defeated.

- iv. Lack of empowerment as most of the adult learners who obtained skills in various areas such as catering, fashion and design, soap and paint making etc. needs to be empowered with equipment needed to deliver the job such as sewing machines for those in fashion designers, hair dressing machines for the saloon stylists, clippers for the barbers. The lack of these machines makes entrepreneurial sustainable development by adult learners difficult. It was also observed that the few available machines in the various centres were not properly put used and many were abandoned to rot.
- v. Inadequate capital/credit facilities: poor funding is the main drawback to the implementation of adult education for entrepreneurial development in the state. Entrepreneurship is very capital intensive and required huge funds. Making available loans, grants and subsidies investment in order to revamp micro and small scale businesses is necessary. The lack of money to run MSMEs is main challenge of business, and at times lead to the collapse many businesses. A situation whereby learners with business venture lack access to loans and other facilities/ enabling environment is a setback. Most cases where loans are available, the high interest rate discourage them, while multiple tax system also affects entrepreneurial development in the state.
- vi. Corruption: High rate of corruption recorded in our public service is a major constraint to effective implementation of ANFE for entrepreneurial sustainability in Akwa Ibom State. Corruption can be defined as illegal use of public office to advanced personal gains at the detriment of the public interest. In the views of Claude Ake, corruption is the bane of African society. Corruption in public sector manifest itself in many forms such as misappropriation, mismanagement, embezzlement, bribery, Nepotism, favouritism, Godfatherism, sadism, contract inflation etc.
- vii. Lack of industries and infrastructures: Inadequate medium and large scale industries that can provide market for entrepreneurs to sale their product in the state is also a setback while lack of infrastructures such as constant electricity supply, potable water, good roads and transportation, hospitals, schools, banks to borrow money for business also constraint entrepreneurial development in the state.

Conclusion and Recommendations

Adult and non-formal education from all indication is a veritable instrument for human capacity building, socio-economic and political development and entrepreneurial sustainable development in the state. Although this sector have not received enough attention from government and other education stakeholders in terms of funding, but the truth remains that adult and non-formal education, if properly implemented can spring wonders and surprises in term of human capacity development in the state. The role of adult education in advancing entrepreneurial development can never be underestimated since adult citizens formed majority of the productive force of the economy, building their skills through vocational training is the sure way of unlocking their potentials and securing entrepreneurial skills for a better future and sustainable development.

The study recommends the followings:

- i. Policy reforms to redress the challenges of adult education and entrepreneurial sustainable development such as inadequate budgeting for education, insufficient infrastructures and credit facilities as well as empowerment of adult learners. There is needs for proper funding of adult education through adequate budgeting for the programme. Committing more funds to training and empowerment of adult learners to become entrepreneurs will help to curb youth restiveness, limit prostitution, insurgency and other criminal activities in the state. Also, empowerment programmes should directed towards learners with practical knowledge and skills needed for micro and small business in Akwa Ibom State and in Nigeria.
- ii. There is need for proper coordination, monitoring and evaluation of the programmes by the Centre Based Management Committee (CBMC), department of Social Development, Education, Information, Sports and Culture (SDEISC), and the State Agency to ensure that adult education programme meets the goal of mass literacy, skills acquisition and empowerment of the adult learners to be more productive and self-dependent in the society.
- iii. There is a need for training and re-training of teachers and facilitators to meet the minimum national qualification requirement of NCE, and also facilitators and volunteers should be regularly exposed to seminars, workshops and conferences in order to develop practical skills needed for teaching entrepreneurship education in adult schools.
- iv. There is need for adequate infrastructures such as provision of permanent building for adult schools, teaching material, facilities and equipment, electricity supply, potable water, health care services and banks to enable learners who acquire skills for entrepreneurship to access soft loans and grants for their businesses.
- v. There is need for more centres to be establish in various communities for purpose of nearness, especially the drop-in-centres in market squares to help market men and women easy access, and at the same time volunteers such as youth corps members, retired teachers who may still want to teach, NMEC and AKSAANFE staff and LGAs education officers who are not engaged should be posted to assist in teaching in the centres.

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ENTREPRENEURSHIP AND YOUTH DEVELOPMENT IN NIGERIA: POLICIES, PRACTICES AND EFFECTIVENESS

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ABSTRACT

The bedrock of Nigeria's economy lies in entrepreneurship. Micro, small, and medium enterprises (MSMEs) make up a sizable portion of all businesses in Nigeria and account for 49.8% of the country's Gross Domestic Product (GDP), according to data from the National Bureau of Statistics (NBS). They are present in all economic sectors and make up about 85% of all industrial employment in terms of the labor force. These businesses have greatly aided the value creation in the industries in which they operate by providing original ideas, creative solutions, and business models (WATHI, 2021). Youth empowerment is a focal point for economic growth, and entrepreneurship significantly affects youth development. Although the Nigerian government has committed to entrepreneurship and youth development, with the youths making up to 70% of the entire population, it still has not shown track records of the development. Thus, this research examines the synergy between entrepreneurship and youth development in Nigeria. It aims to explore what policies and practices have been created and implemented to foster the synergy between the two variables and how effective they have been. The research utilized the qualitative research method and leveraged secondary data sources, such as journal articles and conference proceedings, to gather data. This study concluded that entrepreneurship is instrumental to youth development in Nigeria and recommended that more cohesive youth development policies be put in place in Nigeria to foster both human capital development and economic development in the country.

1.0 Introduction

Every country's growth is tied to the resourcefulness of its citizens, especially its youth. Nigeria has been committed to entrepreneurship development since the end of the civil war in 1970. Since then, the government has stepped up its support for the growth of entrepreneurship by enacting a number of policies and programmes, including the Economic Structural Adjustment Programme (SAP) in 1986, and by establishing organizations like the National Directorate of Employment (NDE), the National Open Apprenticeship Scheme, and the Small and Medium Enterprise Development Association of Nigeria (SMEDAN), among others (Akande & Ejiofor, 2014).

Since about 70% of Nigeria's population comprises young people, it has not been easy to give them power and help them grow. There are a lot of challenges that are faced by Nigerian youths, and they can only be met if the youths are inquisitive, well-taught, innovative, and have an entrepreneurial spirit (Aja & Adali, 2013). Through the Central Bank of Nigeria, the federal government has been able to foster effective policies, especially with the creation of Entrepreneurship Development Centres (EDCs). Between 2006 and 2008, they also put in place the Microfinance Policy, Regulatory Framework, and Supervisory Framework for Nigeria, as well as the NYSC Sensitization, Venture Prize Competition, and NYSC Entrepreneurship Training Programmes, among other things, to help give young people more power and make the economy more diverse (CBN, 2012). It has also participated in a number of initiatives, including Africa Youth Empowerment Nigeria (AYEN), Graduate Internship Scheme (GIS), Youth Initiative for Sustainable Agriculture in Nigeria (YISA), Youth Enterprise with Innovation in Nigeria (YouWIN!), Youth Entrepreneur Support Programme (YES-P), and N-Power Empowerment Programme (Omeje, Jidefor, & Ugwu, 2020). Some universities, like Covenant University, have also made entrepreneurial development studies a core part of their curriculum to encourage their students to start their own businesses. Other private sectors and non-governmental organizations have also committed some resources. Some examples are the Youth Empowerment and Development Initiative (YEDI), the Diamond-Crest for Youth Education Foundation, the Tony Elumelu Foundation for Entrepreneurship in Africa, the New Era Foundation, the Youth for Technology Foundation, and LEAP Africa (Omeje et al., 2020).

The unemployment rate in Nigeria is still a cause for concern despite the fact that there are policies and practices in place to support young people's development through entrepreneurship. The main idea behind encouraging youth entrepreneurship is that it will help a lot of young people create jobs for themselves and also hire other people. But to what extent have these policies and practices aided the synergy between entrepreneurship and development? How effective are the policies? Therefore, this paper seeks to examine the synergy between entrepreneurship and youth development. It also aims to clarify the policies and practices that have promoted entrepreneurship for youth development as well as the level of effectiveness in youth development in Nigeria.

2.1 Conceptual Clarifications

2.1.1 Youth

The concept of youth is not a generally agreed-upon term, especially when it comes to the age range of youths, different countries and organisations have different ranges into which they classify youths, however, what has been generally agreed upon is that youth is the transition from adolescence to being a young adult, it is also considered as a timeframe between the end of childhood and entry into the world of work it. Therefore, youth encompasses the period that young people are in school or have graduated, but have access to professional and political rights (Anthony & Ikechukwu, 2019; Gwija, Ewese-Eke & Iwu, 2014; Odeh, 2022).

The age of youth varies from country to country. In The Gambia, youths are between the ages of 17 and 35; in Zambia ages of 15 to 25 years; in Ghana ages 18 and 40, Botswana 18 to 30; South Africa pegged it between ages 18 and 35; in Zimbabwe 18 to 35; the UK does not adopt European Union ages 15 to 25, but her national policy sees youths between ages 18 and 19. The Nigeria National Policy 2009 puts the age bracket at 18 to 35 years; while the age stipulations from the National Youth Service Corps (NYSC) in Nigeria states that people between the ages of 18 and 30 are youths. The United Nations, on the other hand, delimits the ages of youth to 15-24; according to the African Union, youth are between the ages of 15 and 35 years. (Awogbenle & Iwuamadi, 2010; Gwija et al, 2014.; Odeh, 2022).

Although the definition of youth varies from country to country and institution to institution, this paper employs that of the Nigeria National Policy of 2009 which classifies youth as men and women aged between 18 and 35 years. The period of youth is a dynamic stage in life, and young adults are known to be a vulnerable group in society, due to societal marginalisation, however, they are also key assets of any community and are particularly valuable players in economic development known for their innovation, enthusiasm and exuberance (Akau, 2015; Entwistle, 2008; Gwija et al, 2014).

2.1.2 Entrepreneurship

The earliest definitions of entrepreneurship can be traced back to the work of Cantillon, who linked the term with the idea to “undertake”. Entrepreneurship has come to mean any form of self-employment, where the entrepreneur is seen as a risk taker, who invests in goods or services where the final selling prices of these have not yet been determined. Entrepreneurship is the recognition of an opportunity to create value, and the process of acting on this opportunity, whether or not it involves the formation of a new entity (Entwistle, 2008; Hlungwani & Sayeed, 2018).

The 21st century is witnessing a global wave of entrepreneurship as more people seek out new means of self-empowerment and business ownership. Entrepreneurship fosters systemic change and fosters inclusive growth, impacting the economy on a meaningful scale, an entrepreneur may be defined as a person with the vision to see a new product or process and the ability to make it happen. Entrepreneurship aids economic growth and competitiveness, economic independence, self-esteem, job creation, and the social welfare of any country, as well as the political stability and national security of that country (Awogbenle & Iwuamadi, 2010; Gwija et al, 2014; Mahmoud, Makoond & Naik, 2017).

2.1.3 Youth unemployment

Unemployment is simply the state of being without a job. Youth unemployment occurs when young people who are willing and capable of working are unable to find adequate paid employment. Those who are eager to work for the going rate of pay but are unable to obtain employment are said to be in this circumstance. The level of poverty and related welfare concerns would rise in an economy with a higher unemployment rate. Nigeria is not free from

the developmental issues that plague growing economies in the twenty-first century, and unemployment is a core developmental issue plaguing the nation, especially unemployment among the youth population. Youth unemployment reduction becoming a major challenge many governments seek to tackle, and one of the best ways to adequately mitigate this phenomenon is through entrepreneurship (Ahmed & Ahmed, 2021; Emeh, 2012).

2.1.4 Youth entrepreneurship

Youth entrepreneurship is a fairly new yet growing field in the world of development programs, it is a strategy to facilitate the economic participation of young people across the globe (Gwija et al, 2014). Youth entrepreneurship is the solution to youth unemployment, as it not only creates jobs for young people but also brings young people's assets into the labour market. Some of these assets include loyalty, new ways of thinking, energy and enthusiasm for training, sophistication with technology, and positive responses to high expectations. Furthermore, young people are very mobile, quickly reacting to volatility and market fluctuations, which has a positive effect on the economy as a whole. Youth entrepreneurship is both nationally and globally recognized as an important solution to the problem of youth unemployment, poverty alleviation and economic development (Ahmed & Ahmed, 2021; Entwistle, 2008; Gilmore, 2009; Lez'er, Semerianova, Kopytova & Truntsevsky, 2019). Youth participation in entrepreneurship plays an important role in the socioeconomic development of any society (Lez'er et al, 2019).

2.1.5 Youth development

Youths are a significant target population for development programs, and they possess a strong potential to effect change in communities worldwide. Because youth comprise a significant percentage of the global population, they present a prime target for community development programs, as there is a great opportunity to change the pattern of a community by breaking the cycle of poverty at its roots (Entwistle, 2008). Youth development and empowerment are vital stages in life for building the human capital that allows young people to avoid poverty and lead better, and possibly have a more fulfilling life (Awogbenle & Iwuamadi, 2010).

Youth development is heavily dependent on youth empowerment, which is considered a process that encourages young people to take charge of their lives (Kelvin-Iloafu, Igwe & Enemuo, 2019). The empowerment of the youth population to play their role as social change agents and strategic partners leads to youth development, and the most significant discourse used in the youth development arena influences the policies and programmes used in the practice of youth development (Charles & Jameson-Charles, 2014). Youth development and empowerment are crucial for building the human capital of any country, this is because they afford young people the means to live better lives and lift them out of the throes of poverty. The ability of a nation to invest in and rely on long-term prosperity is significantly influenced by the human capital it develops in its youths. Hence, it is crucial for growth and poverty reduction to ensure that young people are well-prepared for the future. Youth also make up the bulk of a nation's resource base when it comes to meaningful development (Emeh, 2012). Youth development in this paper places an emphasis on the policies and programs implemented in the attainment of this goal.

2.2 The Synergy between Entrepreneurship and Youth Development

The United Nations World Programme of Action for Youth to the Year 2000 and Beyond, for instance, has identified ten important priorities for youth: education, employment, hunger and poverty, health, the environment, drug abuse, juvenile delinquency, leisure activities, girls and

young women, and full effective participation in society and decision-making (International Council on National Youth Policy, 2001).

To empower young people, one must establish and maintain the enabling circumstances that will allow them to act independently and on their own terms rather than following the instructions of others. The Commonwealth of Nations says that young people are empowered when they recognise that they have or have the ability to make choices in life, know what those choices mean, make a free, well-informed decision based on that information, act on that decision, and take responsibility for the results of those actions (Okoli & Okoli, 2014). Therefore, it is easy to say that the rise in entrepreneurship will create jobs that will translate to youth development.

Gilmore (2009) noted that poor employment in an individual's youth might harm their long-term career prospects, youth unemployment leads to low youth participation in economic development, this affects the kind of access young people have to economic resources and may lead to further economic marginalisation and lack of access to employment and other economic opportunities. Youth entrepreneurship is the answer to this pressing issue being faced by youths around the world and incorporating entrepreneurship into the academic curriculum gives young people in schools exposure to this concept and is beneficial to young people, their families and even their communities in the long run.

Adebayo (2012) looked at the efforts of higher education to reduce poverty among the undergraduate youth population. Illiteracy and poverty are linked, and functional education—which is typically acquired in higher education—is one of the most effective methods to empower young people. The research, therefore, recommended the inclusion of more practical skill acquisition courses in the university education system such as green certificate, bamboo and rattan, aquaculture and animal husbandry among others, and stated that a bridge between the workforce policies and the university curriculum should be established to prepare the youths for the industrial sector.

Emeh (2012) highlights the menace of unemployment in Nigeria, noting that a large percentage of Nigerian youths are unemployed. The youth population of the country also accounts for over a third of the population, making Nigeria an ideal youth economy, unfortunately, the economy of the nation has been growing at a snail's pace due to unemployment, and a lack of skilled workers to occupy roles in need of technical know-how. Put more succinctly, the human capital is inadequately equipped to take the nation's economy to the next level, this puts the country in a precarious position whereby idle youths are engaged in various vices. In order to curb this menace, vocational training has been included in the educational curriculum, the National Directorate of Employment (NDE) was also established in 1986 with the aim of boosting youth employment and vocational skills development. Finally, the researcher recommended that for youth development to thrive in Nigeria public resources should be appropriately administered and corruption should be curbed.

Aja-Okorie & Adali (2013) examined the importance of entrepreneurial education on youth empowerment and also as a panacea to the growing crisis of youth unemployment in Nigeria. They declared that entrepreneurship is the best means of fighting the growing levels of poverty in the country and human capital must be adequately developed to meet this goal, and youth empowerment is the key to achieving this initiative.

Odeh & Okoye (2014) noted that Nigeria is the most populous country in the African continent, and for the goal of economic development to be attained youths must be empowered. More

than 70% of the Nigerian population lives below the poverty line and this is a huge cause for alarm the rate of poverty has been on an increase for years. The relationship between unemployment and poverty is a toxic cycle as a high rate of one variable leads to an increase in the other. The antidote to this toxic cycle is employment, job creation leads to human capital development and affects economic development positively. Job creation does not deal with the problem of unemployment alone, as the issue of underemployment must also be tackled. The research concludes that youth empowerment is the solution to the issue of poverty and unemployment, Nigerian youths need to be imparted with the necessary skills and given access to financial resources in order to turn back the tide of underdevelopment in the nation.

Ofili (2014) highlighted the challenges faced by entrepreneurs in Nigeria by making use of qualitative methods, and by utilising interviews so as to ascertain fully the perspectives and challenges of the selected entrepreneurs. The study discovered that poor transport systems and ailing infrastructure in Nigeria are major setbacks to many entrepreneurs, their businesses also struggle with profitability due to the system of taxation in the country, access to capital and the existence of few support agencies also stagnated business growth. The study recommended the reduction of regulations for start-ups and infant businesses in certain industries in order to aid the growth of businesses, microfinance institutions should also be set up to provide financial aid to businesses.

Anthony & Ikechukwu (2019) state that youth violence has now become commonplace in Nigeria, this violence is perpetrated by gangs in schools, street communities and other social settings and has resulted in the loss of lives and property, and has caused serious societal unrest. The authors evaluated several youth development programs that have been put into place in Nigeria since independence because youth development is suggested as a remedy to this violence. A number of factors, including the new wave of moral decay and drug misuse, ethnic nationalism, unemployment, and overpopulation, among others, contribute to the unrest among young people. Youth violence will continue to outweigh nation-building efforts in Nigeria unless youth development programs are properly implemented.

Lez'er, Semerianova, Kopytova & Truntsevsky (2019) noted that youth entrepreneurship is an aspect of the national economic development of any state that is most promising. Young entrepreneurs contribute positively to the development of small and medium-scale business enterprises, increase capital inflow and create new jobs which reduce the plague of unemployment. Now more than ever youth-focused policies to bolster entrepreneurship should be put in place by the government, they concluded that there should exist state support structures to foster entrepreneurship such as youth participation in the process of creating youth-focused policies for entrepreneurship, creating a good economic and financial climate for businesses to thrive, and tax reduction or exemption in the infant years of a business.

Eze-Michael (2020) observed that youth restiveness has become prevalent in Nigeria due to the surge of unemployment, poverty, illiteracy, corruption and bad governance. Angry youths in the Niger Delta region are engaged in various forms of restiveness in demand of their rights due to instances of marginalization, denial of social rights, environmental degradation, and economic devastation actions by the government of Nigeria. To combat this growing restiveness in the region, the study recommended the creation of jobs and the implementation of skills training and acquisition, while an emphasis on vocational and technical education should be placed on the educational curriculum. The study concluded that youth development is instrumental in the efforts to curb youth restiveness in the Niger Delta region.

Ibrahim & Audu (2020) took into account the historical development of youth policies in Nigeria and observed that while Nigeria has never been lacking in the development of policies to galvanise its youth population, the country has however, lacked the political will to follow through with the effective implementation of these policies. They concluded that for youth development policies to be effective, a comprehensive and inclusive structure must be put in place for policy development and implementation.

Omeje, Jidefor & Ugwu (2020) observed that various efforts have been made by the Nigerian government to address the issues of the youth, especially with regard to unemployment. Empowerment through entrepreneurship has been facilitated by numerous governmental organisations, non-governmental organisations, international organisations and even philanthropists in the private sector, policies and programs have also been championed by the federal government to bolster youth empowerment. The study made use of the theory of empowerment and the multinomial logistic regression model to assess if youth empowerment has led to the growth of entrepreneurship and contributed to economic diversification in Nigeria. It was discovered that with the exception of tax rates, transportation costs, and land access, practically all of the factors used to measure entrepreneurship growth and development in Nigeria are statistically significant. It also highlighted that the efforts being made at youth empowerment by various organisations are yet to have a significant effect on the growth and development of entrepreneurship in the country.

Ahmed & Ahmed (2021) made use of the descriptive study research design in assessing the constraints facing young entrepreneurs in Ethiopia. Noting that a strategy for reducing poverty and fostering economic growth through the creation of new jobs for young people is the encouragement of youth entrepreneurship, the researchers surveyed 5000 youths in Ethiopia and some key constraints highlighted in the findings of the research include limited access to financial aid, poor infrastructure and institutions, lack of adequate education and technical know-how, limited support structures and unfavourable government policies.

3.0 Human capital theory

The human capital theory was first propounded by economists Gary Becker and Theodore Schultz in the 1950s and early 1960s. This theory assumes that if individuals invest resources on education, training, and health care, it will help to boost their productivity and future earnings. These productivity and future earnings are accumulated over time. Also, this theory assumes that there will be a rate of return on human capital expenditures if they are influenced by market factors, government regulations and individual choices. Eferakeya and Ifuruze (2016), posit that education, training, and skill acquisition are the mechanisms for increasing individual productivity and general economic growth. Education is a technique for increasing human capital, increasing labour productivity, and raising technological levels around the world.

According to Ross, Rasure and Munichello (2021), the intangible economic value of an individual's experience and talents is referred to as human capital. This comprises learning, training, intelligence, abilities, general well-being, and other characteristics that employers respect, such as loyalty and timeliness. According to human capital theory, if education and skill training is increased, it can help people raise their productive capacity. More so, this theory assumes that if youths are given entrepreneurship education, it might generate new concepts and information to them and expose them to business knowledge and creativity, preparing them for long-term sustainable growth (Agbonna, Shoge, Okun & Olorunlomeru, 2022).

Not all economists and researchers agreed that human capital increases productivity and performance substantially. For instance, Marxian economists Samuel Bowels and Herbert Gintis argued against the human capital theory, claiming that converting individuals (labour) into capital effectively eliminates class strife and attempts to strengthen individuals' rights (Ross et al., 2021). In addition, human capital theory exaggerates the importance of individual efforts while underplaying the significance of socioeconomic background and prejudice in determining an individual's status of human capital. It is oversimplified in that it views individuals as simple inputs, ignoring their emotions, motivations, and experiences. It is also based on the assumption of a perfect market in which all persons have equitable access to education and training possibilities, which is not the situation in reality. It fails to take into account the adverse consequences of human capital expenditure, including global degradation and social disparity.

According to Human Capital Theory, an individual's knowledge, skills, and experience add to their socioeconomic value and performance. This theory can be implemented in the context of entrepreneurship and youth development in Nigeria by:

- i. Investing in education and training activities that equip young people with the information and skills they need to establish and run successful enterprises.
- ii. Fostering the creation of a supportive environment conducive for entrepreneurs, such as access to funding, mentors, and networking opportunities.
- iii. Supporting the formation of collaborations between the commercial sector, the government, and educational institutions in order to equip young people with the resources and assistance they require to succeed.
- iv. Establishing a culture of sustained training and self-development among young entrepreneurs to enable them to gain new knowledge and adapt to changes in the business environment.

Nigeria can nurture an entrepreneurial culture and encourage the development of a new generation of young, skilled entrepreneurial leaders by adopting the principles of human capital theory.

4.0 Methodology

This research seeks to explore the relationship between entrepreneurship and youth development in Nigeria, placing a spotlight on the policies and practices that have been put in place to foster entrepreneurship among the youth population. To achieve this goal, the study adopts the secondary research method involving the review of existing literature and data related to the topic of the paper. The descriptive and exploratory research design was adopted to identify and analyse data on the policies, practices and resultant efficacy of youth development programs to bolster entrepreneurship in Nigeria. The study reviewed academic papers from journals, conference proceedings, and national policy documents. Data collection for this research was gotten from secondary sources such as peer-reviewed academic papers and online sources, the primary data was gotten from academic databases such as JSTOR, Elsevier, and Google Scholar. Data for this study were analysed using a systematic review method of content analysis which entailed the identification, and selection of literature, the extraction of the necessary information from literature, the synthesis of this information into the body of the research, and drawing relevant insights from the information gathered.

5.0 Youth development policies in Nigeria

While the word "youth" has diverse meanings, there is little debate about its inventiveness and strategic importance to the advancement of a country. If young people are given the proper education and opportunities, they can play a crucial role in the growth of their country (National Youth Development Policy (NYDP), 2019). Nigeria as of 2020 is ranked seventh on the list of the world's most populous nations (United Nations Population Fund (UNFPA), 2020). 40.3 million of these people, or 19.8% of the total population, are young people. This number alone exceeds the population of 199 nations in the world, elevating national concern for youth development (NYDP, 2019).

Nationalist movements were energized during the period leading up to independence by the enthusiasm, brainpower, and resourcefulness of young people who actively participated in the fight to liberate their fatherland. These youth organizations included the 1934-founded National Youth Movement (NYM) (Ibrahim and Audu, 2020). When Nigeria became independent in 1960, youth development policies first appeared. Governments at all levels have embraced various youth-friendly initiatives that have aided in the development of the typical Nigerian youth. Some of them are taught in school, while others are not. The ones covered by the school policy include interscholastic athletic competitions, school-based crafts, the establishment of organizations like rotary, debating, theatrical, Man O'War, and Girl Guides, among others (Agbegbedia and Ejemezu, 2019). In the years following the creation of the National Youth Council (NYC) in 1964 and the National Youth Service Corps in 1973, succeeding administrations have tried to include youth development in policy (Ibrahim and Audu, 2020).

The idea of reducing poverty and raising the standard of living for residents grew to dominate many governments' development policies. In the 1950s and 1960s, this environment was the one that embraced the newly independent countries (Uche, 2019). In 1962, the first National Development Plan was launched. The National Youth Council (NYC) was established two years later. Progress was hard to check throughout the mid-1960s political upheavals. The Boy Scouts, Man O'War, and other well-known in-school organizations did, however, establish themselves through time. In the 1960s and 1970s, extracurricular activities comprised emergency assistance and the creation of non-profit organizations that supported community development, skill-building programs, competitive sports, and cultural festivals (Ibrahim & Audu, 2020; National Youth Policy, 2001). Nigeria experienced a secessionist dispute in 1967, which sparked a three-year civil war. The National Youth Service Corps (NYSC) was created in 1973, by the Gowon administration in the interests of unification, forbearance, and togetherness. This program required recent graduates to perform a one-year mandatory service to other states and localities (Ibrahim and Audu, 2020; Odeh, 2022). In 1977, a new national education policy was released that allowed for the inclusion of vocational courses in the curricula (Emeh & Eke, 2006). Following this occurrence, the Federal Government established the Chukwuma Committee on March 26, 1986 (Omoruyi and Osunde, 2004). In November 1986, the National Directorate of Employment (NDE) was established as a result of the committee's report. The new directorate was given the duty of encouraging skill development and fostering the spirit of innovation, self-reliance, and independence (Emeh and Eke, 2006).

In 1983, the first National Youth Policy was created, which led to the creation of the Ministry of Youths and Sports (National Youth Policy, 2001). The 1980s saw a rise in demands for more youth-focused policies in various international organizations' member states (Isah and Vambe, 2013). For instance, the United Nations General Assembly emphasized the vital function of

youth around the globe in its 1985 call for international youth involvement, development, and harmony (Isah and Vambe, 2013). The declaration of 1985 as the "International Youth Year" boosted this dedication even further. Sadly, youth-focused policies and development initiatives were completely ignored throughout the 1990s. A revised version of the National Youth Policy and Strategic Plan of Action was endorsed in 2001 by President Olusegun Obasanjo. The Federal Ministry of Youth was reinstated as a result in 2007. Among the main goals of the National Youth Policy of 2001 were the following:

- Make certain that all youths receive equal treatment and are supported in realizing their entire capacity.
- Make youth morally dependable and responsive by instilling in them ideals of leadership and followership.
- Engage youths in decisions that are made at all levels of government that benefit them.
- Give youths the chance to get vocational training focused on self-employment and independence, whether they are in school or not (Ibrahim and Audu, 2020).

The National Poverty Eradication Programme (NAPEP), which was tasked with coordinating and overseeing all poverty-eradication initiatives in Nigeria, was also established by the Obasanjo administration. In order to empower youths and diversify the economy, the government, through the Central Bank of Nigeria, launched the Microfinance Policy, Regulatory and Supervisory Framework for Nigeria and introduced the NYSC sensitisation program between 2006 and 2008, the Venture Prize Competition, and the NYSC Entrepreneurship Training Programs, among other initiatives (Omeje, Jideofor & Ugwu, 2020).

A second National Youth Development Policy was created in 2009. As anticipated, there was no difference between the youth policy between 2001 and 2009. But the latter was more organized and stated. Among its claimed goals were the following:

- Create a broad policy structure that will serve as a guide for all decisions pertaining to youth development.
- Approaching youth issues holistically (completely) will guarantee that the most important aspects are covered.
- Encourage young people to participate in civic and community decision-making and to engage in the democratic process.
- Make sure that all youth programs are focused on and led by youths.
- Encourage the growth of independent businesses to lower youth unemployment.
- Promote youth participation in community-based, leadership, decision-making, and other development programs.
- Mobilize resources for all levels of youth programs and projects (Ibrahim and Audu, 2020).

The Youth Enterprise with Innovation in Nigeria (YouWin) was established in 2011 by the administration of President Goodluck Jonathan. YouWin was a competition that offered financing for the most viable company plans in an effort to encourage youths in Nigeria to pursue entrepreneurship and enterprise development. President Goodluck Jonathan also introduced the Nigerian Youth Entrepreneurship Strategy (YES) in 2015, a broad-based public-private partnership program geared at curbing the menace of unemployment among the young population of the country (Anthony & Ikechukwu, 2019). When President Muhammadu Buhari's administration took office in 2015, it introduced N-Power as part of its dedication to empowering and providing employment opportunities for Nigeria's burgeoning youth population. As of August 2020, it currently projects that it would have over 500,000 beneficiaries, according to its official web pages.

'Enhancing Youth Development and Participation in the Context of Sustainable Development' was the 2019 National Youth Development Policy theme. The 2019 youth development policy has been bolder than any of the National Youth Development Policies before it, as seen by its policy benchmarks and strategic drive. With a goal of creating an average of 3.7 million jobs annually (or around 18.5 million jobs during the 5-year policy term), with a focus on youth employment, its five-year estimates are nothing short of wildly optimistic (NYDP, 2019). Regarding agriculture, it promises to improve youth access to the Central Bank of Nigeria (CBN) Ministry of Micro, Small & Medium Enterprises (MSME) fund, which is worth billions of Naira. Its architecture will be examined, allowing activities to promote on-lending will be put in place, and agricultural extension services will be improved to 1:1,000 by 2020 and 1:750 by 2022, with a focus on youth in agriculture. Additionally, it will try to establish the Nigerian Youth Development Fund (NYDF), with a focus on providing loans and grants to youth business owners and agricultural entrepreneurs (NYDP, 2019).

5.1 Challenges of youth development policies in Nigeria

Youth entrepreneurship is one of the most promising areas of development of the state's economy, at the same time, it is not effectively implemented (Lez'er, Semerianova, Kopytova & Truntsevsky, 2019). As highlighted above, many programs have come up to bolster youth development and entrepreneurship initiatives, however, the effectiveness of these activities remains to be decided.

While it is obvious that Nigeria has not been lacking in the area of youth policy development, it has been observed that there is no overarching strategy guiding these policies and as a result, there is no cohesion in the formulation of youth-centred policies. Different administrations have come up and have created new policies with little regard to building what was done in the past, different policies flying in different directions which seems like a proverbial reinventing of the wheel instead of building up on what already existed has led to a lack of cohesion in youth development policies. Leaders must learn to regard important youth development policies as a communal duty for the good of the entire nation in order to support the efficient implementation of youth policies in the country, unfortunately, inconsistent policies and maladministration in the country have not allowed this to take place (Ibrahim & Audu, 2020).

Moreover, while the Nigerian government has already emphasised the importance of youth entrepreneurship and has implemented various policies to the effect, the socio-economic climate of the nation still makes it difficult for these policies to take fruition. According to the World Bank (2019), Nigeria is one of the most difficult countries to do business in and was ranked at 131 among 190 countries. The ease of setting up and operating a business in Nigeria is considerably arduous and this poses a challenge to young entrepreneurs who first have to scale hurdles thrown at them by the deficient institutions in the country before they can consider scaling their own businesses. Epileptic power supply, weak institutions and failing infrastructure, corruption and exploitation rule the socio-economic climate of the nation and these factors are all strong impediments to the growth of any business. Therefore, it is not enough for the government to champion entrepreneurship-centred initiatives and policies, there must also be policies and frameworks put in place to adequately cater to and support these businesses such as tax breaks or subsidies, (Ibrahim & Audu, 2020; Ofili, 2014).

Additionally, it must be stated that there exists an abundance of resources and opportunities, however scarce they may seem, to youths in urban and developed areas. Studies show that this is not the case for their counterparts in rural areas which are less developed, in fact, the challenges faced by youths in these regions are exacerbated by the fact that they have less of

every resource than their peers in urban regions have access to. For instance, lack of access to financial aid has stifled the growth of businesses in rural areas, limited market base due to lower population observed in rural areas is also another hindrance to the growth of entrepreneurial initiatives, and insecurity which makes the risks involved in doing business even higher in rural areas and this stifles the penetration of entrepreneurial policies in rural areas (Adewumi & Keyser, 2020).

On a final note, the inability of youth development policies is due to the exclusion of the youths from the development of these policies. Youth entrepreneurial challenges are specific to their demography and the involvement of more youths in the policy development process gives them a voice and a perspective with the view to proffering long-lasting solutions to their unique circumstances by using policy as a tool (Anthony & Ikechukwu, 2019).

6.0 Conclusion and Recommendations

The findings of this study have revealed that Nigeria is not lacking in youth development policies and has championed several programs and initiatives singularly and collaboratively. Unfortunately, these policies have not been implemented seamlessly over the years due to inconsistency, maladministration, and corruption. Also, the socioeconomic climate of the nation makes it difficult for entrepreneurs to thrive due to various institutional and economical bottlenecks, these bottlenecks lead to the stagnated growth of infant businesses and add to the toxic cycle of stagnated economic development in the country. This study thereby recommends the creation of a youth committee to review all existing youth policies in Nigeria to come up with a cohesive youth policy that takes into account the current state of the country and her youths in order for there to be sustainable development in the nation. Special youth development initiatives should be created for youths in rural areas with sustainable plans and aid put in place to encourage entrepreneurship in these areas. Support systems should also be put in place for a maximum of five years to ensure that businesses that are set up in rural areas are fail-proof. Fellowships with the aim of fostering community and creating a network for growth and follow-up should be done bi-annually within the first 5 years of every youth empowerment initiative in order to have a system that tracks the growth and development of the beneficiaries of these programs and also render assistance when it is necessary. Finally, there should also be a system of transparency across all strata of government in order to check maladministration and corrupt practices, this will lead to the strengthening of state institutions and further galvanise future attempts at youth development.

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Addressing Entrepreneurial Performance Gap among Graduates of Technical, Vocational, and Education Training through Soft-skills Acquisition

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Abstract

The National Policy on Education (2013) recognizes TVET as a credible platform for empowering Nigerian youths with practical and technical abilities for the pursuit of successful career either in the world of work or entrepreneurship space. It is believed that TVET has the potential to drive employment generation through small business creation and industrialization across the country. Despite the establishment of TVET institutions, the daunting statistics of unemployment, business failures, and slow industrial progress only confirmed that the goals behind the promotion of TVET institutions in Nigeria is far from being achieved. Many graduates of these TVET institutions remain incapable of meeting the challenges associated with today's world of work as well as ever evolving world of entrepreneurship. As such, the need to integrate soft-skills related curriculum cannot be overemphasized. This study, therefore, explored entrepreneurial performance among graduates of TVET institutions in Osogbo and ascertained the effect of soft-skills education on the entrepreneurial performance of TVET graduates. The study adopted Qualitative research approach with a view to understanding how soft-skills education can foster entrepreneurial performance among TVET graduates. It explored thematic issues on TVET relating to policy targets, policy implementation, and entrepreneurship indicators in Nigeria. Using interview from key stakeholders, we generated and categorized literatures on two critical issues in like of skills acquisition (i.e. hard and soft-skills) on entrepreneurial performance. Based on the analysis of supportive materials for these themes, we obtained that contrary to the integrative input of both skills to define functional TVET model and ultimately, entrepreneurial performance of graduates, the curriculum of TVET supports hard skills or technical abilities, but fail to cover adequately for soft-skills. Many TVET institutions in Nigeria are yet to integrate soft-skills (e.g. critical thinking, interpersonal, self-leadership, teamwork, self-management, digital skills etc.) as mandatory aspect of learning. The study implied the need for TVET institutions in Nigeria to improve on their delivery of soft-skills to boost employability of its graduates,

competitiveness, and ultimately economic growth. Moreover, soft-skills can engender the growth of indigenous businesses and set the country on the path of knowledge creation, innovation and entrepreneurship development.

Keywords: Business Failure, Entrepreneurial Performance, Graduate Employability; Soft-skills Acquisition; TVET

Introduction

Education remains crucial to economic growth and development agenda of every nation. A skilled workforce is fast becoming an instrument of national development. In harnessing the numerous opportunities present by global competitiveness, massive calls are made to the direction of specialised education that seeks to prepare individuals for the acquisition of practical skills and technical know-how (García-Pérez, et. al., 2021; OECD, 2018). The TVET system, as termed, refers to the aspects of the educational process involving, apart from general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life (UNESCO, 2002). The system focuses on practice, skills, and application as against theory and knowledge of academic education. TVET's goal is also aligned with SDG4 objectives; as it is held as a panacea for unemployment reduction, industrialization, and economic development. However, despite its potential, the impact of the TVET policy has been underwhelming. In many developing countries including Nigeria, statistics and several indicators continue to present high rate of youth unemployment, business failure, social disparities, and environmental degradations, among other socio-economic issues and challenges that consistently dent the golden objectives on which the TVET system was built (Nigerian Youth Employment Action Plan, 2021).

Consequent upon the disparity between TVET policy and implementation (Umar, 2020), a dimension to the debacle of poor entrepreneurial performance and outcomes lies in the competence of institutionally produced manpower in Nigeria. The question underlines the genuine issue with the relevance and quality of the TVET model especially towards its purported goal. It is not just a question about whether the TVET institutions are producing manpower that is taking up jobs in various sectors of the national structure, but about their contributions and sustainability, especially in the ever-changing world of work. Relevance of TVET relates to the spate of criticisms for the current skills mismatch between TVET and the world of work, as the set of education is largely decontextualized from the socio-economic and cultural reality in which young people live (Emmanuel, 2020; Okoye & Okwelle, 2017; ADEA, 2017). Fortunately, the reformed TVET curriculum has since bridged some of these gaps with the introduction of technological compliance courses, CBT and as well reinstated traditional apprenticeship courses through the Non-formal TVET systems (UNESCO, 2019; 2020).

On the other side of the criticism, which perhaps underscores the main issue, is the quality of TVET. Quality relates to the achievement of learning outcomes especially those that meet the societal goal (Ayonmike, Okwelle, & Okeke, 2015). In reference to Nigeria, it somewhat emphasises ill-training delivery and by extension students' assessment and certifications which translate into poor entrepreneurial performance. The TVET instructional model does little with professional integration among learners. As pointed out by UNESCO (2020), both technical and soft skills required of formal institutions should be the same as those expected of graduates of technical and vocational training, and their assessment leads to the

awarding of the same qualification (p.21). Many literatures, therefore point to the importance of soft skills in professional development, the world of work, and ultimately entrepreneurial performance (Arráiz, Beuermann, Frese, Maffioli, Verch & Ubfal, 2020; Tem, Kuroda, & Tang, 2020). They include varieties of skills, habits, and behaviours that distinguish a professional and that make the difference when undertaking a project, solving a conflict, and relating to others (Oviawe, 2020; Skills 4U, 2017). Youth Business International, (2019) highlighted these skills in intra and inter-personal skills, creating and problem-solving ability, risk management, information and opportunity alertness, collaboration and growth mindset. However, despite the importance of soft skills, it is the more difficult of the two as it is not easily transferred from training to workplace (Laker & Powell, 2011), except with conscious planning and implementation to training system (Pandey, & Anand, 2020).

The situation therefore raises concern on the extent to which necessary skills are inculcated into the programme to denote quality and effectiveness of TVET curriculum. Specifically, it is important to examine the adequacy of the curriculum in terms of embeddedness of hard skills and soft-skills and their magnitude especially in the light of recent reforms on the programme.

Research Questions

- i. What is the adequacy of hard or technical skills within the TVET curriculum in Nigeria?
- ii. What is the adequacy of soft-skills embedded in the TVET curriculum and programme in Nigeria?

Literature Review

Entrepreneurial Performance (EP) of TVET Graduates

Entrepreneurial performance as a construct can be fuzzy as it holds for several measurements. For instance, performance from policy arena explains how a country fares in relation to numbers of indicators like firms, employment and wealth creation (Ahmad & Hoffmann, 2008). Some definitions which try to view it from the trajectory of firm are concerned about development of new products, identification of market opportunity etc. (Funmilayo, Rui, Clement, Solomon, Ofori, & Onyedikachi, 2022). Sometimes, entrepreneurial performance serves as a placeholder for competency, as the latter explains a person's ability to take opportunities and courage to take risks (Sariwulan, Suparno, Disman, Ahman & Suwatno, 2020). On the general level, entrepreneurial performance is measured in line with set of stated entrepreneurial goals (Van Vuuren, 1997). It measures entrepreneurial actions that are instrumental in delivering the impacts (p.7). This also means that since national objectives and individual goal tend to align within the framework of welfare, the term does serve a multitude of purposes denoting individual, organisation and society in respect to the set goal and or objectives. Importantly, Ahmad & Hoffmann, (2008) explained that since there are multitudes of possible impacts of EP which also account for multitude of entrepreneurial indicators, it is inevitable to have different countries focusing on different indicators of performance based on the dictate of her policy objective. Entrepreneurial performance in Nigeria is therefore diagnosed through three indicators: unemployment reduction (Richards, 2022), massive industrialization, and economic growth (Ogunlana, 2018).

Unemployment

Unemployment has become a bane to the developmental goal of the country. Nigeria is bitterly affected with soaring numbers of individual without jobs. Over years, statistics have shown a growing trend of unemployment analysis, and importantly among the teeming youth populace. With the increasing population, the country remains in the precarious position as many able

bodies that are not being engaged; forced them into several anti-social behaviours and terrorism (Adesina, 2013; Olorunfemi, 2021; African Development Report 2015). Although, several policies have been undertaken by the government to correct the anomalies, all have failed to yield significant statistical advantages for the country.

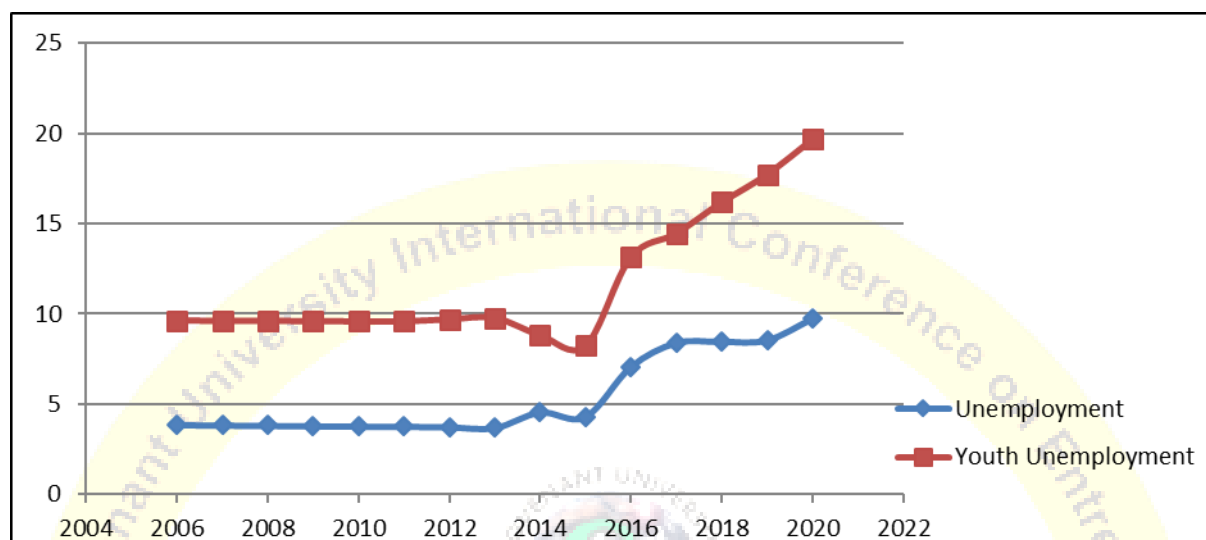
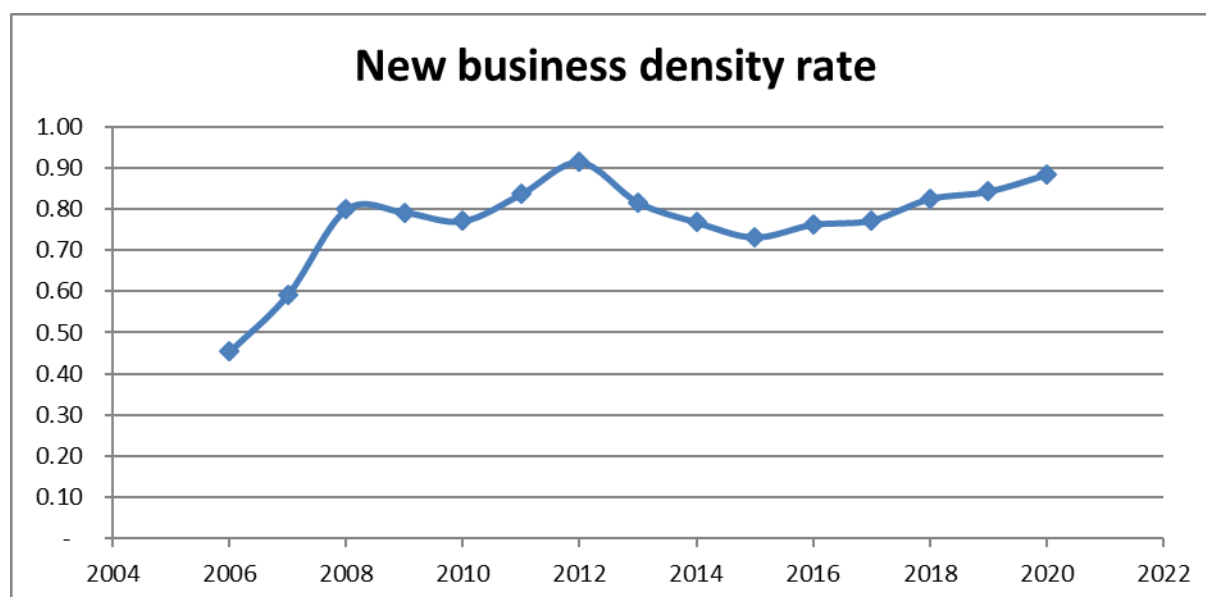


Figure 1: Trend analysis for unemployment growth in Nigeria (World Bank Indicator, 2020).

Unemployment rate is a measure of the share of the labour force that is unemployed. Figure 1 above clearly highlighted the level of unemployment in Nigeria. From year 2006 to the year 2015, the unemployment rate was steady; however, by the year 2015, the statistic jumped to a steady rise till the end of the year 2020. The same trend was recorded for youth unemployment for the country. Beyond the figure, recent analysis of unemployment in Nigeria put the statistics at 33.3% in the fourth quarters of the year 2020 while 54% was estimated for youth unemployment for the period. This situation of unemployment, especially among the youths has left the government adopting different policies in order to gain statistical advantage on the rate of unemployment and improving on the country's labour force (African Development Report 2015). Important among them is the educational policy that seeks to bolster self-sustaining spirit, creativity and business thinking among the graduates in tertiary education. Unfortunately, its successes have been underwhelming given their inability to cope in the complex work sphere.

Business Formation and Industrialisation

A major expectation from several policy undertakings of Nigeria government is the willingness of youth to embark on venture creation. As such, the rate at which businesses are formed is considered a testament of the country's self-dependence and industrialisation (Fox & Gandhi, 2021). However, existing statistics on industrialisation continues to bring some concerns especially in the consideration of government industrial plan through increased business initiatives (Ikon & Chika, 2018). First, there are wide indications that many businesses are formed but are equally not sustained. SMEs contribute nearly 50% of the country's GDP and account for over 80% of employment in Nigeria many of the initiatives are hardly sustained (PWC, 2020; Ajibola, 2020). Contrary, industrial growth has been redundant; although some notable improvement were recorded in some areas including electricity, water Supply, and transportation and other services based sectors; and many of these gains would later be offset by the many other ill-performing sectors especially manufacturing and agriculture despite their pressing role in local production and exportation (PWC, 2020).



Data source: Worldbank Data (2020)

Figure 2 shows a sharp rise after the year 2006 but was accompanied by slight fall in the year 2015. However, the number of businesses created peak again by the 2016 and slowly and steadily improved towards the end of year 2020. Importantly, it is expected that such improvement should reflect massive improvement in industrialisation through number of available industries and sub-sectoral production (innovation). These goals remained unrealised given the direction of statistics on business formations and their impact on numbers of industrial indicators.

Table 1: Componential Growth and Productivity of Nigerian Industries

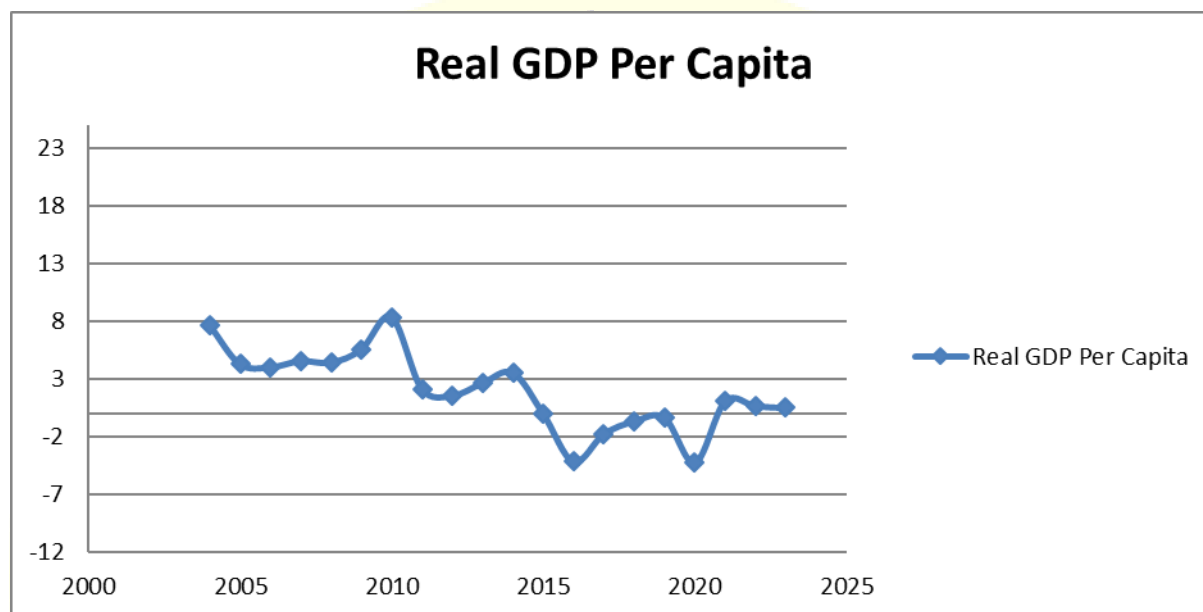
Year	Manufacturing	Mining	Electricity	Industry Total (All Sectors)
2016	176.08	69.50	150.32	102.08
2017	175.72	71.89	169.67	103.98
2018	179.39	72.85	182.26	105.95
2019	180.76	75.85	179.25	108.36
2020	176.82	69.11	182.09	102.31
2021	181.60	64.40	223.50	101.50

Data source: Central Bank of Nigeria Statistical bulletin 2022

Table 1 is the Index of Industrial Production (IIP) which explains the growth rates in different industrial groups of the economy in a stipulated period of time. Based on the table, the manufacturing industry growth was erratic with noticeable improvement obtained from year 2017 but latter fell in year 2020. Although the industry seems to rebound in the year 2021, it can be concluded that the growth have been very slow and does not reflect the growing rate of business formation. Again, the same can be said of Mining industry with noticeable growth sparring from 2017 to 2019, but however fell in the years 2020 and 2021. The summative output of each component reflects the general slow trend of the industry. It can therefore be said that the most established firms by the populace do not only encounter difficulty both in growth and productivity.

Economic Growth

It is consistently on notes that the Nigeria economy remains in bad shape despite several macro-policy and interventions. The Gross Domestic Product (GDP) as the key economic monitor have exchanged between contraction and contraction over some number of years. The already nosediving economy from year 2014 went into recession in 2020 with a 1.8% GDP contraction due to coronavirus and only rebound due to numbers of policy efforts by the government, combined with support from the international community (see fig. 3). It was concluded that despite seeing a growth recover quickly to the tune of 3.4% in 2021, the combined recession effect for six prior years of negative per capita growth meant a severe impact on the livelihood of people (United Nation Common Country Analysis, 2022).



Data source: FRED Economic Data on Real GDP Per Capita (Nigeria)

Again, the economic recovery goal of the country which hinge on diversification plan; and this may seem unrealistic given slow development of some sectors like manufacturing and agriculture. Today, crude oil holds the giant share of the export earnings and government revenues and all efforts at export diversification and inclusive growth continue to be hampered by the slow growth of the several sectors as aided by the poor fiscal and monetary policies over years (Federal Republic of Nigeria, 2017). Based on these, the main conclusion is not about how the country can chart a growth for itself but about the trajectory. It seems that that there are structural challenges that limit its ability to sustain growth, employment opportunities and achieve industrialisation goal that is highly coveted.

In general, the Nigeria economic scorecard have been very poor at best; and this hinted at the haphazardly performance of entrepreneurial activities in the country. It should be recalled the three indicators are sum up the value created by poor entrepreneurial activities in the country (Ahmad & Hoffmann, 2008). Again, the low sustainability issue, also, imply some key need for strategic means through which the process generate the entrepreneurial performance outcome. The means is as important as the goal itself.

TVET and the Goal of National Policy on Education

The TVET as a short-form for Technical Vocational Education and Training emboldens the general resolves to provide learners with the practical skills and knowledge-based information into particular occupation or trade. UNESCO-UNEVOC (2006) explained TVET as a designation that seek to provide a population with knowledge and skills that maximises jobs

opportunity in the world of work. As a global tool through which most countries seek to address the conjoined unemployment and industrialisation challenges; there is slight difference in the adopted (functional) approach based on some targets and indicators that need to be measurable and achievable for specific country (Allais & Wedekind, 2020; p. 326). Although, like other contexts, its modalities remains complicated as TVET place or position is not fully ascertained but linked to school-like institutions such as colleges, in workplaces, or in hybrid spaces. For instance, NBTE boasts some of the TVET-like institutions in polytechnics, college of health sciences, college of agriculture, vocational enterprise institutions (VEI), technical colleges, innovation enterprise institutions (IEI) and other specialised institutions such as industrial training centres etc. (Digest for Statistics on Technical, Vocational Education and Training, 2019). Despite the nature, it is crystal clear that all the institutions obtain their vision centrally from the national policy on education (NPE). The NPE over years, spell out the goals to which TVET is adaptable for particular period and situation. The goals of TVET as described in various versions of NPE include to:

- provide trained human resources in applied sciences, technology and business, particularly in craft and advanced craft at technical levels (NPE 1998)
- provide technical knowledge and vocational skills necessary for agricultural, commercial and economic development (NPE, 2004)
- give training and impart the necessary skills to individuals who shall be economically self-reliant (NPE 2013)

Importantly, the year 2020 was the transformative target for the country to become one of the 20 largest economies in the world, given its capacity to transform its youth into high skilled and competent citizens through TVET. Thus, to achieve this, array of courses were officially approved in the TVET institutions in Nigeria.

TVET in Current Situation

TVET has undergone significant changes since its inception as frontier of vocational and education training as far back as pre-colonial era (Akpan, Usoro & Ibritam, 2013). Critical examination of current trend and issues with TVET, with special focus on government intervention through Nigerian Educational Research and Development Council (NERDC) shows that several reforms have undergone to reshape the programme through curriculums design and which mostly resonate the socio-economic goal of particular period of national planning (Fleisch, Gultig, Allais & Maringe, 2019). In terms of finance, the involvement of three ministries: Education, Finance and the Labour and Productivity define the determination of the government to support TVET, both formal and non-formal TVET through budgetary allocation. Additionally, the government idea of setting aside 2% education tax on the assessable profit of all registered companies in the country, as a form of TETFund interventions to tertiary institutions at states and federal levels, have helped profit the necessary support for vocational and education training in the country.

In 2017, not less than 34 vocational (trade-based) subjects were reformed and re-introduced into the new senior secondary education model (UNESCO, 2019; Dalberg, 2014). Again, within functional capacity of the NBTE in ensuring quality of TVET curricula, some key reforms were done to the TVET which include:

- establishment of more TVET institutions,
- development of the Nigerian Skills Qualifications Framework (NSQF),

- Introduction of ODFL/Flexible Skills in the institutions: the Open and Distance Flexible Learning (ODFL) is a flexible and open approach to distance learning to promote access to the labour market.

It is noteworthy that major revamp of TVET programme have also come in the way of some introduced Non-formal TVET systems. Important courses such as Arts and Crafts; Fabrication and Welding; and Livestock Management which reflect the cultural heritage were introduced for certifications especially under National Skills Qualifications (UNEVOC, 2019). Although not much have mentioned as regards knowledge transmission and skills developments which sum up teaching and pedagogical situation, yet, there are evidences towards improvement through ICT and E-learning even if it has only yielded little to the overall quality of the TVET (Federal Republic of Nigeria 2018; Saidu & Abubakar, 2020).

Methodology

The study is a qualitative approach combining secondary and primary research. The secondary research was conducted through a review on some previous studies on TVET in Nigeria especially those that pertain to the curriculum. The search was conducted across several literature search platform including: Google Engine, Google Scholar, Web of Science, ERIC. Basically, the search was spread across terms such as “TVET”, “Technical Skills”, “Soft skills”, “Reforms” and “Nigeria”. The thorough search of the electronic database yielded 42 publications published between 2014 and 2023, after which classification and elimination of irrelevant materials were performed. Although, the process was a bit short of systematic analyses of database or strict adherence to (PRISMA) guideline method due to the condition imposed by context (Nigeria); as policy-relevant research especially as uphold by TVET is not easy to find for Nigeria. The search therefore was able to garner some useful literatures (including grey literature) through dedicated databased on the subjects. The retrieved data were screened for appropriateness and classified based on the objectives. Finally, ten (10) literatures were review for both for hard and soft-skills respectively.

Focus Group Discussion (FGD)

The second aspect of the data was obtained through focus group discussion with some key stakeholders on the TVET programme. This was made to clarify certain ambiguity that may emanate from the secondary research and particularly on the inter-link between the subjects. A coordinator and five (5) Heads of Departments were engaged in a semi-structured interview with a view to unraveling the dynamics for stents poor skills and ultimately poor entrepreneurial performance.

Results

Curriculum Depth: Introducing new subjects and infusing new knowledge into existing subjects

This aspect raises question on the adequacy of curriculum content and it's covering on skills-set needed for 21st century. This therefore resonates with the questions raised in the study.

Table 1: Systematic Literature Search Return for Hard Skills and TVET

Authors	Year	Methodology	Journal	Sample size	Conclusion	Decision
Kio, Y.M. & Usman, A.A.	2022		Proceedings of the 3rd International Conference, The Fed. Polytechnic, Ilaro		The study concluded a missing link in the TVET curriculum and content delivery and as required in the world of work	Negative
The National Board of Technical Education	2019	Not applicable	Policy paper		The body Licensed 65 TVET institutions	Positive
Owo, O.T & Deebom, M.T.	2020	Qualitative	International Journal of Latest Research in Humanities and Social Science	302	The study revealed that the unavailability of training materials and competent personnel hamper the acquisition of relevant technical skills for employment generation in Rivers State.	Negative
The National Board of Technical Education	2018	Not applicable	<i>Policy paper</i>		The paper highlighted the integration of ICT, Open, Distant and E-learning into TVET programme	Positive
Dalberg	2014	Not applicable	<i>Policy paper</i>		The paper highlighted the introduction of 34 subjects on trade and entrepreneurship	Positive
Chatramada V., Wafudu, S.J. & Asukwo, A.E.	2021	descriptive survey	Online Journal for TVET Practitioners	109	The paper concluded the need to improve on general curriculum content importantly, microcontroller types and general contents for electrical/electronic engineering of polytechnics in North-East Nigeria	Negative
The National Board of Technical Education; Nigerian Skills Qualifications Framework	2023; 2021		Policy Paper	Not applied	The body introduced new sixty (60) new courses as part of the reviewed National Diploma (ND), Higher National Diploma (HND), ODFEL and NOS	Positive
The National Board of Technical Education	2017		Policy Paper		Resolution to train technical college teachers for a period of one month in every three years	Positive
Muoghalu, C.N & Ayodeji, O.O.	2022	Qualitative	Multidisciplinary Journal of Research Development	Nil	It highlighted contemporary issues on curriculum design and implementation especially on funding, Implementation, feedback and evaluation, Information as well as Communication Technology (ICT)	Negative
The National Board of Technical Education	2023		Policy Paper		Introduced the National Occupational Standards (NOS) to aid managers in workforce planning, quality control,	Positive

Table 2: Systematic Literature Search Return for Soft Skills and TVET

Authors	Year	Methodology	Journal	Sample size	Conclusion	Decision
Ismail, S., & Mohammed, D.	2015	Qualitative	World Congress on Technical and Vocational Education and Training	Nil	The paper concluded that TVET curriculum contain no course that directly teaches good attitudes and traits	Negative
Mohammad, D. S., & Ismail, S.	2019	Qualitative	Open Journal of Science and Technology	Nil	The paper highlighted the disparity in TVET curriculum in Nigeria and Malaysia and with particular emphasis on generic skills and personal attributes as the main differentiator between the two countries.	Negative
British Council	2018	Survey	Policy paper	Nil	The report underlined that students' behaviour and attitudes to learning and continued education can be influenced by the introduction of employability skills via innovative teaching practices.	Negative
Usman, A.	2020	Qualitative	Journal of CUDIMAC (J-CUDIMAC)	Nil	The paper indicated that graduates at technical colleges' level are not equipped with the employability skills needed by industries	Negative
Onipede O., Ogunkelu, M., Njoku, C. & Jinadu Y.O.	2020	Qualitative	<i>Vocational and Technical Education Journal</i>	Nil	The paper highlighted the lack of contextual and holistic approach for TVET in Nigeria. It emphasised synergy in the planning, implementation, and the evaluation of learning	Negative
Olojuolawe, S. R., Fadila, N. B. M. A., & Latif, A. A.	2019	qualitative	International Journal of Entrepreneurial Research (IJER)	Nil	The paper emphasized a high level of skill mismatch between gradates of Electrical Technology in Nigeria and the labour market due to lack the skills for 21st-Century jobs.	Negative
Mustapha, A. Abubakar, A.B. & Kano, M.M	2021	Quantitative	International Academic Journal of Educational Research	142	The paper obtained difference in the personal attributes and others employability skills possessed by female student offering TVE in College of Educations and polytechnics	Negative
Shola F, B., Latib, A. A., Samari, R., Kamin, Y., Saud, M. S., & Amin, N. F.	2019	Survey research design	International Journal of Evaluation and Research in Education	70	The paper concluded that soft skills such as communication, problem-solving, teamwork and self-management qualities among others are not inculcated into technical and vocational education programme	Negative
Gimba Dogara, M., Kamin, B., bin Abd Hamid, Z., & bin Nordin, M. S.	2019	Quantitative	International Journal of Recent Technology and Engineering	114 technical teachers	The paper suggested that the curriculum of TVET in Nigeria need to be reviewed with effective development of soft skills for employment as a major consideration	Negative
Ntegwung, G. J., & Iyagbaye, P. O.	2022	Survey research design	International Journal Of Educational Benchmark	551	The paper underpinned creative skills in TVET as the most important performance indicators	Negative

4.2 Focus Group Discussion (FGD)

In a round table arrangement, dynamics, issues that relates to TVET training and Success were discussed with trainers in Industrial Development Centre, Federal Ministry of Indstry, Osogbo, Nigeria. Essentially, four (4) individuals (Male (1) Female (3): a coordinator and three HODs across three units. These units include: Ceramic, Welding, Tie-dye and Batik, and Electronics. The average age and experience in the training centre is 54.2years and 28 years respectively. The discussion ranged across vital issues pertaining to technical and soft-skills within the programme and suggestion for improvement.

4.2.1 Approaches to Training

Considering the fact that TVET is meant to develop knowledge and practical skills related to occupations in many sectors including economic and social life, its dependent on practical mode cannot be overemphasized. The participants discuss:

Participants 1: *you know that this place is federal government establishment, we do not have enough materials....it is practical based, although we take theory too. It is more of practice than theory.*

The discussion basically unraveled a practical-oriented approach to TVET teaching. The experiential nature create a rich, hand-on experience as trainees get to see how things are done in real-time. Importantly, it falls within the ambit of TVET curriculum requirements. However, the knowledge that environment changes and Man, through its own intellect has the power to define the trajectory of its own growth makes question about creativity and risk-taking within the programme an important one: a participant explains:

Participants 2: *We only teach them and give you our own idea but by the time you are practicing it, you can use. If you use it that way and its perfect you will use that method and if you do it and it's not perfect, you change it. So things are not by force. For instance, there are many ways we can use to cut it steels..... You may use saw, you may use electricity and you may use grinder. Once you have the machine to use so things is not by force. We only show you the difference and then you pick one you prefer. That is it.*

Participants 3: *We encourage them to endure ...when tell them that when they are pressing on ...gradually they will reach their destination. We don't have any platform for creativity but words of encouragement we give to them.*

From the discussion, it became crystal clear that the TVET curriculum in Nigeria supports more of hard skills compare to the soft-skills. Unfortunately, this situation poses a lot of difficulties considering the fact that both are equally needed within the programme to bring the lasting impact on trainees as well as achieving the objective-set of the programme.

4.2.2 Learners' Attitude

The inadequacy of skills within the curriculum may pan out to affect trainees both on and after the programme. Much have been said and connected to students or trainees' lackadaisical attitude and behavior on the programme. Several claims for inferiority complex between the TVET gradates and their counterparts in university education, with the latter prioritized with funding and other incentivisations. The general perception of TVET among the generality of people today is that of

a programme for the “weak”, “not good enough” or exposed people who have little aspiration. The participant discusses farther:

Participants 3: Some of them don't have interest and some of them have interest. So it is better before bringing them you ask them...because if you don't have interest in something...you don't do it well...I noticed some of them when teaching them, some will be pressing phones, some, playing and some will be serious.

Participant 1: What I am saying is that many of them may be frustrated in terms of money, in terms of transportation, so we handle them...if we notice...we invite them and ask what happen to them. At times, parent force their wards to this place, once they come here, they children do not show seriousness to the programme.

The lines again reiterate the need for proper orientation for the students-recruits as this fundamentally fall under the need for soft-skills within the programme. There are still very limited and sometimes incorrect information on TVET in the public domain. Thus, students who come into the programme or institution do with less enthusiasm and are willing to jump at any opportunity they feel offer better prospect especially in terms of financial advantage and prestige.

Improvement Need for TVET Institution

The need to shape TVET programme to meet its targets or objectives may require necessary policy intervention both at policy and implementation levels. There is no doubt that government has a he role to play given that prospect as TVET can yield significant outcome in the future only when it is considered an investment. Participants express their view on government role:

Participant 2: The experience I have is that when training people...they have interest in it, but the only obstacle is money. If government or people sending them to us can assist them monetarily, all those things will work...but majority of them don't work because when they train they don't have something to start with. If it is organization that bring them here, that organization should plan to assist them to establish...that's when the programme will have effect...that is when it will yield what it is intended in the society. But when they train and there is no money to start, that is a problem. what I have planned to tell people that are bringing them here is that they should plan to get money for them either through loan or something...not training alone...

Participant 4: *Improvement is that if the government can assist the parent and bring the children here and by paying the practical fees, may be the students will stay. But nowadays children they don't wait for long time...that is why you many tricycle riders in the town. They need daily food and income. They don't want to wait and learn for a long period. Imagine you ask a person to learn tailoring for number of years for 5 to 6 years without anything, they will run away but if government can assist them with token, they will use to eat and buy machines for themselves.*

The financial role of government is well explicated in the discussion. It has been reiterated that starting can be a bit difficult especially when funding are not available. Thus within the training duration, the programme should provide scholarships opportunity for students who might not be able to afford the cost of tuition and materials for training, yet capable of succeeding in the programme. Again, government policy can also intervene by strengthening the financial institution whose goal is to assist investors, innovators and business owners.

Discussion

The study focused on critical issues militating against TVET contribution to entrepreneurial performance in Nigeria. More importantly, it beamed a searchlight on the two key skills component: hard and soft skills, which define an effective TVET framework. The questions raised were answered with the systematic literature review and focus group discussion. Based on the first question exploring the adequacy of hard skill within the TVET curriculum, evidences were obtained for introduction of important courses or subjects into TVET curricula, especially those that capture the self-sufficiency objectives of the programme/institution. Out of the literature searched for hard skills in Nigerian TVET curriculum, six returned outcome, all policy papers, indicated the presence of technical skills in the curriculum. This includes number of updated courses to improve choice of career and policies towards facilitation (Fleisch, Gultig, Allais & Maringe, 2019). Notably too that some important studies concluded some challenges especially in lieu of global standard, pedagogy, and up-to-date materials and equipment, yet, their conclusion were not in exclusion of Government commitment to improve on the programme.

The literature search for soft-skills generated results that indicate the lack of integration of soft skills within the TVET framework in Nigeria. The outcome shows that there is no policy paper that popularizes soft-skills within TVET programme. Again, many articles that focus on soft skills in Nigeria TVET did only on advocacy rather than explicating the adequacy or inadequacy of the skills within the framework. The findings were corroborated by the FGD which confirmed that soft skills such as creativity, resilience, confidence and others do not form important aspect of skills training in the institutions or centres. Thus, comparatively, soft-skills is less focused of the two skills and have a major implication for both employability of TVET graduates as well as sustainability for those that prefers start-up after their training.

Conclusion

The study underscores the importance of TVET in boosting employability of young citizens; industrialization and economic development of the country. Despite proper recognition of TVET as policy tool to achieving the State's goal, the implementation has been lopsided with many challenges bedeviling the programme. Importantly, government effort at revamping the programme by introducing several technical skills has been shortchanged by the lack of vision for soft skills within the programme.

Implications

- The study implied the need for TVET institutions in Nigeria to improve on their delivery of soft-skills to boost employability of its graduates, competitiveness, and ultimately economic growth.
- Soft-skills need to be introduced to engender the growth of indigenous businesses and set the country on the path of knowledge creation, innovation and entrepreneurship development.
- Professionals such as guidance counselors, social workers should be employed in TVET institutions to enhance manpower development through soft-skills training.

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Entrepreneurship Education and Insecurity Reduction in South-South Geopolitical Zone of Nigeria

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Abstract

The worrisome level of insecurity in Nigeria has ignited many suggestions for solution including entrepreneurship education. However, little is empirically known about the approach through which entrepreneurship education can reduce insecurity. This study surveyed final year business students in six public universities in the South-South geopolitical zone of Nigeria to investigate the influence of entrepreneurship education on insecurity reduction. The specific objectives were to assess the influence of risk-taking propensity, opportunity recognition capability, and entrepreneurs' emotional intelligence on insecurity reduction. The sample size was 250 randomly selected final year degree university students. The structured questionnaire was used to collect primary data which were analysed by employing the weighted mean, standard deviation and correlation analysis. Results indicated that entrepreneurship education which emphasizes risk-taking propensity ($r = .322, n = 195, P < 0.01$), opportunity recognition capability ($r = .252, n = 195, P < 0.00$), and entrepreneur' emotional intelligence ($r = .320, n = 195, P < 0.01$) has significant positive relationship with insecurity reduction. It is recommended that a review of current entrepreneurship education curriculum in Nigeria to incorporate findings of this study would lessen the menace of insecurity.

Keywords: *Entrepreneurship education; Insecurity reduction; Opportunity recognition capability; Risk-taking propensity, Entrepreneurs' emotional intelligence*

1. INTRODUCTION

In recent times, there has been an increasing incidence of insecurity in Nigeria. Insecurity in Nigeria has been witnessed playing out almost daily. This is seen in terms of the occurrence of kidnappings, political assassination, armed robbery, prostitution and cultism. Others are, Internet – fraudsters, gang wars, serial bombing, ritual killings, human trafficking, ethno-religious conflicts, thugery, among others. Achumba, Ighomeroho, & Akpor (2013) opined that insecurity can better be considered from two perspectives. First, a state of being opened to danger or threat of danger. Second, a state of being exposed to risk or anxiety. While insecurity is not exclusively a Nigerian problem, it is a topical issue in the country today. The issue appears so overwhelming that many

Nigerians are being exposed to danger, fear and uncertainty. For instance, the Global Peace Index (2012) rated Nigeria low on security matters.

This unfortunate insecurity situation in the country has been linked with youth unemployment. Matthew, Haruna, Ameh & Maisamari (2020) reason that what accounts for poverty and unemployment among youths is the lack of entrepreneurship skills, their perception and interest. Youth unemployment results in economic displacement (Aliyu, 2018). As the youths are economically displaced, they become idle and think of what to do in their circumstance which in some cases lead them into vices in the society. In particular, some authors have opined that unemployment constitutes a key issue that breeds insecurity in different regions of Nigeria (Anho, 2014; Aliyu, 2018).

In the South South Zone of Nigeria, insecurity manifest mostly through the activities of crude oil theft, sea piracy/robbery, kidnapping for ransom, vandalism of oil pipelines and militancy among others. All these signals the worsening insecurity in the zone and country at large. In view of this situation, some authors, suggested that through entrepreneurship education, the situation can be checkmated through impartation of appropriate skill set and attitude, capabilities and development of individuals to enhance successful entrepreneurship (Sulaiman, 2017). Entrepreneurial education has also been proposed as a channel to the realization of positive values, reduction in poverty and a culture of peace (Anho, 2014).

Entrepreneurship education is concerned with the development of the individual's attitudes, behaviours and capacities (Sofoluwe, Shokunbi, Raimi & Ajewole, (2013). It deals with activities which impart knowledge on being resourceful, self-reliance, taking risks and being versatile (Anho, 2014). It comprises all experiences which offer to students the ability as well as vision of the appropriate approach to accessing and transforming business opportunities (Aliyu, 2018).

At the moment, Nigeria's security problem is becoming quite unbearable. Efforts by the government, concerned groups, and individuals have not significantly and positively impacted on the country's insecurity situation. Furthermore, there is limited empirical research focusing attention on the link between entrepreneurship education and insecurity reduction, particularly in the South South Zone of Nigeria. However, the few available studies (Sofoluwe, *et al.* 2013; Ancho, 2014) are mostly desk research with conflicting outcome such as that of Sofoluwe, *et al.* (2013 which reported that inadequate entrepreneurship education does not significantly impact sustainable security. A similar study by Matthew, Haruna, Ameh & Maisamari (2020) was limited to Gombe State in Northern region of Nigeria; It was revealed that entrepreneurship education influenced students into self-reliance. Wachukwu & Salomi (2020) discovered that entrepreneurial skills empower students to be gainfully employed hence would tackle insecurity; the study was however, limited to one local government in Rivers State. Eze, Worimegbe & Sanjo (2020) studied entrepreneurship education in Obafemi Awolowo University and Lagos State Polytechnic and found that equipping more people with entrepreneurship skills results in declining crime and insecurity rates. Further, investigation by Alabi (2019) indicated that entrepreneurship development would significantly affect insecurity level; the study was conducted in Ondo State, Nigeria. Thus, the objective of this study was to investigate the influence of entrepreneurial education on insecurity reduction in the South South Zone of Nigeria. In specific terms, this study:

- i. Assesses the relationship between risk-taking propensity and insecurity reduction
- ii. Investigates the relationship between opportunity recognition capability and insecurity reduction
- iii. examines the relationship between entrepreneurs' emotional intelligence and insecurity reduction

In order to achieve the highlighted specific objectives, the following null hypotheses were evaluated:

Ho1: Risk-taking propensity has no significant relationship with insecurity reduction

Ho2: Opportunity recognition capability has no significant relationship with insecurity reduction

Ho3: Entrepreneurs' emotional intelligence has no significant relationship with insecurity reduction

2. LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship education is a major force in any economy and represents a form of education with contents which primarily target providing trainees with requisite interests, skills, motivation and attitude to take to self-reliance and job creation (Matthew, Haruna, Ameh&Maisamari, 2020). Entrepreneurship education covers every aspect of managing a business; business formation, business management, its diversification and growth alongside continuous process of equipping trainees with relevant entrepreneurial skills (Onuma, 2016). What entrepreneurship education does is to create in the individual, the zeal of taking a risk, creating as well as sustaining a growth oriented and profit-making enterprise (Mokaya, Namusonge&Sikalieh, 2012).

Aliyu (2014) asserts that given that it is effectively delivered, entrepreneurship education can potentially influence self-employment and accelerate sustainable growth and development. With proper delivery of entrepreneurship education, some authors have given hope that participants would acquire the requisite skills to recognize business opportunities that could be exploited; they can acquire the knowledge to be self-reliant and hence take to self-employment and can acquire the capacity to take risks and manage them properly.

Risk Taking Propensity

Risk taking propensity denotes the extent of entrepreneur 'enthusiasm in the commitment of resources into business venture with possible chance of failure or success (Acikdilli and Ayhan 2013). It is exemplified in the degree or capability in which someone is willing to engage in uncertain ventures (investing in newly existing market, committing resources into new production lines, borrowing heavily with expectation of high yield) for the organization in order to achieve significant goals (Obioma, Miebaka& John, 2020; Lumpkin & Dess, 2001, Wiklund& Shepherd, 2005). Entrepreneurs operate in an almost uncertain environment, where the outcome may be unknown or relatively unpredicted. To such extent, learning to take and manage risk is an option that could help foster continuity for business firm and for the entrepreneur (De Hoe & Janssen, 2014).

A plethora of studies have shown that the propensity to take risk is related to many entrepreneurial outcomes such as organizational learning, entrepreneurial resilience, and corporate sustainability (Nwankwo, Ogamba, Anyanwu & Onu, 2016), improved level of customer satisfaction, business growth and enhanced social performance (Obioma, Miebaka & John, 2020). A couple of literature have also shown that developing the propensity to take risk is associated with better performance such as profitability, corporate growth, increased market share, financial efficiency, and introduce new products in advance of their competitors (Leko-Simic and Horvat, 2013; Miller & Le Bruton-Miller, 2011; Sarfaraz & Mustafa, 2021). Thus, it could be argued that firms and entrepreneurs that performs better in uncertain business environment must have developed higher level of risk proclivity. Given the numerous empirical evidences of the relationship between risk propensity and firm performance, it is argued herein that potential entrepreneurs must develop risk-taking characteristics or capabilities if they wish to perform creditably. It follows therefore that, entrepreneurial education programmes whose curriculum emphasizes the development of risk-taking propensity is likely to enhance reduced tendency towards crimes that breads insecurity in the community.

Opportunity Recognition Capability

The ability to recognize profitable business opportunity in the environment is also regarded as important facet of entrepreneurial orientation (Simon & Patrick, 2019; Guo, Tang, Su, & Katz, 2016). Opportunity recognition is a central construct in entrepreneurial development research (Bolton & Lane, 2012; Sabai & Tau, 2018). It explains an individual's ability or effort to consistently search the environment in order to identify new ideas leading to business development, superior performance, business survival, and competitive advantage (Guo, Tang, Su & Katz 2016). In a recent study, opportunity recognition was found to positively influence university graduate's self-employment (Oboreh & Aruoren, 2021). A good entrepreneur must be proactive in scanning the environment to identify situations that are receptive for the introduction of new firms, products, service, market niche, raw materials, improved processes and enhanced quality (Khalid & Sekiguchi, 2018; Oboreh & Aruoren, 2021).

According to Baron, (2006), a successful entrepreneur must possess the skills to recognize and detect potentially profitable opportunities that is hidden to others, and select the right alternative strategies for implementation. Scholars such as (Oboreh & Aruoren, 2021; Sofoluwe, Shokunbi, Raimi, & Ajewole, 2013) have argued that the ability to recognize business opportunity in the environment is a capability or competency that must deliberately be develop. To that extent, personal learning, training and education in entrepreneurship-oriented programmes have been suggested by entrepreneurship scholars (Fatoki, 2012; Ucbasaran, Westhead & Wright, 2009). However, these scholarly works appear to have ignored how the knowledge gained through entrepreneurial educational programmes could help in developing opportunity recognition competencies for purpose of reducing or mitigating insecurity. Thus, the specific link between opportunity recognition capability resulting from entrepreneurial education and insecurity reduction still seems blurry, therefore needing further empirical insights as undertaken by this study.

Entrepreneurs' Emotional Intelligence

Emotional intelligence (EI) describes the ability to understand, perceive one's own feelings and manage them accordingly. It also includes the ability to identify emotional indications in other people and reacting to them in a favorable manner (Fakhr&Hadia, 2017). According to Olatide, & Richard, (2017) emotional intelligence, defines the degree of individual's capability to learn and control his own emotions and feelings and employ such understanding to relate with the thoughts of others accordingly. EI consists of four main dimensions including self-management, self-awareness, social awareness, and relationship management (Archana & Vasanthi, 2018; Olatide, & Richard, 2017). In a study, Mortanet *al.*, (2014) maintained that individuals with high emotional intelligence would remain in business even under stressful conditions and adapt well to changing business environment. Emotional intelligence has been linked with a number of performance outcomes including career and business success (Urquijo, Extremera & Azanza, 2019), better leadership performance (Amanawa, 2022), entrepreneurial intention (Parvaneh, & Korosh, 2014), organizational performance (Supramaniam, & Kuppusamy, 2021), and job satisfaction (Sulaiman, Abdu & Balarabe, 2016). We argue therefore that individual with high emotional intelligence are likely to set up a small business and run it successfully in the face of difficulty or unforeseen occurrence rather than take to crime and increase the level of insecurity (Foo, 2011). Thus, it is expected in this study that entrepreneur's emotional intelligence will positively influence insecurity reduction.

3. METHODOLOGY

This study was based on the survey research design. The study had a population of 667 final year bachelor of science (BSc) degree students in Business. They were selected from six public universities in the six states of the South-South zone of Nigeria. The sample size for this study was 250 final year BSc degree students undergoing a course of study in Business as at the time of this study. This sample size was determined through Taro Yamane sample size determination formula because the study had a finite population (Sekaran & Bougie, 2011). These respondents were selected for the survey because of their exposure to business and entrepreneurship courses in their degree curriculum. To ensure fairness, one university was chosen from each of the six South-South states (see Table 1). The selected institution must have been in existence for more than five years and have an existing physical structure or center for Entrepreneurship Development. The random sampling technique was employed to select respondents from five business-related disciplines or departments (Accounting, Business Administration/Management, Banking and Finance, Marketing and Insurance). The research subjects were administered copies of questionnaire in line with their proportional contribution to the population as shown in Table 1. The research instrument was duly validated by experts in the field of Business Management and Entrepreneurship. Their suggestions were used to modify the research instrument, thereafter, the Cronbach Alpha reliability test was performed on the study variables and constructs. The result yielded alpha coefficient of 0.81% indicating that the instrument in question was highly reliable. Measurement of research variables was done with five-point Likert-type scale with their scores arranged as follows: Strongly agree (SA=5), Agree (A=4), Disagree (D=3), Strongly Disagree (SD=2) and Undecided (UN=1). Both descriptive (univariate) and inferential (bi-variate) analyses were carried out. A mean score of 3.0 and above was accepted as benchmark for decision making. In addition, correlation analysis was used to evaluate the bivariate constructs of the study. All results were analysed at 0.01 level of significance.

Table 1: Proportion of Sample Representation

S/N	Institution	Number of Final Year Business Students	Proportional Representation
1.	University of Uyo	102	38
2.	University of Calabar	126	47
3.	University of Benin	87	33
4.	University of Port Harcourt	118	44
5.	Federal University, Otuoke	131	49
6.	Delta State University	103	39
	Total	667	250

Source: Various Universities' Websites, 2023

4. RESULTS AND DISCUSSION

4.1 Respondents Characteristics

Of the 250 respondents who received copies of questionnaire, 195 were valid responses used for data analysis (Table 2); yielding a 78% response rate. Several steps were taken to achieve the reported response rate. These include making announcement and reminders during practical entrepreneurship sessions, sending bulk text messages on WhatsApp platforms and students' groups, sending email reminders through the heads of the department of the participants.

Table 2 shows the respondents' demographic data for the study. It is observed that 113(57.95%) of the respondents were male while 82(42.05%) were female. In addition, 35(17.95%) of the respondents were below 20 years of age; 139(71.28%) respondents were between 20 and 25 years of age; 19(9.74%) respondents were between 26 and 30 years of age, while 2(1.03%) respondents were 31 years and above. In terms of the respondents' course of study, 58(29.74%) of the respondents offered Business Administration/Management; 33(16.92%) were students of Banking and Finance; the highest number of respondents 77(39.49%) offered Accounting; 21(10.77%) of the respondents studied Marketing while 6(3.08%) offered Insurance and Risk Management.

Table 2: Demographic Profile of Respondents (N= 195)

Variables	Categories	Frequency	Percentage%
Sex	Male	113	57.95
	Female	82	42.05
Age	Less than 20yrs	35	17.95
	20-25yrs	139	71.28
	26-30	19	9.74
	31yrs and above	2	1.03
Course of Study	Business Admin	58	29.74
	Banking& Finance	33	16.92
	Accounting	77	39.49
	Marketing	21	10.77

Insurance & Risk 6 3.08
Mgt

Source: Field Survey, 2023

4.2 Descriptive Analysis of Univariate Data

Table 3 shows result of descriptive univariate analysis for each study variables and constructs. Based on the 5-point Likert scale constructs, the mean score of 3.0 was used as threshold for making agreement or disagreement decision. The 3.0 threshold point was derived by dividing the sum of the 5-point Likert scale by 5. Thus, a mean score ≥ 3.00 for any construct signifies agreement and vice versa.

Table 3: Descriptive assessment of study variables

Variable/constructs	N	Mean	Std. Deviation	Decision
Risk-taking Capability:				
Proclivity to high risk project	195	3.68	0.81	Agree
Boldness to taking risk	195	3.41	1.10	Agree
Taking calculating risk	195	3.46	1.07	Agree
Propensity to handling uncertainty	195	2.30	0.49	Disagree
Opportunity Recognition:				
Seeing potential new venture all around	195	3.27	1.09	Agree
Sensitivity/alertness to new venture opportunity	195	3.50	1.49	Agree
Perceiving new venture opportunity naturally	195	2.62	0.44	Disagree
Emotional Intelligence:				
Self-Management	195	3.41	1.45	Agree
Self-Awareness	195	3.86	1.25	Agree
Social Awareness	195	3.26	1.34	Agree
Relationship management	195	3.47	1.42	Agree

Source: Field Research Data, 2023

As reported in Table 3, it can be observed that except for the risk-taking construct “propensity to handle uncertainty” (Mean=2.30, SD=0.49), and opportunity recognition construct “perceiving new venture opportunity naturally” (Mean=2.62, SD=0.44), all other items scores met and exceed the mean score threshold. However, the highest mean score pertains to the construct “self-awareness” (Mean= 3.86, SD=1.25). The low mean scores for the two variables- uncertainty handling propensity, and natural perception of business opportunities- implies that respondents do not find them as necessary requirements for effective entrepreneurship education that could curb insecurity. The highest mean score item “self-awareness” implies that the ability to recognize feelings as it happens and to accurately and confidently make self-assessments is an important element of entrepreneurship education and a factor in insecurity reduction.

4.3 Bivariate analysis of relationship amongst all variables

In order to arrive at reliable findings and conclusion from the analyzed data, the proposed hypotheses are tested using the Pearson product moment correlation at 0.01 level of

significance. Table 4 shows the results of correlation analysis concerning the relationship between entrepreneurship education variables (risk-taking propensity, opportunity recognition capability, entrepreneurs' emotional intelligence) and insecurity reduction.

Table 4: Correlation matrix of all study variables

Variable		RTP	ORC	EMI	IR
RTP	Correlation Coefficient	1.000	.306*	.316*	.535**
	Sig. (2-tailed)	.	.040	.012	.002
	N	195	195	195	195
ORC	Correlation Coefficient	.306*	1.000	.329*	.502*
	Sig. (2-tailed)	.040	.	.020	.011
	N	195	195	195	195
EMI	Correlation Coefficient	.316*	.329*	1.000	.521**
	Sig. (2-tailed)	.012	.020	.	.000
	N	195	195	195	195
IR	Correlation Coefficient	.322**	.252*	.320**	1.000
	Sig. (2-tailed)	.002	.011	.000	.
	N	195	195	195	195

Note: RTP= Risk-taking Propensity, ORC= Opportunity Recognition Capability, EMI = Entrepreneurs' Emotional Intelligence, IR= Insecurity Reduction

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.01 level (2-tailed).

Source: Field Research Data, 2023

At 99% level of confidence, correlation coefficient for all dimensional variables of entrepreneurial education and insecurity reduction yielded positive and significant result: risk-taking propensity ($r = .322$, $n = 195$, $P < 0.01$), opportunity recognition capability ($r = .252$, $n = 195$, $P < 0.01$), and entrepreneurs' emotional intelligence ($r = .320$, $n = 195$, $P < 0.01$). Since the correlation coefficients (R) for each variable are not equal to zero, it implies that positive relationship exists between entrepreneurial education variables and insecurity reduction. Based on the results, all the null hypotheses are rejected. The highest significant R-value is observed between risk taking propensity (RTP) and insecurity reduction (IR) ($r = .322$, $n = 195$, $P < 0.01$). This suggests further that a unit increase in each of the independent variables (RTP, ORC, EEI) is associated with an increase in reduction of insecurity in the region.

4.4 Discussion of Findings

The main thrust of this paper was to argue that entrepreneurial education that emphasizes three basic elements-risk-taking propensity, opportunity recognition capability and entrepreneurs'

emotional intelligence is capable of curbing insecurity challenges. It has been found and confirmed in this study that the proposed elements of entrepreneurial education are positively correlated with reduced insecurity. For instance, risk taking propensity has been found to make the highest significant association with reduced insecurity; which implies that the more entrepreneurial education programmes and curriculum in our schools encourages risk-taking and the building of risk-taking capability among the youths, the more there would be the possibility of reducing the challenges of insecurity. To build risk taking capability, entrepreneurship education should emphasize measures such as proclivity to high risk business projects with higher returns, boldness in taking risks and taking calculated risks. Risk taking has been suggested by prior studies as part of the requirements for business success and learning (Nwankwo et al., 2016; Sofoluwe et al., 2013; Sarfaraz & Mustafa, 2021). The findings in this study is therefore consistent with the earlier suggestions. In addition, the present study has found positive relationship between entrepreneurs' emotional intelligence and insecurity reduction. This also implies that the more entrepreneurial education programmes have the elements of entrepreneurs' emotional intelligence including self-management, self-awareness, social awareness, and relationship management, the more likely it would help future entrepreneurs remain focused in their venture and by extension lessens the menace of insecurity in the study area. Again, this position similar to prior research advocating the integration of emotional intelligence in University teaching and learning (Amulya, 2016; Elias, 2004; Mamat, & Ismail, 2021), emotional intelligence and career and business success (Urquijo, Extremera & Azanza, 2019; Supramaniam, & Kuppasamy, 2021; Amanawa, 2022) On the contrary, the findings in this study refutes that of Sulaiman, Abdu & Balarabe, (2016) whose study reported negative relationship between emotional intelligence and lecturer's job satisfaction, and students learning ability.

5. Conclusion

Worried by the worsening insecurity situation in the South South Geo-political Zone of Nigeria, this study was conducted to explore the possibility of leveraging entrepreneurship education in addressing the menace. Findings of the study indicated that entrepreneurship education has a significant positive relationship with insecurity reduction. This suggests that security in the South South Geo-political Zone of Nigeria can be improved when more attention and increased investment is made on entrepreneurship education. Hence, it is concluded that entrepreneurship education is urgently needed in the zone to create jobs, reduce poverty, create wealth and raise the standard of living with a view to ultimately reducing insecurity. Following this conclusion, it is recommended that there should be a review of current entrepreneurship education curriculum in Nigeria with emphasis placed more on trainees' risk-taking propensity, opportunity recognition capability and entrepreneurs' emotional intelligence in order to effectively tackle the menace of insecurity.

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VOCATIONAL SKILLS ACQUISITION AND CAREER DEVELOPMENT AMONG STUDENTS OF UNIVERSITY OF LAGOS

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Abstract

The future starts now. This requires a strategic plan towards achieving the stated future goals of the Nigerian youth becoming suitable employee with employable skills for organisations and industries upon graduation from the University. Vocational skill is a product of Vocational Education which is a key aspect of Nigerian Policy of Education towards reducing or eradicating youth unemployment in Nigeria. Despite this, employment is low while job seekers increase exponentially. This study identified students involvement with evidences of the practical skills acquired in the university that lead to career development and ultimately job competency at delivery. A descriptive survey design was adopted for the study with 35,436 full time undergraduate students of the University of Lagos as the population while 500 students were the sample for this study. A self-structured questionnaire was developed by the researchers for data collection. Four research questions were raised and answered using percentage and frequency. The findings revealed that vocational skill acquisition enhances career development as they both work hand-in hand among other findings. Based on the findings, it was concluded that every seriousness and awareness injected in vocational skills acquisition at this level through quality and practical evidences of production of goods and services useful for human consumption and exchange for money automatically create in them the dignity, value and experience upon which career development could be built in the world of work and the future of work. This study

recommended that more attention be given to pre-vocational education at all levels of education, with evidence to show to all students that irrespective of their career preferences/ choices, vocation can be carved out of every career, thereby empowering them for a better future.

Keywords: Vocational skills acquisition, vocational education, job creation, future work, career awareness.

INTRODUCTION

Background to the Study

The goal of a functional education in every society is to live and earn a living. The former is the general education for all while the latter involves the acquisition of skills in various forms for diverse practical occupations. This also invariably forms part of the goals of every young adult leaving school to either get a paid employment or to create the job. However, in Nigeria of today, earning a degree is not an automatic meal ticket or escape route from poverty as there are so many unemployed qualified young adults without any productive engagement. Similarly, the SDG 4 emphasizes quality education; in its broad terms, this is to ensure inclusive and equitable quality education and promote lifelong learning opportunity for all. Despite these two forms of education, unemployment among Nigerian graduates is alarming and a menace in the society. The African indigenous education emphasizes social responsibility, job orientation, political participation, spiritual and moral values (Omordu & Amaele, 2014).

Vocational skills are essential for career development in Nigeria, as they provide the foundation for success in many industries. The acquisition of vocational skills can help individuals to enter new industries, advance in their current professions, and become more competitive in the job market.

One way that vocational skills facilitate career development is by providing individuals with the practical knowledge and experience needed to succeed in their chosen professions. According to Adeyemi and Salako (2018), vocational skills training provides individuals with the technical expertise needed to perform specific job-related tasks. This enables them to become more effective in their roles and to take on more responsibilities as they advance in their careers.

Vocational skills also help to prepare students for new and emerging industries. For example, Nigeria is currently experiencing growth in the technology industry, which requires workers with

specialized technical skills (Ezeji, 2019). By acquiring vocational skills in areas such as computer programming and network administration, individuals can position themselves for success in these emerging fields thereby leading to more productivity in ways that reduce unemployment. In addition to providing practical skills, vocational skills development can also help individuals to develop important soft skills such as communication, teamwork, and problem-solving. These skills are highly valued by employers and can help individuals to advance in their careers (Adeyemi & Salako, 2018). Furthermore, vocational skills development can provide individuals with opportunities to network and build relationships with professionals in their industry. This can help individuals to gain insights into their profession, learn about job opportunities, and make important connections that can help them to advance in their careers (Ezeji, 2019).

Acquiring vocational skills development is an important facilitator of career development of students during school and after graduation. By providing individuals with practical and technical skills, as well as opportunities to develop important soft skills and build professional networks, vocational skills training can help students to enter new industries, advance in their current professions, and become more competitive in the job market. In Nigeria, vocational skills development is crucial for the country's economic growth and development. However, there are several enablers and barriers that affect the success of vocational skills development initiatives, as well as opportunities for improvement.

One of the enablers of vocational skills development in Nigeria is the government's commitment to investing in skills development. The government has established several vocational skills development programs, such as the National Skills Qualification Framework (NSQF) and the Skills Acquisition and Entrepreneurship Development (SAED) program, which provide training and support for individuals seeking to acquire vocational skills (Ezeji, 2019). Another enabler is the role of private sector organizations in supporting vocational skills development. Many companies in Nigeria have established vocational training centers to help individuals acquire the skills needed to work in their industries. For example, the Nigerian Breweries Plc established the Technical Training Center (TTC) to train young Nigerians in technical skills related to the brewing industry (Nigerian Breweries, n.d.). However, there are also several barriers to vocational skills development in Nigeria. One of the biggest barriers is the lack of infrastructure and resources needed to support training and development programs. Many vocational training centers lack the

equipment and materials needed to provide hands-on training, which limits the effectiveness of these programs (Ezeji, 2019). Another barrier is the negative perception of vocational skills in Nigeria. Many Nigerians view vocational skills as a second-rate option, preferring academic degrees instead. This attitude often leads to a shortage of skilled workers in industries that require technical skills, such as manufacturing and construction (Adebowale, 2021).

Despite these challenges, there are opportunities for improving vocational skills development in Nigeria. One such opportunity is the growing demand for skilled workers in emerging industries such as renewable energy and information technology. By investing in training and development programs in these areas, Nigeria can prepare its workforce for the jobs of the future (Ezeji, 2019). In summary, vocational skills development in Nigeria is important for the country's economic growth and development. While there are several enablers and opportunities for improvement, there are also barriers that need to be addressed, such as the lack of infrastructure and negative perception of vocational skills.

Vocational skills development and career development are important aspects of personal and professional growth. Vocational skills refer to the technical and practical knowledge required to perform specific job-related tasks, while career development refers to the process of managing one's career path and advancing in one's chosen profession. The acquisition of vocational skills and career development are closely related, as the former provides the foundation for the latter.

According to the World Economic Forum, the increasing pace of technological change is leading to a shift in the types of skills needed in the workforce. In particular, the demand for vocational skills, such as critical thinking, problem-solving, and adaptability, is increasing as employers seek workers who can navigate a rapidly changing technological landscape (World Economic Forum, 2020). In response, vocational skills development has become a key focus of education and training programs, with many institutions offering vocational courses and certifications to help individuals acquire the skills needed to succeed in the modern workforce.

At the same time, career development has also become increasingly important as individuals seek to advance in their chosen professions. According to a study by the Society for Human Resource Management, employees who feel that their employer is invested in their career development are more likely to feel engaged and committed to their job (Society for Human Resource Management,

2020). As a result, many employers now offer training and development programs to help employees acquire the skills and knowledge needed to advance in their careers.

Vocational skills development and career development are important components of personal and professional growth. The acquisition of vocational skills provides a foundation for career development, while career development programs and opportunities help individuals advance in their chosen professions. With the increasing pace of technological change, the need for vocational skills and career development is likely to continue to grow in the coming years. **Statement of the**

Problem

In the reality of our time, the number of graduates that are churned out are facing unavailability of jobs, lack of proficiency in job delivery, lack of self-reliance and the ‘japa’ syndrome which erodes career development of our youth within the system that trained them as supposed practical solutions to the workforce. Furthermore, the employability skills embedded in the university curriculum can channel the path to career development among this set of students if properly annexed with the needs in their environment instead of scouting for employment. However, the perception of university students on vocational skills acquisition as inferior to academic degree certification cannot be over emphasized. In view of these, unemployment is on the rise while career development in vocational skill acquisition is almost impossible until after the endless search for employment without success. Therefore, this study sought to investigate how vocational skills acquisition has influenced career development among students of University of Lagos, Nigeria.

Objective of the Study

The main objective of this study was to examine how Vocational Skills Acquisition influence Career Development among undergraduate students of the University of Lagos as they prepare for employment upon graduation. Specifically, the paper sought to:

- Ascertain how vocational courses offered at the University of Lagos expose the students to career development
- Ascertain how the exposed vocational skills translate to employability skills. Prepare the students for career opportunity
- Ascertain how vocational skills prepare students of University of Lagos for economic empowerment. Ascertain how vocational skills translate to economic tools for students of University of Lagos.

- Ascertain how vocational skills acquisition prepares students for specific career in line with the skill acquired for career progression/ growth.

Research Questions

- How do vocational courses offered at the University of Lagos expose the students to career development?
- How do the exposed vocational skills translate to employability skills?
- How do vocational skills prepare students of University of Lagos for economic empowerment?
- How do vocational skills acquisition prepares students for specific career in line with the skill acquired for career progression/ growth?

Significance of the study

Acquisition of skill competence and proficiency in job delivery are symbiotic. The vocational skills acquired at the university are meant for job specifics for human Capital development for industries and career development opportunities for the students upon graduation. The industries are Incapacitated without the human efforts to harness the needed skills acquired at the university as a preparatory ground for the workforce. Furthermore, these students are strategically positioned as functional entity with a wholesome education for empowerment, providing solutions, proficiency in job delivery, benefit of job satisfaction and career progression in the individuals, organizations and industries. The university as a preparatory ground for employment and employability skills get feedback that structure the curriculum to meet industrial needs.

Research Methodology

The research design adopted for this study was Descriptive Survey. The population of the study was all the projected 35,436 full-time undergraduate students of University of Lagos. The sample size of the study was 500 full-time undergraduate students of University of Lagos, using Taro Yamane formula. Multi-stage sampling technique was used for the selection of the sample for the study. The instrument used for data collection was a self-structured questionnaire designed by the researchers titled Vocational Skill Acquisition and Career Development among Students of University of Lagos. (VSACDSUL). The instrument had 20 questionnaire items and adapted the four point Likert scale of:

SA- Strongly Agree

A- Agree

D- Disagree

SD- Strongly Disagree

The face and content validity of the instrument was determined by experts in test and measurement while the reliability of the instrument was determined by administering 50 copies of the instrument on students of Yaba College of Technology who did not participate in the main study and the data obtained was analysed using Cronbach alpha reliability technique and a coefficient of .80 proved that the instrument was reliable. The research questions were answered using frequency count and percentage.

Results

Research Question One: How do vocational courses offered at the University of Lagos expose the students to career development?

Table 1: Vocational Courses and Career Development.

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
1	Vocational skill acquisition improves job delivery when employed.	300	60	200	40	-	-	-	-	500	100
2	Acquisition of practical skills is a necessary skill for career development.	180	36	260	52	60	12	-	-	500	100
3	Vocational skill will facilitate choice of career	260	52	200	44	-	-	20	4	500	100
4	Career development is independent of vocational skill acquisition.	60	12	120	24	280	56	40	8	500	100
5	Vocational skill acquisition and career development are both integral parts of a wholesome education	240	48	220	44	40	8	-	-	500	100

Source: Authors' compilation, 2023.

From the above table 1, all the respondents agreed (with 100% level of agreement) that vocational skill acquisition improves job delivery when employed. Meanwhile, 88% of the respondents agreed that acquisition of practical skills is a necessary skill for career development, while only 12% believed otherwise. Similarly, 96% of the respondents agreed that Vocational skill will facilitate their choice of career, whereas, only 4% disagreed with the statement. However, only 36% of the respondents thought that Career development is independent of vocational skill acquisition; whereas, 64% of the respondents thought that career development is not independent of vocational skill acquisition. Lastly, 92% of the respondents agreed that both vocational skill acquisition and career development are both integral parts of a wholesome education; while, only 8% of the respondents disagreed.

Research Question Two: How do the exposed vocational skills translate to employability skills?

Table 2: Vocational Skills and Employability Skills

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
6.	Vocational skill will enhance creativity in career development	120	24	160	32	220	44	-	-	500	100
7.	Vocational skill acquisition is a needed preparatory skill for career development	180	36	220	44	100	20	-	-	500	100
8.	Acquisition of vocational skill ensures job retention	140	28	220	44	120	24	20	4	500	100
9.	Vocational skill acquisition engenders career/ job satisfaction	140	28	240	48	100	20	20	4	500	100
10.	Vocational skills acquisition are more job specific than career development	80	16	160	32	200	40	60	12	500	100

Source: Authors' compilation, 2023.

From the above table, 56% of the respondents thought that vocational skill will enhance creativity in career development, while, only 44% of the respondents thought otherwise. In the same vein,

80% of the respondents agreed that vocational skill acquisition is a needed preparatory skill for career development; while only 20% of the respondents disagreed. Furthermore, 72% of the respondents agreed that acquisition of vocational skill ensures job retention; whereas, 28% disagreed that it does. Similarly, 76% of the respondents thought that vocational skill acquisition engenders career/ job satisfaction, while 24% thought otherwise. On the other hand, only 48% of the respondents agreed vocational skills acquisition are more job specific than career development, while, 52% thought it does not.

Research Question Three: How do vocational skills prepare students of University of Lagos for economic empowerment?

Table 3: Vocational Skills Acquisition and Economic Empowerment

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
11.	Vocational skill acquisition is more intentional for economic empowerment	240	48	200	40	60	12	-	-	500	100
12.	Vocational skill acquisition and career development are necessary tools for a developing economy/ system.	160	32	300	60	20	4	20	4	500	100
13.	Vocational skill acquisition is needless in career development	-	-	20	4	260	52	220	44	500	100
14	Course of study exposes students to be self-reliant upon graduation	160	32	280	56	60	12	-	-	500	100
15.	Vocational skill acquisition is imperative for a functional career development.	40	8	120	24	320	64	20	4	500	100

Source: Authors' compilation, 2023.

From table 3 above, 88% of the respondents agreed that vocational skill acquisition is more intentional for their economic empowerment, while only 12% disagreed with the statement.

Similarly, 92% of the respondents thought that vocational skill acquisition and career development are necessary tools for a developing economy/ system; whereas, 8% of the respondents thought otherwise. However, 96% of the respondents believed that vocational skill acquisition is needful in career development, while only 4% believed otherwise. Furthermore, 88% of the respondents agreed that Course of study exposes students to be self-reliant upon graduation, while on the contrary, 12% disagreed. Lastly, only 32% of the respondents agreed that vocational skill acquisition is imperative for a functional career development; whereas, 68% believed that vocational skill acquisition is not imperative for a functional career development.

Research Question Four: How do vocational skills acquisition prepares students for specific career in line with the skill acquired for career progression/ growth?

Table 4: Vocational skills acquisition and specific career progression.

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
16.	Career progression is less important than vocational skill acquisition	40	8	180	36	220	44	60	12	500	100
17	Vocational skill acquisition does not translate to career development	80	16	220	44	200	40	-	-	500	100
18	Vocational skill acquisition endangers career/ job satisfaction.	-	-	40	8	180	36	280	56	500	100
19	Vocational skill will facilitate career growth.	100	20	200	40	160	32	40	8	500	100
20	Vocational skills are accidental to career choices.	-	-	20	4	240	48	240	48	500	100

Source: Authors' compilation, 2023.

From the table 4 above, only 44% of the respondents agreed that career progression is less important than vocational skill acquisition, while 56% disagreed with the statement. Meanwhile, 60% of the respondents agreed with item 17 that vocational skill acquisition does not translate to career development, while only 40% disagreed with the item. However, only 8% of the respondents agreed with item 18 that vocational skill acquisition endangers career/ job satisfaction;

whereas, a whopping 92% of the respondents thought otherwise. On the other hand, 60% of the respondents agreed with item 19 that vocational skill will facilitate career growth, while, 40% of the respondents disagreed. Lastly, only 4% of the respondents agreed with item 20 that vocational skills are accidental to career choices; whereas, 96% of the respondents believed otherwise.

Discussion of Findings

Recommendations and Conclusion.

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N.B: Work in progress.

The Girl-Child Education in Knowledge Economy as a Booster for Women Empowerment and Poverty Eradication

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Abstract

“Educate the girl-child and you educate a nation” is a popular saying. However, gender discrimination which has its source either from religion, ethnic or traditional inclination is a major contributor to poverty which is still a puzzle in Nigeria and Africa at large. The knowledge Economy is indiscriminate of gender and offers to develop the girl-child’s intellectual capacity into becoming economically independent adult. The patriarchal African society has greatly influenced the unleashing capacity of the women folks from assuming their maximum potential. Upon this premise was this study based. This study examined the potentials of the girl-child education towards women empowerment, youth job creation and poverty alleviation. The descriptive survey design was adopted for the study. Five research questions and two hypotheses guided the study. Purposeful sampling technique was adopted with a sample population of 500 participants. A self-structured questionnaire was used as a means of data collection. Mean, Standard deviation and weighted mean score were used to test the hypotheses at 0.05 level of significance. The findings revealed that women can create employment and drastically alleviate poverty if they are consciously empowered with quality education (formal or informal) as a ‘Girl-child’. Based on the findings, it was concluded that the girl-child education in the knowledge economy is imperative in her all-round development towards becoming an independent and functional adult in the society. Consequently, this study recommended a “catch them young” approach for the girl-child through functional education (be it formal, informal or non-formal) and conscious awareness of the creative power of the mind which if harnessed effectively can create more jobs and reduce poverty to the barest minimum. While the women also require timely intervention through empowerment and conscious efforts of appropriate bodies laden with such responsibility.

Keywords: *Girl-child, Education, Knowledge economy, Women empowerment, employment creation, Poverty eradication.*

INTRODUCTION

It is a well-known fact that education is pivot around which all human and national development revolve. Unfortunately, in some areas, women are relegated to the background even in educational matters under the pretext that woman education ends in the kitchen. But the fact remains that when you train a woman, you have trained the whole nation. In every civilized society, children and youths are regarded as the pride of the nation.

The girl-child is a biological female offspring from birth to 18 years of age. During this period, the young girl is totally under the care of the adult who may be parents, guardians or elder siblings. It is also a period when the girl-child is malleable, builds and develops her personality and character. She is very dependent on others on who she models her behavior, through observation, repetition and imitation. Her physical, mental, social, spiritual and emotional developments start and progress to get to the peak at the young adult stage. (Sutherland, 2001). The development of any society would be grossly lopsided if the girl child is not given quality education because education in this age of knowledge economy is accepted as an instrument to power, prestige, survival, greatness and advancement for men and women.

Knowledge economy therefore, is a system of consumption and production that is based on intellectual capital. In particular, it refers to the ability to capitalize on scientific discoveries and applied research. In a knowledge economy, a significant component of value may consist of intangible assets such as the value of its workers' knowledge or intellectual property. A knowledge economy of a girl child depends on her level of education

In recent years, there has been a paradigm shift towards an economy where the production and use of knowledge matter.

Such concepts as economies of scale and scarcity of resources do not strictly apply in an economy where knowledge rules. It is an economy that bases itself on creating, evaluating, and trading knowledge.

The term knowledge society refers to a society in which the creation, dissemination, and utilization of information and knowledge has become the most important factor of production.

Such a society values human capital as the prime input to production and innovation. Learning, Creativity and Openness. The girl child's knowledge, skills, training will help her to increase the intellectual capital which can be developed through formal school system.

According to Obanya (2007) the girl-child educational attainment is low as records have shown that fewer girls go to school than boys. Offorma, (2009) noted that this is because the girl-children have not been so lucky to be cherished, protected and loved in Nigerian society due to certain traditional practices, stereotyping, cultural and religious beliefs which put them at the risk of abuse and neglect.

According to UNICEF data (2011) on the state of the world children, educating girls saves lives and builds stronger families, communities and economies. An educated female population increases a country's productivity and fuels economic growth. Some countries lose more than \$1 billion a year by failing to educate girls to the same level as boys. Girl-child education is a catch-all term for a complex set of issues and debates surrounding (primary education, secondary, and tertiary and health education in particular) for girl and women. Offorma (2009) defines girl-child as a biological female offspring from birth to eighteen (18) years of age.

The girl child should be retained. We need to catch them young. We can defend that it isn't for employment but to create awareness and to keep them focused.

Investing in girls' education transforms communities, countries and the entire world. Girls who receive an education are less likely to marry young and more likely to lead healthy, productive lives. They earn higher incomes, participate in the decisions that most affect them, and build better futures for themselves and their families.

Girls' education strengthens economies and reduces inequality. It contributes to more stable, resilient societies that give all individuals – including boys and men – the opportunity to fulfil their potentials.

But education for girls is about more than access to school. It's also about girls feeling safe in classrooms and supported in the subjects and careers they choose to pursue – including those in which they are often marginalized.

Statement of Problem

Education is a very important tool for societal and personal development and the girl child must be educated in order to have a bright future. Part of the fundamental human rights of a child is the

right to education. There are many factors that militate against the girl-child education especially in developing countries like ours –Nigeria where some feel or believe that the duty of women is to be good cooks. And according to such beliefs, educating a woman is seen as a challenge to the ego of the male counterparts and as a result, little effort is being made towards the education of the girl-child. They rather prefer to train a male-child instead.

The United Nations General Assembly (2001) adopted the Universal Declaration of Human Rights which stipulates that everyone has the right to education which shall be free at least in elementary and primary stages. Again, it should be recalled that one of the five main national goals of Nigeria is to have a land full of bright and equal opportunities for all citizens using education as instrument.

However, Osinulu (1994) lamented that the girl- child is discriminated against in terms of education and given out to marriage early thereby denying the girl-child the required competences for community development and equal opportunity as citizens of the country

This study therefore sets to ascertain the influence of the education of the girl-child on women empowerment, youth employment creation and poverty alleviation.

Objective of the study

The main objective of this study was to ascertain the extent to which the education of the girl-child in knowledge economy will lead to their empowerment, job creation and poverty alleviation.

The specific objectives of this study therefore were to:

- i. Ascertain the extent to which level of education of the girl-child will lead to their empowerment as they grow up to become women.
- ii. Ascertain the extent to which the exposure of the girl-child to knowledge economy will lead to their employability.
- iii. Ascertain the extent to which environmental factors will influence the education of the girl-child.
- iv. To investigate the relationship between women empowerment and job creation in the knowledge economy.

Research Questions

The following research questions guided this study:

- i. To what extent will the level of education of the girl-child lead to their empowerment as they grow up to become women?

- ii. To what extent will the exposure of the girl-child to knowledge economy lead to their employability?
- iii. To what extent will environmental factors influence the education of the girl-child?
- iv. To what extent does the education of a girl-child in knowledge economy guarantee poverty alleviation?

Significance of the Study

The findings from this study will help to educate and empower the girl-child as she journeys into womanhood. This invariably affects her family and the larger society positively. An educated and empowered woman is an asset to her family and society as a result of the benefits accrued to education as the bedrock of development.

The findings from of this study will help to educate the girl-child in this knowledge economy, for her empowerment which will invariably lead to poverty alleviation. Also the findings from this study will help to tap the potential embedded in the girl-child which will have a positive effect on her, her family and her society at large.

Research Methodology

The research design adopted for this study was Descriptive Survey. The population of the study was all the projected 50,000 secondary school-aged girl-child in Shomolu Local Government Area of Lagos State. The sample size of the study was 500 secondary school-aged girl-child in the local government using Taro Yamane formula. Multi-stage sampling technique was used for the selection of the sample for the study.

The instrument used for data collection was a self-structured questionnaire designed by the researchers titled Girl-Child Education and knowledge economy as a booster for women empowerment and job creation among secondary school students in Lagos State (GEKEWEJC).

The instrument had 20 questionnaire items and adapted the four point Likert scale of:

SA- Strongly Agree

B- Agree

D- Disagree

SD- Strongly Disagree

The face and content validity of the instrument was determined by experts in test and measurement while the reliability of the instrument was determined by administering 50 copies of the instrument on secondary school girls who did not participate in the main study and the data obtained was

analysed using Cronbach alpha reliability technique and a coefficient of .86 proved that the instrument was reliable. The research questions were answered using frequency count and percentage.

Results

Research Question One: To what extent will the level of education of the girl-child lead to their empowerment as they grow up to become women?

Table 1: Education of the Girl-child and women empowerment.

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
1	The more educated I am, the more empowered I become.	363	73	122	24	8	2	5	1	500	100
2	Education will enable me to acquire the needed skills to succeed in life.	317	63	167	33	13	3	3	0.5	500	100
3	Being educated will enable me to contribute to the welfare of my family and the society at large.	333	67	152	30	15	3	-	-	500	100
4	I can be empowered without necessarily being educated.	61	12	177	35	183	37	79	16	500	100
5	Education and empowerment are not meant for women.	122	24	3	0.5	30	6	345	69	500	100

Source: Authors' compilation (2023).

From the data in table 1 above, 97% of the respondents accepted that the more educated they are, the more empowered they become; while only 3% of the respondents believed that they can be empowered without being educated. 96% of the total respondents agreed that education will enable them to acquire the needed skills to be successful in life; and only 4% of the respondents disagreed. Also, 97% agreed that being educated will enable them to contribute to the welfare of their family and the society at large; whereas, only 3% of the respondents did not agree that being educated will contribute to the welfare of their families and society. However, 53% of the respondents believed that they cannot be empowered without education; while 47 % of the respondents agreed that they can be empowered without necessarily being educated. And 75% of the respondents disagreed that Education and empowerment are not meant for women; whereas, only 25% believed otherwise.

Research Question Two: To what extent will the exposure of the girl-child to knowledge economy lead to their employability?

Table 2: Exposure of Girl-Child to Knowledge economy and their empowerment and job creation.

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total I	Total %
6	Exposure to scientific discoveries will help me to be empowered and to create job.	229	46	239	48	20	4	12	2	500	100
7	The more knowledgeable I am, the more I will be able to create job.	317	63	178	36	3	0.5	3	0.5	500	100
8	My intellectual capability can be developed through formal education.	224	45	218	44	51	10	7	1	500	100
9	Without knowledge economy, I can still create jobs.	43	9	216	43	175	35	66	13	500	100

10	I can still make it in life without skill acquisition.	74	15	160	32	142	28	124	25	500	100
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Source: Authors' compilation (2023).

Table 2 above showed that 94% of the respondents agreed that exposure to scientific discoveries will help them to be empowered and to create job, while only 6% believed otherwise. Also, 99% of the respondents agreed that the more knowledgeable they are, the more they will be able to create job, whereas, only 1% disagreed with the item. Consequently, 89% agreed that their intellectual capabilities can be developed through formal education, while 11% of the respondents disagreed. However, 52% of the respondents believed that they could still create job without knowledge economy, whereas, 48% believed that they cannot create jobs without knowledge economy. On the other hand, only 47% of the respondents agreed that they can still make it in life without skill acquisition, while, 53% believed that they can only make it in life with skill acquisition.

Research Question Three: To what extent will environmental factors influence the education of the girl-child?

Table 3: Environmental factors and education of the girl-child.

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total	Total %
11	My parents do not believe in the education of a girl-child	15	3	5	1	76	15	404	81	500	100
12	My parents find it very difficult to afford my education as a girl-child	8	2	30	6	112	22	350	70	500	100
13	My parents always motivate me in doing my school work and supervise my homework.	330	66	137	27	28	6	5	1	500	100
14	Inadequate modern school facilities are	203	41	162	32	69	14	66	13	500	100

	barriers to scientific discoveries.										
15	Going to school does not interest me.	48	10	42	8	104	21	306	61	500	100

Source: Authors' compilation (2023).

From the table three above, 96% of the respondents disagreed that their parents do not believe in the education of the girl-child, while only 3% agreed to the statement. Also, 92% of the respondents disagreed that their parents find it difficult to afford their education, and 8% of the respondents agreed to the statement. On the other hand, 94% agreed that their parents always motivate them in doing school work and supervise their homework, while only 6% disagreed with the statement. In the same vein, 73% agreed that inadequate modern school facilities is a barrier to scientific discoveries, whereas, 27% of the respondents disagreed with the statement. Lastly, a whopping 82% of the respondents stated that they are interested in going to school, whereas, 18% believed otherwise.

Research Question Four: To what extent does the education of the girl-child in knowledge economy guarantee poverty alleviation?

Table 4: Education of the Girl-Child in Knowledge Economy and Poverty Alleviation?

S/N	Items	SA	SA %	A	A %	D	D %	SD	SD %	Total I	Total %
16	The more knowledgeable I am, the more empowered I become for poverty alleviation	391	78	102	20	5	1	3	.5	500	100
17	Creativity is required for poverty alleviation.	322	64	145	29	28	6	5	1	500	100
18	The more skills I acquire, the more empowered I become for poverty alleviation.	360	72	127	25	13	3	-	-	500	100
19	Without education and creativity, poverty alleviation is still possible.	25	5	114	23	198	40	162	32	500	100

20	With my skills I can trade knowledge.	254	51	190	38	36	7	20	4	500	100
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Source: Authors' compilation (2023).

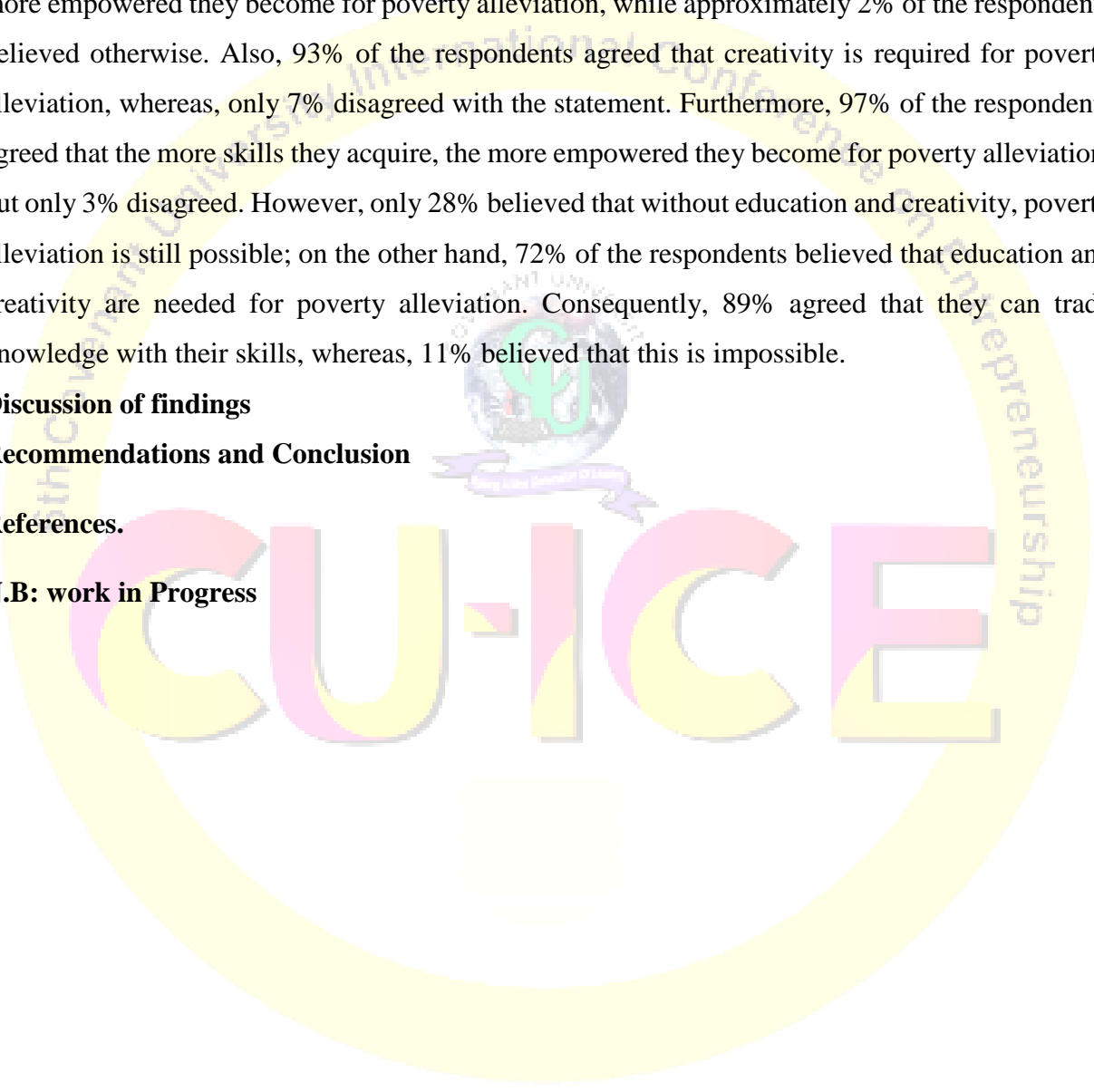
From the table four, 98% of the respondents agreed that the more knowledgeable they are, the more empowered they become for poverty alleviation, while approximately 2% of the respondents believed otherwise. Also, 93% of the respondents agreed that creativity is required for poverty alleviation, whereas, only 7% disagreed with the statement. Furthermore, 97% of the respondents agreed that the more skills they acquire, the more empowered they become for poverty alleviation, but only 3% disagreed. However, only 28% believed that without education and creativity, poverty alleviation is still possible; on the other hand, 72% of the respondents believed that education and creativity are needed for poverty alleviation. Consequently, 89% agreed that they can trade knowledge with their skills, whereas, 11% believed that this is impossible.

Discussion of findings

Recommendations and Conclusion

References.

N.B: work in Progress



Track 2: Digital Transformation and Sustainable Entrepreneurship

THE NIGERIAN FASHION INDUSTRY: TECHNOLOGICAL INNOVATION AND MARKET EXPANSION

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ABSTRACT

The global fashion sector is worth more than \$2.5 trillion, with the share of Africa projected to be less than one per cent. technological innovations in the Nigerian fashion industry can enhance, distinguish and differentiate the products offered to create additional value as well as satisfy customers. The study examined technological innovation and market expansion of small scale enterprises in Etiosa L.G.A Lagos State. Data was analysed using regression analysis. The results gotten from this study shows that technological innovations have significant effects on market expansion of SMEs in the fashion industry in Lagos State. In conclusion the researcher provided recommendations in line with enhancing new market and innovative procedures for market expansion of fashionpreneurs.

1.0 Introduction

Nigeria's creative industry is attracting unparalleled recognition as a way out to the country's plummeting oil wealth even as the economy seeks a proxy to thrive (Nwankwo, 2018). Inquisitions on the components of national production has been rampant given its overreliance on importation. Nevertheless, the creative industry has been distinguished to be reliable with likelihood of legitimately benefiting Nigerians. An aspect of this industry deals with fashion which has captivated foreign communities as well as private enterprise engagement (Ajani, 2012). Given that concise data is lacking about Nigeria's market size, the footwear and clothing market in sub-Saharan Africa is projected at \$31 billion whereas that of international wears is worth \$3 trillion (Anita, 2018). Nigeria presently, Nigeria organises six fashion week functions on a yearly basis. In addition, the speed of evolvement of these events alongside their standards indicates the enhancement of fashion (Anikweze, 2012). Also, Nigerian designers are attending foreign fashion shows with unique designs across Johannesburg, New York and Milan among others.

Within ten years, Nigeria's fashion industry has risen in grandeur, drawing international recognition. National Bureau of Statistics (NBS) attests that the footwear, clothings and textile industry has grown from 2010 by an average of 17 percent due to higher demand and partially triggered by remarkable programs which continuously push Nigeria into the consciousness of worldwide fashion. Activities like Lagos Fashion Week, alongside their intriguing yearly runway

events and incubator-approach for grooming brands, has championed this move. Despite all of this, and for good reason, many fashion critics tend to question the industry's rate of market growth. The global fashion sector is worth more than \$2.5 trillion, with the share of Africa projected to be less than 1 per cent of that amount. Elsewhere, the apparel industry in Sub-Saharan Africa is valued at \$31 billion, where Nigeria contributes \$4.7 billion (15 percent), which is far less than South Africa's \$14.4 billion despite Nigeria having nearly quadruple of her population.

In addition, the limited market size cannot be connected to the preference for international fashion of Nigerians. A McKinsey survey discovered that just 11 percent of participants saw foreign labels as trendier than their domestic counterparts. Although such research gives grounds for a booming indigenous sector, an apparent discrepancy is evident with real-life: it imports around 60 percent of apparels traded on Jumia, which is Nigeria's biggest online store. If the Nigerian government decides to provide textiles and the fashion industry in general with a more suitable environment to flourish, such act can foster rebuilding the previously blossoming businesses nationally. Nigeria was endowed with fairly thriving textile segments decades ago, however, as in many other regions, the oil boom caused development to die down. The sector came to a full stop followed by the Chinese invasion.

Technological innovation in the fashion industry can enhance market expansion through offering items to broader dimension of the current *market* or penetrating a fresh geographic, psychological and demographic area. While entrepreneurs' creativity in the fashion industry is not in question, the ability of small-scale fashion entrepreneurs in the local industry in Nigeria to tap into the global market is still a challenge. The inability to wholly publicise their skilfulness is in question. The challenges of amplifying manufacturing and disbursement serve as roadblocks to industrial progression. Consequently, Wang (2019) examined the linkage between technological innovativeness and organisational output for medium and small ventures while Liu and Jiang (2016) assessed the impact of technologically creative capacities on product improvement. Nevertheless, most works have not given cognisance to the essence of technological innovation in fostering market expansion especially as it relates to the fashion industry. This study seeks evaluate technological innovation and market expansion in the Nigerian fashion industry.

2.0 Literature Review

The modern definition of the term 'Innovation' means a new concept, idea and reasoning exhibited through unique approaches or platforms (Bhaskaran, 2017). Innovation is also popularly regarded as implementing improved solutions that satisfy new, unarticulated necessities or current market contingencies. Such innovative acts take place through the provision of better effective commodities, procedures, utilities, business models or technological ventures which are accessible to government agencies, communities and marketplaces.

Given the increased technological usage, the global occupational space is changing as companies and enterprises are getting highly competitive. A better or new commodity or procedure, whose technological features are substantially different from the past, is technological innovation (Yu & Peng, 2013). The successful realization of a new ideology to a firm that creates it (in trade or management) is technological innovation. Although inventions, technologies and research are different from innovations, they can be based on any one (Antonio, Lau, Yam & Tang, 2010). Innovation in technology presents technological work through technology forums. Technological

innovation encourages reflection of considerably improved business values by addressing technology-based dimensions of utilities or commodities (Chen, Yang, Hu, Meyer, & Bhattacharya, 2009). Innovation also can help companies to minimize costs. Innovation can help a small manufacturer can use automation to lower their dependence on humans for certain processes in production (Liu, Baskaran, & Li, 2009). In this way, the organization will reduce personnel expenses including wages, benefits and sales. Innovations in technology better reflect the market viewpoint of increasing consumer performance when coping with product or service technical aspects (Lahovnik & Breznik, 2014). The quality of product or service comes from the synthesis, incorporation and interaction of different technologies. New items, procedures and related major technical advancements in such aspects are technological advances (Yam et al. 2010). Technology-oriented innovation greatly influences organised populations by disrupting markets, altering the comparative relevance of inputs, affecting the capability for organizational learning and transforming the basis for competition (Zandhessami, Parvinchi & Molaei, 2012).

Market expansion entails selling commodities to a larger segment of an established geographical, demographic and psychographic sector (Irina, Kostyra, & Hinz, 2015). Market expansion is an approach for corporate advancement. Firms adopt a tactic for expanding coverage when their success peaks in existing channels (Austin, Davila & Jones, 2017). Success depends on confirming already existing markets have been fulfilled. Then, businesses need to find other easily reachable markets (Achrol & Kotler, 2012). Expanding the firm's market is a tactic that usually occurs when growth peaks in existent markets. Organizations looking into new markets need to take stock of their skills and assets (Brun, Fabrien & Line, 2014). These could include new or existing products with an attractiveness in untapped areas

2.1 Theoretical Framework

Diffusion of Innovation Theory

Innovation diffusion is a theory which aims to shed light on why, how and the speed at which novel technologies and ideologies are spreading (Parston, McQueen, Patel, Keown, Fontana, & Kuwari, 2015). The theory was popularized by a professor of communication studies named Everett Rogers, in his book titled 'Diffusion of Innovations' which had its first publication in 1962, and its fifth version in 2003. Rogers insists that diffusion embodies the mechanism by which the participants of a social system communicate an innovation over time. The origins of innovation theory's dissemination are diverse and cover diverse fields. Rogers suggests that five vital elements will affect the dissemination of fresh ideas:

Innovators: Characterized by those who want to experience innovative products first.

Early Adopters: These people are comfortable with adapting and taking on novel thoughts.

Early Majority: Includes persons undertake novel innovations ahead of regular individuals. Nonetheless, proof is required that this innovative medium functions prior to adopting it.

Late Majority: Encompasses individuals who are doubtful and reluctant for change such that adopting innovation only happens after general acceptance by many others.

Laggards: This covers highly customary and conserved persons who are always the last to embrace new technological changes and are the most difficult set to attract or convince.

That process is heavily dependent on human capital. To sustain itself, the innovation has to be widely adopted. There's a point within the adoption rate when innovation hits its critical point. Adopter classifications are innovative, early adopters, early majority, late majority and laggard. Diffusion is manifested differently and greatly depends on the category of adopters and process of innovation-related choices. The adopter categorization criterion entails innovative ability, which is the magnitude by which a person takes on a unique ideology.

Adopting a new fashion product, service, or concept in the sense of this study is not an instant trend. It's important to know that in a social setting, it doesn't happen equally to all individuals. Consumers who accept innovativeness earlier exhibit unique attributes, according to studies than those who later adopts an innovation (Greve & Siedel, 2015). For companies in the fashion industry, therefore, it is important to grasp the features of each segment, which will either facilitate or hinder the embracement of an innovation (Dearing, Beacom, Chamberlain, Meng, & Berta, 2017). Where marketing, process or technical advancement definitions emerge in view of the possibility of attracting consumers to innovation depending on developing novel fashionable items, the distribution method or technical inputs in terms of production speed (Douglas, 2016).

3.0 Methodology

The research population comprises every fashion designer in Lagos State which is the hub of small-scale fashion designers in Lagos. Consequently, the sample population is unknown. The sample size was reached using Bissits (2014) who stated that a sample size of 100 participants is acceptable for undetermined population. A sample size of 120 small scale fashion entrepreneurs in Lagos State was used. Questionnaires was used for data collection and out of 120 distributed, 102 were returned and filled correctly. Descriptive, inferential and linear regression analysis was used to analyse data gathered.

4.0 Data Presentation and Analysis

4.1 Frequency Distribution of Demographic Characteristics of Respondents

This table elaborates on the demographic characteristics of the participants who made up this study.

	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	41	40.2	40.2
	Female	61	59.8	59.8
	Total	102	100.0	100.0
Age	15 - 20 Years	14	13.7	13.7
	21 - 25 Years	52	51.0	64.7
	Above 25 Years	36	35.3	100.0
	Total	102	100.0	100.0
Marital Status	Single	68	66.7	66.7
	Married	34	33.3	100.0

Total	102	100.0	100.0
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Source: Field Survey, 2022

Table 4.2.0: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.507 ^a	.258	.250	.42883

a. Predictors: (Constant), Technology innovation

Source: Field Survey, 2022

Table 4.2 summarises the model and reflects the extent to which disparities in the outcome variable (market expansion) is justified by the regressor (technology innovation). R-squared is .258, meaning that technology innovation accounts for 25.8% of variations in market expansion. The estimated standard error stands at .42883, representing the error term. This means that a unit change in technology innovation affects market expansion.

Table 4.2.1: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.379	1	6.379	34.688	.000 ^b
	Residual	18.389	100	.184		
	Total	24.768	101			

a. Dependent Variable: Market expansion

b. Predictors: (Constant), Technology innovation

Source: Field Survey, 2022

Table 4.2.1 mirrors the ANOVA table which checks statistical significance of the null hypothesis. F-value of 34.688 indicates a poor fit. Nonetheless, the relationship between technology innovation and market expansion is statistically significant ($p < .05$). This indicates that engaging technology innovation engenders market expansion, thereby leading to rejection of the null and acceptance of the alternate hypothesis which connotes that technology innovation impacts on market expansion.

Table 4.2.2: Coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.383	.448		3.086	.003	.494	2.272
	TECH_INV	.605	.103	.507	5.890	.000	.401	.809

a. Dependent Variable: Market expansion

Source: Field Survey, 2022

Table 4.2.2 displays the simple model which expresses the dimension to which technology innovation affects market expansion. The beta co-efficient relating to engagement of technology innovation is .507, indicating an appreciable explanation of the outcome variable. So, it can be inferred that technology innovation significantly contributes to changes in market expansion ($p < .05$).

5.0 Discussion of Findings

The findings indicate that technological innovation affect market expansion of firms in the Nigerian fashion industry. This aligns with the study of Musimiire et.al, (2012) which found that technological innovation enables a company to retain market coverage and clientele, particularly in technologically oriented industries with market saturation and losing clients to competitors who easily mimic these goods.

Innovation diffusion theory strives to shed light on the mechanisms, pace and reasons why recent technology and ideologies are spreading (Parston, et.al, 2015). In this study, for companies in the fashion industry, it is important to comprehend the attributes of each segment, which would either aid or hinder the enactment of an innovation (Dearing, et.al, 2017). Where technological innovations emerge in view of the possibility of attracting consumers to innovation as contingent upon establishing novel fashion products, the distribution method or technical inputs in terms of production speed (Douglas, 2016).

6.0 Recommendation and Managerial Implication

This research has efficiently evidenced the effect of technology innovation on business performance of selected SMEs in the fashion industry in Lagos State. In line with discoveries made, SMEs in the Nigerian fashion industry should endeavour to implement technological product innovations or processes in application that are brought to market to foster market expansion.

key stakeholders and policy implementers within Nigeria should create an enabling environment to foster the advancement of smaller fashion-based establishments through technology innovation. Also, small scale fashion entrepreneurs should implement technological innovation to foster market expansion and growth.

7.0 Conclusion

The study asserts that technological innovation impacts on market expansion of fashion firms. The sector can be revived by investing in technological innovation which will propel fashion companies better comprehend and represent their target audience. If managed strategically, the sector has an incredible chance for growth. Moreover, if the industry is committed in a purposeful and sustainable way, it will exhibit a remarkable ability to strengthen many persons and move Nigeria's economy forward over a longer period.

8.0 Ethical Considerations

The researchers ensured that respondents are aware of this project's context and are carried along with the most recent method and scheme of participation. However, each respondent and participant will be able to remain anonymous and their responses will be handled confidentially.

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A SYSTEMATIC REVIEW OF CYBERCRIME ENTREPRENEURSHIP USING ENTREPRENEURSHIP EMERGENCE THEORIES

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Abstract

Emerging realities in our society have glorified, celebrated and romanticized cybercriminals and their proceeds. This ugly and immoral societal acceptance of such criminal tendencies and their proceeds has extended the frontiers of Entrepreneurship due to its elastic nature to what is recently known as Cybercrime Entrepreneurship. Cybercrime Entrepreneurs on one hand, are experienced cybercriminals that sets up centers (virtual and physical) for teaching these criminal skillset while on the second hand, they are successful, experienced and well-connected cyber criminals that set up ventures and recruit less experienced young/old people by teaching them the relevant skillset necessary for the cybercriminal acts as well as provides the enabling environment for them to efficiently carry out their assigned duties. This paper presents a review of theories of Entrepreneurship Emergence and their validity in understanding the recent disturbing publicity of Cybercrime Entrepreneurs and its subsequent indulgence by teenagers in Nigeria. The theories used are Economic factors theory by Joseph Schumpeter, Psychological factor theory by David McClelland, Sociological factors theory by Thomas Cochranis and Alert Theory. We have observed that Cybercrime Entrepreneurial motivation is in tandem with the postulations of some theories and not only one set of factors. It was also observed that there are significant discontinuities and continuities in the configuration of cybercrime Entrepreneurship and Practical Entrepreneurship worldwide. The study concludes that Cyber Entrepreneurship is a function of psychological, sociological, criminological and economic factors and has negative implication to human capacity development of any country. The research recommends amongst others that policy should be enacted to discourage the influx of youth into Cybercrime Entrepreneurship; punishment be explicitly spelt out in the law. Furthermore, government should also try to help our youths by engaging them positively in order to discourage the recent negative mantra “education is a scam” in Nigeria.

Keywords: Cybercrime, Entrepreneurship, Psychology, Virtual

Introduction

The recent emerging realities in digital entrepreneurship and businesses have epitomized the advances made by information technology to human endeavors. The business environments are continually submerged by ever increasing usability and acceptability of information technology to support businesses as there are indications of convergence of business and information technology. Businesses in Nigeria have been receptive to this new trend of doing businesses which ranges from office support, decision making, payment options, digital marketing, and digital communication and in recent times the use of social media platforms for advertising and as business support

channels to customers and potential customers. Businesses and entrepreneurial endeavors have also witnessed the magic touch of information and communication technology connecting clients and customers across cities and villages thereby making a virtual marketplace. The world has indeed become highly digitized and has turned into a global village. According to Kaspersky (2008), the world has transcended to the point where many people spend a significant portion of their lives online. There is an inarguable conclusion that the virtual world mirrors our real world. Taking Nigeria as a case study, then president of the Federal Republic of Nigeria, Chief Olusegun Obasanjo, who foraged into this area of development in 2001, has made Information and Communication Technology affordable and a necessity for every Nigerian. The communicator Magazine of Feb. 2019, an NCC online publication, alluded that the nation's broadband penetration has increased from 6% in 2013 to over 30% in 2018 and to 32.34% as at January, 2019. According to the International Telecommunication Union, the overall number of mobile subscription in Nigeria including feature phone and smart phone users was almost 145 million in 2018.

The embarrassing economic situation of the country which is an indication of moral bankruptcy or decadence in our society which is a tragedy of our materialistic culture, our failing economic and political structures (Okpako et al., 2020). Materialistic culture which comes up as a result of violation of moral conscience through honoring and celebration of thieves which consequently builds an edifice which would produce beggars in no too distant future. The recent mushrooming indulgence and acceptability of teenage youths in carrying out cybercrimes and consequently their epicurean lifestyle have taken up a disturbing publicity and have been weighed in the balance of morality and actionable progressive tendencies in the frontiers of national development and is found wanting (Okpako et al., 2020). Nigerian teenagers who are either graduates or artisans that are fed up with the struggling atmosphere of Nigeria's economy without a commensurable gain or benefit have decided to go into risky endeavors or small businesses and other entrepreneurial endeavors that would ensure quick materialistic gain, in this regard, cybercrime. According to **“channelstv online platform” of September 15th 2022 which reported** that “Two proprietors of a center for training of internet fraudsters (Yahoo boys) and seven others have been arrested by the Benin Zonal command of the operatives of Economic and financial crimes commission. They were arrested on Tuesday 15th September 2022, in Benin City, Edo State at the internet fraud coaching center (A.K.A. HK).” The concept of risk underscores the idea of choices, decisions that may carry downsides but are made in order to reap a possible gain. Considering the recent disturbing publicity and indulgence of Nigerian youth into cybercrime and other criminal activities makes true the assertion of Bernstein (1996) that the connection between daring behavior and rational analysis as a central feature of modernity. It is therefore socially inexcusable for a society like Nigeria to be overwhelmingly submerged by a social deviant behavior such as cybercrime without recourse to effective approach to arrest it as it is detrimental to the economic development of the country

The recent trends has also suggested a gradual mistrust of the policies of the Government and as such young individuals have resorted to self-help with a huge moral burden on the country. The harsh economic situation of the country has made some citizens to prioritize their personal

wellbeing over moral and values as well as social well-being which have been an integral part of humanity and economic development of any society. The quest for material gains has undermined the essence of societal well-being through misapplication and misuse of the digital landscape for negative endeavors which is now known as cybercrime. Quite a number of young individuals have towed the honorable path to success while others have sinisterly and in worst cases associated or romanticized with criminal endeavors to survive or to get their supposed fame. There is these irrepressible urge to be materially and financially successful having tasted the bitter pill of poverty and its cohorts. Young individuals that are intelligent, well versed in their trade and have demonstrated high commitment to contribute to humanity have been misdirected, thronged to the wrong path by the nation's economic and moral woes. Their supposed dreams have been thwarted yet they will not give up in achieving it through criminal activities. They have a high sense of self efficacy which has transcended to the goals they chose, the aspirations, how much effort they now dedicate on a given task and the time they persist in the face of turbulent, difficult and disappointment times.

This study is timely especially when Nigerian government is trying to improve the quality of life of her teeming youths through entrepreneurial and vocational training programs. With the prevailing harsh economic situation of the country as well the unemployment rate, the emergence of cybercrime entrepreneur will soon be a new normal. This paper presents a review of theories of Entrepreneurship Emergence and their validity in understanding the recent disturbing publicity of Cybercrime Entrepreneurs and its subsequent indulgence by teenagers in Nigeria. This paper used four important theories which are vanguards and representatives of the distinct perspective of entrepreneurship and one criminology theory to explore how the new type of entrepreneurship dubbed Cybercrime Entrepreneurship goes beyond the boundaries of conventional entrepreneurship.

2.0 Literature review

Shehu (2014), coined the term „cybercrime“ to distinguish computer programmes and coordinated interlocking sets of programmes designed specifically to animate financial crimes in relation to other types of malicious software. According to Halder et al (2011), cybercrime is characterized as crimes directed against a person or group of persons with a criminal disposition to taint the victim's image or cause physical or mental harm to the victim using modern telecommunication networks such as internet (social media, e-mails, notice board and groups) and mobile phones. This term confines cybercrime to illegal activities carried out with the assistance of the internet and directed at people and groups. The advent of new waves of crime has polluted the internet's contribution to the nation's progressive growth. The internet has evolved into a haven for the most lucrative and discreet forms of criminal activity. From Europe to America, Africa to Asia, cybercrime has spread around the globe. Cybercrime has come as a surprise and has become a strange phenomenon that has settled in Nigeria for the time being. According to Olaide & Adewole (2004), youths account for a large proportion of criminals in Nigeria. Saulawa & Abubakar (2014) opined that there is less technological sophistication required on the part of criminals, cybercrime in Nigeria is particularly directed at individuals rather than computer networks. According to Ribadu (2007), majority of cybercrimes in Nigeria include website

cloning, false claims, internet purchases and other types of e-commerce fraud. Website cloning, financial fraud also popularly known as Yahoo-Yahoo, identity theft, credit card theft, cyber theft, cyber stalking, fake electronic mails, cyber laundering and virus/ worms/ Trojans were also highlighted by Olugbodi (2010) as the activities associated with cybercrimes that are carried out by these fraudsters

Examination malpractices, abduction, falsification of admission, rape, robbery and theft, sexual harassment, assault, cultism amongst others are amongst the popular patterns of social disruptions in Nigeria perpetuated by the youths. However, in current times, cybercrimes, which is now a new type of crime, has emerged in our culture denting and digging holes in the economy. To carry out most online business transactions from Nigeria, France has introduced a policy that requires web camera verification. Despite the fact that the scope of cybercrime is such that geographical and political borders are meaningless, are not considered relevant, most cybercrimes studies focus on circumstances in the Western world, overlooking the fact that the nature of cybercrime is such that geographical and political boundaries are made irrelevant. Kumar (2003) argues that the participation, attempt and planning of a criminal act anywhere in the world can be carried out by a person who has access to computer and is connected to the internet. Awe (2009), opine that irrespective of geographical location, criminals can generate cybercrimes from anywhere in the world and these crimes can be extended in other areas. With the use of the internet, these criminal acts are easier, more damaging and faster. It is imperative for the Nigerian government to recognize the root causes and provide long lasting solutions as the above stamen proves that cybercrime a global malady. The perpetrators of this crime known as „yahoo boys“ take advantage of e-commerce system to swindle their victims who are mainly foreigners out of thousands to millions of dollars. It is either they mixed up in a loan scheme project or they falsely represent themselves as having peculiar goods to trade.

Shane (2012) defined Entrepreneurship as the process of discovery/co-creation, evaluation and exploitation of opportunities to produce goods and services. How individuals think and act entrepreneurially has become an important question for researchers, educators and policy makers seeking to support entrepreneurial activities either taken individually or within organizations (Hisrich et. al, 2007). Though risk-taking, uncertainty, leadership, creativity and proactivity are essential component of entrepreneurship yet persistence, self-efficacy and passion cannot be hurriedly overlooked. Entrepreneurship is an indispensable ingredient for national economic development which has taken a positive stride in recent times as government continues to underscore its importance and implement policies in that regards. However, young individuals have carved out a niche for themselves through the act of cybercrime and in some cases have become immorally successful in terms of monetary and material indices. This ugly trend has also enticed young individuals to see such acts and proceeds as morally right and normal since there is a negligent perceived risk associated with it. In the words of (Hogan-Howe, 2013) wherein he stated that “Criminals have realized there are huge rewards to be reaped from online fraud, while the risk of getting arrested falls way below that of armed robbers”. In addition, most young ones have lost faith and confidence on their supposed mentors and role models thereby entrusting their trusts to themselves through vicarious learning. They learn from their supposed role models about how to cope with challenges, uncertainties and stress and are positively disposed to develop strategies to deal with challenges and exude a positive physiological state. According to BarNir et al. (2013), role models not only provide opportunities for learning from others but also a good

source of social persuasion, making individuals feels more confident to pursue an entrepreneurial career.

According to a publication by (Laura, 1995), the adoption of effective legislation by all countries against the abuse of information and Communication Technology (ICT), for criminal or other purposes, including the actors intended to influence the integrity of national critical information infrastructures, is critical in achieving global cyber security. Nigeria is the 3rd most cybercrime prone countries in the world and it ranked 43rd in **EMEA (put in the full meaning of the word)**. Umo (2010) opine that the lack of enabling law makes monitoring even more complex. He further described **Yahoo boys** as a term to describe the activities of Nigerian internet youth fraudsters. Today the youths have taken cybercrime as an entrepreneur this have destroyed the educational system of our future leaders – the youths. . According to a report conducted by Zero Tolerance (2006), cyber criminals commit these crimes mostly for the intent of surviving and having a good time. It is important to identify the attributes that these criminals of cybercrimes exhibit from these observations since it has been confirmed that the desire for wealth and good life is a major factor.

2.1 Cybercrime Entrepreneur

According to Merton’s influential theory of social structure and anomie in 1938, crime is the result of the differential access to legitimate, institutionally defined means to achieve culturally defined goals especially monetary success. The Nigeria culture has been infiltrated with the American culture which places value on American dream. The dream considers money as everything as it is used to access all the encompassed desire for material objects. The Nigerian young individuals have taken to this lifestyle yet the institutions have failed to provide equal opportunities for all members of the society to achieve it. Deviant behavior such as crime and in recent times, cybercrime are born out of deviant adaptations to abandon the desired goal, legitimate means to achieve the goal or possibly both.

ChannelsTv through their online platform online September 15th 2022 reported that “Two proprietors of a center for training of internet fraudsters (Yahoo boys) and seven others have been arrested by the Benin Zonal command of the operatives of Economic and financial crimes commission. They were arrested on Tuesday September 15th 2022, in Benin City, Edo State at the internet fraud coaching center (A.K.A. HK).”

DailyPost.ng February 18th 2021 reported by Ishola Oludare

“A training center for internet fraudsters has been discovered at the federal capital territory, Abuja. Economic and Financial Crimes Commission uncovered the underworld academy for the grooming of internet fraudsters, known as yahoo boys. It was located in Arab Contractors Area of Mpape Hills – a suburb of Abuja. They were mostly school leavers ages 18-25.”

Tribune online May 12th, 2022

“A man who runs an academy where internet fraudsters are being trained to defraud people has been arrested along with 16 trainees at the academy by operative of the Economic and financial crimes commission on Thursday May 12 in Abuja-Lokogoma- a suburb of Abuja”.

Retrieved from EFCC website on 8th October 2022

“Economic and Financial Crime Commission (EFCC) on Thursday November 28th, 2019 arrested 23 internet fraud suspects at a building which is being used as a training outfit for potential cyber criminals in Essien Essien Street, Ikot Ibiok village in Eket Local government Area of Akwa Ibom State. The suspects confessed that they were undergoing training in various aspects of cyber criminality such as love scam, online training scam, and identity theft e.t.c. during questioning, the suspects narrated how they were recruited into the Academy to be trained in Cybercrime. According to them, while they were on training, they still carry out various functions such as cooks, daily master, ICT manager e.t.c to ensure a smooth running of the academy.”

2.2 David McClelland Theory

This is also referred to as the Achievement Motivation theory of entrepreneur. David McClelland theory was psychologist that studied the motivating factors behind the performance and the activity of an entrepreneur to achieve a set goal or objective. He opines that the motivating factor behind the commitment and determination of an entrepreneur is dependent on the goal they want to achieve. The theorist stated that with high level of achievement anticipation will equally incorporate high level of performance. It is noteworthy that goal setting encourages performance. Performance without a fruitful venture ends in total waste of resources both human and material resources.

2.3 Schumpeters Theory

This theory was proposed by Joseph Schumpeter in 1911 is also called innovation theory of entrepreneurship. The theorist believes that entrepreneur brings change through the introduction of new technological processes or products, unlike Kirzner who believe that anybody has the potential to be an entrepreneur and they operate within set production constraints (Nwafor, 2007). In order for an entrepreneur to become a specialist, he or she must have that creative or innovative ability. The innovative potential of every entrepreneur guarantee the sustainability of that entrepreneur in the market.

Innovation is different from fraud in business as innovation is always out to improve on ideas in order to satisfy a need and not necessarily to make money by cutting corners or seeking an avenue to cheat people. The theory vehemently opposed to that idea. For an entrepreneur to perform better than his or her equals, that innovative and creative ability is not negotiable. According to Gallouj (2002), the effect of technology innovation performance of organization generally is three (3)-way approach. The first approach is that the introduction and acceptability of ICT may improve productivity and economic performance which is called technologist, the second approach believes that innovation manufacturing and services are different sector known as service orientation while the third approach called integrative explores the boundaries between goods and services and try to bridge the gap. Despite the approach, be it technologist, integrative and service oriented approval toward innovation is critical to the success of very entrepreneur and nor being deceptive in entrepreneurial activities.

2.4 Thomas Cochran's theory of Entrepreneurship

This is another theory of entrepreneurship that needs to be considered in this research work. Some of the cultural values and norms inculcated into individuals go a long way in determining the choice of business and human endeavor. This is a sociological theory of entrepreneurship postulated by Thomas Cochran. The theorist opines that the environment in which an individual is reared, determines the entrepreneurial urge of the individual (Ngige, 2016). He further asserted that entrepreneurs are not seen as being deviant or supernormal individuals, but rather as representing society's model personality. Cultural values should be reflected in the economic growth and development of every nation. Cultural values that emphasizes the need to be determine and succeed as an entrepreneurs' need to be appreciated rather than picking interest in criminal activities in order to make profit or gain

2.5 Alert Theory of Entrepreneurship

The Alert theory was advanced by Kizner in 1997. The theorist discovered that market which is the supplier and the customer's behavior plays a very significant role toward achieving a set goal. Therefore market situation and availability is a determining factor for an entrepreneur success. The market condition must be ascertained by entrepreneur before venturing into business. The idea of the theorist has no bearing with the idea of cybercrime measuring this type of market or business (Cybercrime Entrepreneurship). Every reliable market must be visible to access unlike the cybercrime entrepreneurship which is carried in hide-out (either at night or hidden places). The theorist also believes that an entrepreneur operates within the available opportunity that arises out of the technology submerged society.

2.6 Tolerance for Ambiguity

Budner (1982) cited in Irwan(2015) defined tolerance ambiguity as the propensity to view situation without clear outcomes as attractive as threatening. Schere (1982) cited in Irwan(2015) opine that tolerance for ambiguity is an indispensable attribute for a good entrepreneur because facing challenges and potentials for success associated with business startups are by nature unpredictable. Bushan & Amal (1986) also opine that tolerance for ambiguity as an emotional reaction towards ambiguous environment, complex, and changing situations. This is evident in the fact that entrepreneur that have low tolerance for ambiguity will face stress, reacts prematurely, avoids ambiguity. According to Kirton(1981), a person who has high tolerance for ambiguity will feel the ambiguous situations as challenging, desirable and interesting because it requires an approach due to changes and problem from innovative perspective. The ability to react quickly and able to adjust successfully will be a critical ability that need to be increased (Cristo and Kleanthis, 2011).

Most cybercrime entrepreneurs ventured into it considering the perceived benefits and the huge financial gains which are closely related to the numbers of boys working under them. They believe in concerted effort of realizing their gains by employing the scheme of teaching the inexperienced neophyte, greenhorns how to get prospective clients or victims. At the early stage, the neophytes getting the victims which are passed out to more experienced worker in the venture or preferably the entrepreneur for finishing.

They are well prepared for situations that don't yield the expected gains or perhaps the victim end up not playing the game or taking the hook. They are also prepared to handle situation where the boys or some of the boys are not bringing the victims as anticipated and as such not viable for the entrepreneur for a said period. Having been in the business for some time, they understand the

dynamics associated with it. They are so well prepared for a situation where their trainee eventually pulls out after spending so much on them in terms of feeding, clothing, social life and even internet connectivity. They are also well prepared for police and other agencies disruptions through arrests.

3.0 Conclusion

We offer our analysis as a first step in seeking an in-depth and innovative approach in explaining and understanding Cybercrime Entrepreneurship owing to its nascency. This research work presents a critique and validity assessment of conventional Entrepreneurship theories to Cybercrime Entrepreneurship. This approach tries to merge Cybercrime Entrepreneurship and the traditional Entrepreneurial perspectives by underscoring the universality of Entrepreneurial nature. Theoretically it contributes to the general understanding of the strengths and limitations of traditional entrepreneurial theories in relation to Cybercrime Entrepreneurship and reveals the extent to which these theories are valid explanation for Cybercrime Entrepreneurship, inter-temporarily. This paper answers the question of to what degree or extent the variables identified in the conventional Entrepreneurship theories as determinants are reflected in the emergence of Cybercrime Entrepreneurship as well the degree or extent the existing aetiologies of conventional Entrepreneurship could be transported into Cybercrime Entrepreneurship. It unearths how young individuals are motivated by their sociological, psychological, criminological and economic factors to become Cybercrime Entrepreneurs. The crux of this research work is that, it posits that Cybercrime Entrepreneurship is a function of both psychological, sociological, criminological and economic factors and conditions of the individuals and not on only one set of factors. The negative effect of cybercrime entrepreneurship on human capacity development can never be overestimated as far as quality and accountability is concerned. Cybercrime entrepreneurship encourages fraud and cheats while it discourages diligent, hard work, and pursuit for quality education among young individuals in the society.

The paper makes the following recommendations:

- i. Government should put more effort into enacting relevant laws and policies that will discourage youth individuals or people from cybercrime entrepreneurship and cybercrime itself.
- ii. Though there is ephemeral success associated with cybercrime entrepreneurship, its flamboyant and epicurean lifestyle of their perpetrators and its underlying fraudulent nature, the right doctrine of entrepreneurship should be inculcated into our future leaders even from primary school level.
- iii. There should be consistent reinforcement learning through public awareness of cybercriminal trials and their ultimate punishment which will ensure good cyber hygiene within the society.
- iv. Government should put in more effort into making the society better by providing good amenities and providing enabling environment for economic, educational and human security well-being.
- v. The role of parenting, religious institutions and the community as a tripod in molding the moral and value system of people (both young and old) should be reinforced.

- vi. The government should collaborate with other countries since cybercrime is a cyber-pandemic by building technical expertise to combat the cybercriminals as part of her security measures.

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Determinants of Small and Medium Enterprise Performance: The Role of Innovation in an Organisation

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Abstract

Background: *Given that small and medium-sized enterprises (SMEs) account for 48 percent of Nigeria's gross domestic product (GDP), improving their efficiency and making sure they last is crucial. Nevertheless, a significant number of new ventures in this sector fail every year. The study implies this through an examination of the relationship between innovation and small and medium-sized businesses. This research investigates both internal (organisational structure) and external factor (organisational competition) that affect an organisation.*

Purpose of study: *Considering Nigeria's infamously high business failure rate, studies examining the performance of small and medium-sized enterprises (SMEs) are becoming increasingly important. The aim of the study was two-fold. As a first step, to identify the internal (organisational structure) and external factors (organisational competition) that have an impact on the efficiency of SMEs. The second purpose of this study was to determine how innovation mediates the relationship between internal and external factors and the performance of SMEs.*

Design/Methodology/Approach: *The context of this study was the administration of questionnaires to business owners and managers of small and medium-sized enterprises (SMEs). A positivist approach was adopted utilising the quantitative research design with stratified and simple random sampling as the sampling method, the sample comprising 100 SME owners/managers within Lagos State, Nigeria.*

Results/Findings: *The findings show the existence of a positive and significant relationship between the organisational structure and organisational competition of SME performance. Further, the findings also show that innovation mediates the relationship between organisational structure, organisational competition, and SME performance.*

Recommendations: *Based on the findings, interventions are proposed that relate to how SME performance can be improved within a business environment of an organisation.*

Managerial implication: *The study highlights the need for ongoing research and interventions that foster innovation and enterprise capability development as a means of combating the high failure rate experienced by small and medium-sized businesses.*

Keywords: *organisational structure, organisational competition, innovation, SMEs, performance.*

Introduction

Small and medium enterprises (SMEs) are pivotal building blocks in the industrial and economic development of any nation. They significantly impact the economy via employment generation, raising national living standards and contributing to the gross domestic product and the utilization of local resources in the production of goods and services (Effiom & Edet, 2020). The Smedan and National Bureau of statistics, 2013 report describes SMEs as growth-enhancing sector that not only create and utilize local capital for productive purposes, but also improve the standards of living of the population (Effiom, Ebehung, Uche, Ovat & Obiakor, 2022). In developing economies, they are touted as increasing the levels of innovation. In view of these, nations are becoming more sensitive to the needs of SMEs by creating a friendly business environment and

instituting policies and programs that will enable SMEs to overcome the constraints and challenges they face (Effiom *et al.*, 2022). The development of SMEs is a high priority for many governments around the world due to their contribution in creating employment opportunities and developing innovation. Research emphasize innovation as a vital driver of maintaining organisational competition and improving organisational structure especially for SMEs (Ali, Hao & Aijuan, 2020).

There seems to be a high degree of correlation between the degree of unemployment, poverty, underdevelopment of a nation and the vibrancy of its SMEs. Effiom *et al.* (2022) argue that the Nigerian economy has not fared better because SMEs have not played their expected role. Nevertheless, the performance of SMEs in Nigeria cannot be considered inconsequential because they have been able to encourage the use of local resources and, in some cases, have aided the conversion of local inputs into either intermediate or finished goods. Moreover, the survey on MSMEs carried out by SMEDAN in 2010 found that there were approximately 17.3 million MSMEs that employed almost 32.4 million persons and were responsible for approximately 46.54% of nominal GDP. In 2013, the number of MSMEs in Nigeria rose to approximately 37 million, providing work for approximately 59.7 million persons while accounting for 48.47% of nominal GDP and 7.27% of exports (Effiom *et al.*, 2022). The survey, however, notes that the proportion of SME exports is a far cry when compared to that of Malaysia, Thailand, China, and India, where SMEs are the engine of growth and the subsector is responsible for a major share of their exports (Smedan and National Bureau of statistics, 2013).

Previous research acknowledge that innovation allow firms to achieve desired outcomes by acquiring new technologies and knowledge that makes an organisation to be competitively inclined and develop a better organisational structure (Ali *et al.*, 2020). In African context, SMEs contribute significantly to increasing exports and offering cheaper products compared to their counterparts throughout the world. However, extant literature revealed the positive and significant association between innovation and performance of an organisation (Sahoo, 2019 & Vu, 2020). Also, in a systematic review on innovation in SMEs context, Saunila (2019) argued that empirical research conceptualise innovation as a process or an outcome affecting SMEs performance especially in manufacturing sector. However, there are limited study on organisational structure, organisational competition, and the mediating role of innovation on SME performance. Thus, this study examines the determinant of small and medium enterprise performance, investigating internal factor (organisational structure), external factor (organisational competition) on performance of SMEs using innovation as a mediating variable in three sub-sectors of SMEs namely, manufacturing, service, and information technology.

The present study therefore aimed to contribute to the corpus of knowledge by creating a link between innovation and the determinant of SME performance. Although the determinant of SME performance has been used by previous researchers. However, limited studies have delved into the mediating effects of innovation on the relationship between organisational structure, organisational competition, and SME performance. Makanyeza and Dzvukeye (2015) argued that innovation is essential for organisational structure and for organisation to compete effectively and successful organisation operations. Thus, innovation is the key component of business performance as it will solve operational issues, make business competitive and lay a good structure for an organisation to operate.

Literature review

Organisational performance

Organisational performance has always been a crucial factor, whether it is a profit or a nonprofit organisation. Organisational performance is mainly associated with the term effectiveness; more specifically it is considered a dimension of effectiveness (Hamann & Schiemann, 2021; Xanthopoulou, 2021; Xanthopoulou & Sahinidis, 2022). However, a general definition of performance is the extent to which organisations achieve all their planned goals. However, a firm or business performance is of primary concern for most management researchers and practitioners (Aminu, 2015). Thus, the measurement of organisational performance is discussed in many studies and described as an essential process both in business and public organisations (Prokop, Stejskal & Hudec, 2019). Therefore, the performance of different sectors, firms and surroundings is likely to be determined by a range of different measures, hence the development of performance evaluation models such as the Balanced Scorecard (Malina & Selto, 2004). In summary, a successful firm, or a firm performing well, may be defined as one that is able to achieve its goals via the development and implementation of a value-creating strategy (Aminu, 2015).

Innovation

Different authors defined innovation differently based upon concept and importance. Such as innovation is an idea, a product, or process, system or device that is perceived to be new to an individual, a group of people or firms, an industrial sector or society in general. Innovation refers to doing something different, which includes something risky, costly and time consuming (Costello & Prohaska, 2013). Innovation recognise innovative goods, services, and innovations that need to be embraced and implemented. Innovation is the goal, task, and objective claims of organisations that entail vocabulary. Also, innovation encourages the creation of new processes, goods, services, and technology (Kahn, 2018).

Several researchers over the years have studied the relationship between innovation and organisational performance. To achieve organisational performance, innovation plays an essential role (Imran, Ismail, Arshad, Zeb & Zahid, 2021). Researchers have also shown that innovation plays an important role in an organisation's performance (Shanker, Bhanugopan, Van der Heijden & Farrell, 2017). Through innovations, organisations can enhance their performance efficiency. Also, several studies have noted the direct effect of innovation on organisational performance (Al-Hakim & Hassan, 2016; El-kassar & Singh, 2019; Nawab, Nazir, Zahid & Fawad, 2015). However, Zafar, Hafeez and Shariff, (2016); Aboramadan, Albashiti, Alharazin and Zaidoune, (2019), have noted that innovation mediates the relationship between organisational structure, organisational competition, and organisational performance.

Organisational structure

Organisational structure is an important factor during the business performance process. Hameed, Salamzadeh, Abdul Rahim and Salamzadeh, (2022), stated that organisational structure defines the relationship between people and technology, which plays a vital role in organising technology, people, decision-making, management, and control. Poor organisational structure diminishes the success of the organisational performance effort. Therefore, it should always be considered during the organisational process so that the impact is not being ignored. Hashem, (2019) acknowledged that an organisation with mechanistic and bureaucratic value systems enhances management

control through a centralised decision-making process and formal rules and instructions. Flexible organisational structure also enables organisational performance through its encouraging creativity and innovativeness in the organisation, hence there is a need for less bureaucracy and more empowerment and participation in the organisation. However, some critical factors in the organisational performance effort will include the changes in organisational structure through efficient teams for organisational performance implementation, as well as appropriate allocations of responsibilities and job definitions where a significant change in the organisational structure with emphasis on cross-functional work teams enables achieving successful organisational performance (Nisar, Ahmad & Ahmad, 2014; Hasnan, Ringim & Razalli, 2017).

Organisational competition

By creating value for consumers as part of a business strategy, SMEs can achieve long-term viability. Differently put, an organisational competition serves as a platform for developing a long-term growth strategy and thus relates to creating value for consumers (Jones, Kato, & Weinberg, 2003). Today's businesses face intense national and international competition, with all striving to provide goods and services that are better and cheaper than those of their competitors. Organisational competition refers to the ability of an organisation to generate profits that are higher than the industry average because of its distinct market position (Breznik 2012). Positional superiority is achieved through providing higher customer value or attaining lower relative costs in the market (Gitau & Kosgei 2016). Organisational competition is the next important issue an organisation should take into concern during the industrial evolution periods. In global competition, there are two types of organisational competition, the temporary competition which typically results in high profits, but in limits duration. The other is sustainable competition which is proceeded when the competitors cannot imitate the source of advantage (Banmairuroy, Kritjaroen & Homsombat, 2022). It is revealed that the organisational resources with characteristics of value, rareness, imitability, and non-substitutability were the key factors for creating the organisational competition according to the resource base view theory (Barney, 2007). Thus, organisational competition could help companies to maintain business operating smoothly in the rapid change of technology's life cycle and agile situation. Therefore, organisational competition obtain long-term benefits and avoid any potential strategic rivalry in an organisation (Ge, Yang, Jiang, Gao, Du & Zhou, 2018).

Theoretical framework

Contingency theory contends that there is no one best way of organising: contextual factors play a key role in predicting the effectiveness of a given structure (Birkinshaw, Nobel & Ridderstrale, 2002). Specifically, an alignment between organisational characteristics and contingency factors produces better performance than a misfit. Contingency perspective may be useful to uncover specific effects of firm resources and strategic analysis capability. The effects of firm resources (human resources and financial resources) and strategic analysis capability on organisational performance may be enhanced or restricted, depending on the specific contexts (Organisational structure and organisational competition) in which the firm operates. The contingency view has been used in both theoretical and empirical studies, for instance on board roles, board effectiveness and firm performance (Nicholson & Kiel, 2003), national contexts and the behavioural approach for boards (Charreaux, 2005). However, scholars argued that a contingency approach and the related analysis of mediating effects of innovation provide an appropriate theoretical lens to explore how firm resources and innovation affect organisational performance. Prior studies have

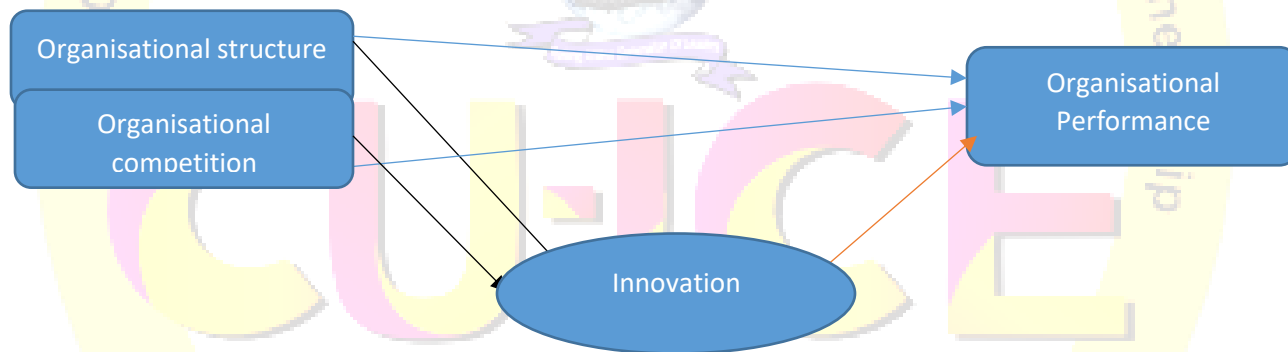
used RBV to explain the competitive value of innovation and business performance (Terziovski, 2010; Cheng, Yang & Sheu, 2014; Wang, 2014), strategy formulation process and innovation performance (Nwachukwu, Chladkova & Olatunji, 2018), human resources and sustainable competitive advantage (Huselid, 1995; Kamoche, 1996). The difference in performance is because of a firm possessing valuable, rare, and difficult to copy resources that competitors do not have (Wernerfelt, 1984). The resources such as assets, capabilities, attributes, information, organisational processes, knowledge, among others, controlled by firms enable them to develop and implement strategies that enhance their operations (Barney, 1991). Thus, innovation is not just the outcome of organisational performance, but it is contingent on organisational structure, organisational competition owned and controlled by a firm. Arguably, in terms of organisational performance, a well-managed human resources, and financial resources, may enhance the firm's capacity to develop new products and services which could lead to improved customer satisfaction, customer patronage and thus contribute positively to organisational performance.

Model of the study

The model presented below shows the hypothesised relationship for the present study between the independent variables (organisational structure and organisational competition) and the dependent variable (organisational performance) with the mediating variable (innovation).

Independent variable

Dependent variable



OS, organisational structure, OC, organisational competition. INN, innovation, OP, organisational performance.

FIGURE 1: Conceptual model of the relationship between organisational structure, organisational competition, and innovation in organisational performance

The model is based on the literature overview and theoretical framework that links the independent variables to the predictor variable and the dependent variable. From this, the following hypotheses were formulated:

- H₁ Organisational structure has a significant effect on organisational performance in Nigeria.
- H₂ Organisational competition has a significant effect on organisational performance in Nigeria.
- H₃ Innovation has a significant effect on organisational performance in Nigeria.
- H₄ Innovation significantly influences the relationship between organisational structure and organisational performance in Nigeria.
- H₅ Innovation significantly influences the relationship between organisational competition and organisational performance in Nigeria.

Research method

The study utilised a cross-sectional survey design, which was considered a suitable method to generate relevant information on the current situation (Williams, Onsman & Brown, 2010). The study population was not ascertained when the study conducted. Hence, 100 copies of questionnaires were distributed among owners and managers of firms in 20 local government areas in Lagos State, Nigeria, the chosen domain of the study. Stratified and simple random procedures were used to distribute copies of the questionnaire to the local government districts, involving a cross-section of enterprises in the three sub-sectors mentioned earlier, namely manufacturing, service, and information technology.

Data were generated utilising self-administered questionnaires. The questionnaire content was adapted from the literature, organisational structure is operationalized through two reflective first-order constructs: formalisation and centralisation and have three items each i.e., six (6) items on organisational structure adapted from Islam, Jasimuddin and Hasan (2015), organisational competition was measured using quality and flexibility with eight (8) items adapted from Li and Zhao (2006), three (3) items on innovation adapted from Hughes and Morgan (2007), and eight (8) items on organisation performance derived from the work of Spillan and Parnell (2006).

The items used in this study explain the Contingency theory as they focus attention on resources which can be defined as those assets that are tied semi-permanently to the firm. Unique assets are difficult for competitors to replicate and thus serve to differentiate their possessors. The present study does not suggest that organisational structure, organisational competition, innovation, and organisational performance independently constitute unique resources, but rather that they can collectively contribute to the creation of unique resources. While each of these four elements is necessary, individually they are not sufficient for creating positional advantage. However, past research suggests that each element is adequate to offer strengths, and together they can help a firm be uniquely performed efficiently.

The present study used Partial Least Square Structural Equation Modelling (PLS-SEM) on SmartPLS2 to analyse the data and followed the two-stage strategy for analysing the measurement model and the structural model separately (Urbach & Ahlemann, 2010). The following main criteria and techniques were employed to estimate the outer and inner model. The first stage considered unidimensionality, reliability, convergent validity, and discriminant validity, while the second stage assessed the goodness-of-fit and study hypotheses study framework. The criteria to analyse the outer model were coefficient of determination (R-square, R²), path coefficient, and effect magnitude (f²).

Results

To evaluate the reliability and validity of the instruments utilised for data collection, the measurement model was developed using PLS-SEM path modelling. Table 1 illustrates the reliability and the validity of the latent variables of the study.

TABLE 1: Construct reliability and validity (measurement model)

Construct	Items	Loadings	AVE	CR
Organisational Structure	OS1	0.80	0.70	0.90
	OS2	0.89		
	OS3	0.78		
	OS4	0.86		
Organisational Competition	OS1	0.88	0.57	0.92

	OS2	0.90		
	OS3	0.91		
Innovation	INN1	0.80	0.70	0.91
	INN2	0.86		
	INN3	0.88		
	INN4	0.79		
Organisational Performance	OP1	0.78	0.70	0.93
	OP2	0.81		
	OP3	0.85		
	OP4	0.86		
	OP5	0.87		
	OP6	0.82		

Note: Some items were deleted due to their insufficient loadings.

Table 1 demonstrates the reliability and validity of constructs of the study. Construct reliability and convergent validity of components were assessed using composite reliability and Average Variance Extracted (AVE), as indicated by Garson (2016). Composite reliability coefficient should be ≥ 0.7 , whereas AVE coefficient should be ≥ 0.5 (Garson 2016). Item loadings should be above 0.5. Table 1 shows that all of the items satisfied the minimum benchmark for item loadings (i.e. 0.5), composite dependability (i.e. 0.7) and AVE (i.e. 0.5), thus demonstrating reliability and convergent validity. The data were subsequently subjected to discriminant validity test using Fornell-Larcker criterion. The outcome is presented in Table 2.

TABLE 2: Discriminant validity using fornell-larcker criterion

		1	2	3	4
1	Organisational Structure	0.84			
2	Innovation	0.55	0.83		
3	Organisational Performance	0.62	0.54	0.83	
4	Organisational Competition	0.63	0.56	0.68	0.90

Note: The bolded numbers represent the square root of the AVE of each latent construct.

AVE was employed by the study to establish discriminant validity using the Fornell–Larcker criterion. For discriminant validity to exist, the square root of the AVE should be higher than its correlation with other latent variables (Garson 2016). In Table 2, the bolded figures represent the square root of the AVE of each latent component. The square roots of the AVE of each construct are higher than their correlations with other latent constructs. Based on the Fornell-Larcker criterion, the data indicated discriminant validity.

Subsequently, the study hypotheses were examined by generating the structural model, bootstrapping the data 5 000 times. The results are shown in Table 3.

TABLE 3: Direct path coefficient

Relationship	Beta Coefficient	SE	T statistics	P Value	Decision
OS-> OP	0.27	0.11	2.509	0.01	Supported
OC->OP	0.42	0.12	3.441	0.00	Supported
INN->OP	0.39	0.13	2.955	0.00	Supported

Note: OS represents Organisational Structure; OC represents Organisational Competition; INN represents Innovation; OP represents Organisational Performance.

It is evident from Table 3 that organisational structure (OS) is significantly related to SME performance at less than 5% ($\beta=0.27$, $p<0.05$). H1, which indicates that organisational structure has a considerable effect on organisational performance in Nigeria, is therefore empirically supported. Similarly, organisational competition (OC) has a positive and significant relationship with the performance of SMEs in Nigeria at less than 1% significant level ($\beta=0.42$, $p<0.01$). Evidently, H2, which indicates that organisational competition has a considerable effect on organisational performance in Nigeria, is also experimentally supported. Finally, and in similar fashion, innovation (INN) does have a positive and significant relationship with the performance of SMEs in Nigeria at less than 1% significant level ($\beta=0.39$, $p<0.01$). Therefore, H3, which claims that innovation has a considerable effect on organisational performance in Nigeria, is supported empirically. Next, the study examined the mediating influence of innovation in the relationship between organisational structure, organisational competition, and organisational performance. The outcome of the data analysis is provided in Table 4.

TABLE 4: Indirect path coefficient

Relationship	Beta	SE	T statistics	P Value	Decision
OS->INN->OP	0.27	0.09	2.936	0.00	Supported
OC->INN->OP	0.19	0.09	2.132	0.03	Supported

Note: OS represents Organisational Structure; OC represents Organisational Competition; INN represents Innovation; OP represents Organisational Performance.

Table 4 presents the results of the analysis of the mediating influence of innovation on the relationship between organisational structure, organisational competition, and organisational performance. From Table 4 it can be determined that innovation (INN) positively and significantly mediates the relationship between organisational structure (OS) and organisational performance (OP) ($\beta=0.27$, $p<0.01$) at less than 1% significant level. This suggests an indirect relationship between organisational structure and organisational performance that is accounted for by innovation. Thus, H4, which claims that there is a substantial association between innovation and organisational structure and organisational performance in Nigeria, is supported empirically. Table 4 further shows that innovation (INN) positively and significantly mediates the association between organisational competition (OC) and organisational performance (OP) ($\beta=0.19$, $p<0.05$) at less than 5% significant level. Hence, it can be claimed that organisational competition in the case of SMEs positively and significantly leads to innovation, while innovation positively and significantly leads to improved organisational performance. Therefore, this study empirically validates H5, which argues that there is a substantial relationship between innovation, organisational competition, and organisational performance in Nigeria.

Table 5 illuminates the variance in performance of SMEs in Nigeria resulting from organisational structure, organisational competition, and innovation.

TABLE 5: R-square

Construct	R-Squared
Organisational Performance	0.52
Innovation	0.36

Together, organisational structure, organisational competition, and innovation account for 52% variance in the performance of SMEs in Nigeria, while organisational structure and organisational competition account for 36% variance in the innovation of SMEs in Nigeria.

The effect size of each path in the whole structural equation model was investigated using f^2 . The results are presented in Table 6.

TABLE 6: Effect size of exogenous variables

Construct	f^2	Firm Performance
Organisational Structure	0.09	Small
Organisational Competition	0.20	Medium
Innovation	0.19	Medium

Note: NA means Not Applicable

According to Cohen (1988), f^2 values of 0.02, 0.15 and 0.35 represent small, medium, and large impacts respectively. When the effect size of the exogenous variables on the endogenous variable of this study was tested, the results showed that the effect size of organisational structure on organisational performance was 0.09, suggesting that it has a small effect size on organisational performance. On the other hand, organisational competition had a f^2 value of 0.20, indicating that organisational competition has a medium effect on organisational performance. Finally, and similarly to organisational competition, innovation had a f^2 value of 0.19, demonstrating that innovation has a medium effect size on organisational performance in Nigeria.

Finally, Table 7 is utilised to show the summary of the test of hypotheses of the study.

TABLE 7: Summary of the test of hypotheses

Hypotheses	Relationship	Beta	T Statistics	Decision
H ₁	OS -> OP	0.27	2.509	Supported
H ₂	OC-> OP	0.42	3.441	Supported
H ₃	INN->OP	0.39	2.995	Supported
H ₄	OS->INN->OP	0.27	2.936	Supported
H ₅	OC->INN->OP	0.19	2.132	Supported

From the results presented in Table 7 it is apparent that organisational structure has a positive and substantial effect on the performance of SMEs in Nigeria ($\beta=0.27$, $p<0.05$). Hence, an increase in organisational structure will lead to a corresponding increase in the organisational performance of SMEs in this country. Similarly, it can be derived from Table 7 that organisational competition is a positive and significant predictor on the performance of SMEs in Nigeria ($\beta=0.42$, $p<0.01$). Thus, a rise in organisational competition attitude will lead to a comparable increase in the organisational performance of SMEs in the country. Moreover, innovation is positively and significantly associated with the performance of SMEs in Nigeria ($\beta=0.39$, $p<0.01$). Consequently, growth in innovation will lead to an increase in the organisational performance of SMEs. It is also evident from Table 7 that innovation has a mediating effect on the relationship between organisational structure and organisational performance ($\beta=0.27$, $p<0.01$). Finally, it is evident from Table 7 that innovation significantly mediates the relationship between organisational competition and organisational performance ($\beta=0.19$, $p<0.05$). Therefore, it may be claimed that organisational competition by a firm leads to higher innovation, and ultimately stronger performance.

Conclusion and recommendations

Previous research primarily neglected the innovation phenomenon and failed to explore the direct relationship between organisational structure and organisational competition (the independent variables in the present study) and organisational performance (the dependent variable in this study). This is even though innovation is considered a mediating variable in the relationship between organisational structure, organisational competition, and organisational performance of SMEs. Based on empirical evidence within a Nigerian context, the study indicated that innovation mediates the connection between organisational structure, organisational competition, and organisational performance. It therefore reveals that SME owners/managers must take organisational structure and organisational competition more seriously as it may enhance their performance for a competitive edge over their SME rivals. The study makes a practical contribution by linking the independent variables, dependent variable, and the predictor variable in a single model. Furthermore, it explains how Contingency theory illustrates the linkage between innovation, organisational structure, and organisational competition, which ultimately leads to organisational performance. The findings of this study are in line with the work of Imran *et al.* (2021); Hasnan, Ringim and Razalli, (2017); and Ge *et al.* (2018)

Limitations

The article only focuses on the SME sector as a starting source within a particular context. A dynamic survey to examine the relationship between innovation and organisational structure, organisational competition and organisational performance in other sectors such as large enterprise and insurance, among others, could assist to further substantiate the conclusions from the present study.

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THE CONTRIBUTIONS OF CRYPTOCURRENCIES TO FINANCIAL INCLUSION AND ENTREPRENEURSHIP DEVELOPMENT IN AFRICA

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ABSTRACT

The COVID-19 pandemic has battered the entire world, including the already vulnerable African continent, resulting in many years of development setbacks. Across Africa and particularly in Nigeria, currency devaluation and low uptake of traditional bank accounts further fuel the usage of cryptocurrencies as a means to earn, trade, and spend money. The goal of this study was to discover the contribution of cryptocurrencies to the Financial Inclusion and Entrepreneurship Development in Africa. The study presented conceptual definitions of terms as well as relevant Literatures and financial inclusion theories to justify research topic. The research used Survey research design as well as Secondary and primary data sources. Using Lagos State in South West and Abuja in North Central as the population of study, the sample size drawn for this research was a total of two thousand (2000) respondents from Lagos and Abuja, who are well informed about CryptoCurrencies. Detailed research instrument was developed and administered. A comprehensive online questionnaire was designed and administered to respondents. Findings

showed that 75% of Lagos respondents and 76% of Abuja respondents affirms that Cryptocurrencies has helped fostered Africa's economy. While 70% from both states equally considers Cryptocurrencies as another avenue for entrepreneurship development in Africa. 64% and 62% of the respondents in Lagos and Abuja respectively thinks that the legislation of Cryptocurrencies in the banking sector in Africa will contribute to Economy of Africa countries and have a positive impact on the banking sector as well as the African society. 76% and 66% of the respondents representing Lagos and Abuja respectively considers Cryptocurrencies as one of the answers to Africa's economic challenges and they likewise believe that Cryptocurrencies have a very bright future in Africa. It was concluded that advances in innovation have ushered in new approaches to digital transformation and financial service provision. With the growth in internet connectivity in sub-Saharan Africa, emerging technologies such as Blockchain and cryptocurrencies have the potential to advance financial inclusion. The study recommended that digital partnership among African states can help foster the legislation and regulations of Cryptocurrencies. This will reduce the risk associated with fraudulent activities.

INTRODUCTION

According to (Daniel & Thomas, 2022), "Cryptocurrencies are digital assets or digital representations of value that depend on distributed ledger technology such as block chain. Cryptocurrencies can offer new opportunities for promoting sustainable development such as provision of innovative and inclusive financial services to underbanked/unbanked people; facilitating fast, easy and cheap digital payments; bringing new areas for tax revenue; ensuring safer store of value in some cases; and supporting biodiversity protection". Along this line, the usage of cryptocurrencies could support the contribution to the achievement of sustainable development goals (SDGs) such as SDGs 1 (no poverty), 5 (gender equality), 8 (decent work and economic growth), 10 (reduced inequalities), 11 (sustainable cities and communities), 14 (life below water), 15 (life on land) and 17 (partnerships for the SDGs) (Daniel & Thomas, 2022). However, it is also important to underline that with opportunities come core challenges and risk (Emmanuel, 2021) mentioned that "Block chain is the technology underpinning cryptocurrencies such as Bitcoin, Ethereum, and Litecoin, among others. The emergence of cryptocurrencies in Africa is particularly exciting due to the opportunities they provide for Africans in cash-based and informal economies to participate in alternative financial infrastructures". (Emmanuel, 2021) revealed that Many traditional financial infrastructures across Africa are often subject to high levels of volatility and ineffective governance. "Block chain financial technology allows for alternative financial infrastructures that increase monetary stability and efficient governance through a decentralised digital financial system".

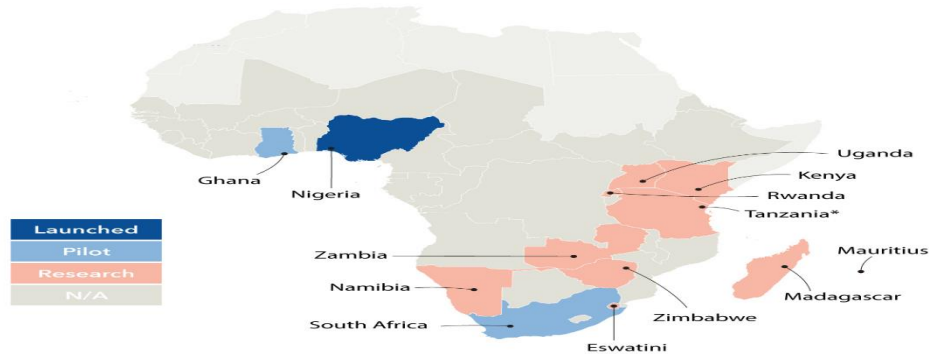
"As a replacement for crypto, most African countries are considering CBDC. Nigeria was the second country after the Bahamas to roll out a CBDC. CBDCs are digital versions of cash that are more secure and less volatile than crypto assets because they are issued and regulated by central banks".

According to (Habtamu F, Saad Q, & Franck O, 2022), every country has different motives for issuing CBDCs because they can also facilitate cross-border transfers and payments. "Sub-Saharan Africa is the most expensive region to send and receive money, with an average cost of just under 8 percent of the transfer amount. CBDCs could make sending remittances easier, faster, and cheaper by shortening payment chains and creating more competition among service providers".

Faster clearance of cross-border payments would help boost trade within the region and with the rest of the world.

Going digital

Several sub-Saharan African countries are exploring the use of central bank digital currencies to enhance payment systems.



Source: Central Bank Digital Currencies Tracker (cbdctracker.org).

*Tanzania is not included in the CBDC Tracker, as it's in an early stage of exploration.

IMF

(Habtamu F, Saad Q, & Franck O, 2022), stated that "there are risks and challenges that need to be considered before issuing a CBDC, however. Governments will need to improve access to digital infrastructure such as a phone or internet connectivity. More broadly, central banks will need to develop the expertise and technical capacity to manage the risks to data privacy, including from potential cyber-attacks, and to financial integrity, which will require countries to strengthen their national identification systems so know-your-customer requirements are more easily enforced".

(Dermirguc-Kunt, 2022) stated that "Not forgetting that the COVID-19 pandemic has battered the entire world, including the already vulnerable African continent, resulting in many years of development setbacks. In this difficult context of compound and complicated crises, digital technologies and digital finance prove to be effective in providing relief for millions around the world, supporting businesses and protecting jobs and livelihoods". As digital technologies transform our economies and societies globally, the world is seeing opportunities in this shift towards digital economies to drive inclusive growth and innovation. The total market capitalization of cryptocurrencies has increased dramatically from \$18 billion in 2017 to over \$2 trillion in 2021. The market cap then dropped to \$1 trillion by September 2022(Dermirguc-Kunt, 2022).

According to Babalola, Director for Africa at Binance, "with the youngest population in the world, the African workforce is predicted to be the world's largest by 2045. There are around 226 million people aged between 15-24, a vast generation of young people and graduates trying to break into the world of work and because of huge unemployment, the youth of Africa are increasingly seeking alternative and non-traditional routes to a salary. Entrepreneurism is crucial for those wanting power over their own futures and to build businesses and generate wealth".

"Many jobs are now remote due to the pandemic, an increasing number of people have been able to work for start-ups in the crypto and block chain space that are out of the country and even the continent. Meanwhile, through block chain, people can build and access systems not previously available to them, for example micro-lending platforms that can help new businesses to establish themselves".

Figure 1:Source: Central Bank Digital currencies tracker

(Chaum 1983) claimed that "major benefit of the decentralised model is putting power back in the hands of users. The ability to transact on an immutable, censorship-resistant and permission less block chain that cannot be affected by the hyperinflation seen so often in African economies is a huge step towards achieving self-sovereignty over their finances."

(IMF 2021) "Research shows the widespread use of digital finance has been estimated to boost the annual GDP of all emerging economies by \$3.7 trillion. The additional GDP resulting from the use of broader digital finance usage could create up to 95 million jobs across all sectors. The potential boost to African communities brought by cryptocurrency and block chain is invaluable and the impact is already being felt by many".

(Chaum 1983) "While use cases are plentiful, Criminals were quick to capitalise on naive traders and people quickly began to associate crypto with scams or pyramid schemes". (Chaum 1983) "Again, African banks are not permitted to trade in crypto though there has been no resistance among governments to independent trading". "But Government of the day in Africa, have refused to consider its financial Inclusion in banking despite its impact on economies across Africa. The current state of crypto currency usage showed that many government bodies are watching to see how cryptocurrency develops and some may even look to issue their own through central bank digital currencies (CBDCs)".

(Emmanuel, 2021) claimed that "as the number of users grows and grows, there is little doubt the future of cryptocurrencies and block chain development in Africa is set to be a prosperous one. In the meantime, however, what is certain is the lifeline block chain and cryptocurrency has given to Africans, with both delivering financial freedom and inclusion for millions".

"While decentralized finance and block chain technology are scalable and have been operationalized in other countries and regions, African policymakers have struggled with how to reconcile cryptocurrencies with their existing monetary system". Many countries in Africa have, in fact, overlooked this financial innovation—maintaining crypto exchanges but failing to offer a regulatory framework or begrudgingly allowing trading but not providing their citizens an exchange. (Habtamu, Saad, & Franck, 2022),

"The questions to be asked is can the legislation and financial Inclusion of cryptocurrencies truly contributes to further sustainable development in Africa? And how positively has cryptocurrencies contributed to financial Inclusion and entrepreneurship development in Africa". On the strength of this, the study seeks to discover the contribution of cryptocurrencies to Financial Inclusion and Entrepreneurship Development in Africa"

The General objective of the study is to discover the contribution of cryptocurrencies to Financial Inclusion and Entrepreneurship Development in Africa while the specific objectives of the study are to discover:

- How the contribution of cryptocurrencies to financial inclusion has helped Africa further foster Economic growth.
- If cryptocurrencies are entrepreneurship avenue to creating sustainable development in Africa
- If the legalisation of cryptocurrencies in Africa can improve individual Economic status and create sustainability
- How the Contributions of Cryptocurrencies can create avenue for entrepreneurship development in Africa.

The results from this study will educate corporate bodies, government, researchers, students, financial professionals and the general public on the contribution of cryptocurrencies to the Financial Inclusion and Entrepreneurship Development in Africa. It will be a contribution to the body of literature for future researchers who may want to carry out research in this area or related aspect. They will find this material useful, while it forms bulk of academic material in the field of Financial Inclusion generally, thereby constituting the empirical literature for future research in the subject.

LITERATURE REVIEW

A Literature review consist of an overview, a summary, and evaluation of the current state of Knowledge about a specific area of research (Dominick, 2009).

2.1 Conceptual Review

2.1.1 Financial inclusion

Financial inclusion is the provision of, and access to, financial services to all members of population particularly the poor and the other excluded members of the population (Ozili, 2018). Financial inclusion also can be described because the transport of banking offerings at an affordable cost to the vast sections of the disadvantaged and low-income groups (Dev, 2006). Financial inclusion is likewise described because the use of, and get admission to, formal monetary services (Sahay et al, 2015). These definitions have one thing in common which is that they emphasize that each member of the population should have access to available financial services.

2.1.2 Cryptocurrencies and Block chains

The concept of supplementary (Delmolino et al., 2016), alternative, or digital currencies (Chaum, 1983) is not new, but the concept of an open-source currency without a central point of trust, such as a central distribution agency or state lead control, is new (King & Nadal, 2012). A cryptocurrency is a digital asset designed to work as a medium of exchange using cryptography to secure transactions, to control the creation of additional value units, and to verify the transfer of assets. Many different cryptocurrencies exist, each with their own set of rules, see, for example, coinmarketcap.com. Differences among the cryptocurrencies may involve, for example, the choice of the consensus mechanism, the latency, or the cryptographic hashing algorithms

Many applications of block chain technology exist, but we focus our attention on cryptocurrencies. Bitcoin (cryptocurrency known as BTC) was the first example of digital asset, which has no backing or intrinsic value, based on block chain technology.

2.2 Exploring the Digital Currencies Landscape in Africa

According to the World Bank, sub-Saharan Africa has one of the highest remittance rates in the world. In 2019, 3.6% of sub-Saharan Africa's Gross Domestic Product (GDP) was derived from personal remittances- a figure over three times the global average. However, the region also has the world's largest unbanked population, with only 42.6% of those above the age of 15 having an account at a financial institution.

(World Bank 2022), "With the bulk of remittances on the continent being peer to peer transfers, cryptocurrencies have the potential to revolutionise remittances between Africa and the rest of the world". (World Bank 2022) Cryptocurrency-based remittances would result in faster transfers, less logistical constraints, and lower transaction costs due to advanced Block chain technology. "Whereas remittances cannot be considered a form of financial inclusion, their potential application to digital currency infrastructures could usher in more inclusive financial infrastructures".

(GSMA, 2022), "Indeed, in August 2020, sub-Saharan Africa traded USD 18.3 million of the USD 95 million total worth of Bitcoin traded globally in one week – the second highest peer-to-peer Bitcoin trading volume in the world after North America (at USD 28.7 million)". According to (GSMA, 2022), "While it is argued that Bitcoin trading significantly increased in sub-Saharan Africa due to the need to hedge against the volatility of local currencies amid the effects of Covid-19 lockdowns on local economies, Bitcoin.com's analysis shows that 86.3% of the volume was contributed exclusively by the continent's leading economies – Nigeria, Kenya, and South Africa".

(International Finance Corporation, 2019) "Digital currencies are thus arguably positioned as more appealing and accessible alternatives to the status quo. They attract comparatively lower transaction fees and carry less of the bureaucratic burdens prevalent in existing financial systems, even those between neighboring countries". (International Finance Corporation, 2019) "Further, unlike mobile money and traditional currency, which are prone to interference by authorities, most digital currencies such as Bitcoin are resistant to external suppression because they are not controlled by central banking authorities". "For example, during the #EndSARS campaign against police brutality in Nigeria, authorities ordered banks and financial institutions to block donations to the Feminist Coalition, one of the organisations charged with coordinating the protests". Top 10 Countries in Crypto Adoption Index

1. Ukraine
2. Russia
3. Venezuela
4. China
5. Kenya
6. United States of America
7. South Africa
8. Nigeria
9. Columbia
10. Vietnam

Source: "The 2020 Geography of Cryptocurrency Report." (Chainalysis, 2020).

2.3 Obstacles to Digital Advancements

(Demolino K et al, 2016), "In Francophone West Africa, activists are calling for stable, regional currencies independent of European financial institutions that impose economic reliance on the West. Some have speculated that the creation of a regional cryptocurrency based on block chain would finally emancipate their economic systems from unwanted foreign manipulation. Indeed, the establishment of a legally-recognised digital currency in Senegal – the eCFA – demonstrates that feasibility and a framework for digital currency exists".(Demolino K et al, 2016), "However, this potential is faced with constraints across the region such as internet disruptions as well as gaps in cybercrime and data protection and privacy legislation Nonetheless, the mobilisation of young enterprises around technological innovation in combination with civil society and government-led innovation in digital economic expansion hold some promise that block chain utilisation can contribute to Africa's social-economic development on a country or regional needs basis"(Demolino K et al, 2016).

According to (GSMA, 2020), "Central banks could either support or develop the block chain and technology infrastructure upon which third parties could participate, or sidestep the burden of technology infrastructure development and maintenance through designing licensing regimes that allow appropriate third parties to issue digital currencies on behalf of their countries". "However,

to achieve this, countries must have adequate financial and technology policy, including legislation that incentivises cryptocurrency development, ensures cybersecurity and protects user data and privacy"(GSMA, 2020).

According to (International Finance Corporation, 2019) "Government cannot “shut the stable door after the horse has bolted.” Blockchain technologies are the future, and any effort to ban them—or even excessively intervene in their operations—would meet the same fate as other state attempts to circumscribe behavior".

Countries with crypto exchanges but no regulatory framework: Cameroon, Côte d’Ivoire, Ghana, Nigeria, Senegal, and South Africa Countries that allow trading but do not provide an exchange: Botswana, Kenya, Zimbabwe (International Finance Corporation, 2019).

2.4 Potential of cryptocurrency for SDGs’ advancement

2.4.1 Improving financial inclusion

According to (IMF Global financial stability notes, 2022), "Most of the population living in the Sub-Saharan Africa (SSA) region is still ‘unbanked’ or underserved by traditional financial services. In 2021, 60% of the region’s population above 15 years old had no financial institution accounts (compared with 26% of the global population), with the share of women without a bank account 12 percentage points higher than men without a bank account". (IMF Global financial stability notes, 2022), Typical barriers to traditional financial access include the expense of financial services, distance to financial institutions, financial illiteracy, lack of necessary documentation and collateral requirements (Dev, 2006). "One can register accounts via mobile phones to send, receive, spend and convert cryptocurrencies with minimal transaction costs and requirements of documentation and collateral, regardless of the physical distance to financial service providers and the gender of account owners For example, Kenya’s Bitcoin payment service provider, BitPesa, partnered with a German peer-to-peer Bitcoin online lender, Bitbond, to facilitate access to financing: micro, small and medium-sized enterprises (MSMEs) could apply for small business loans from Bitbond based on credit score and business information and have their tokenized loans paid through BitPesa into a local currency mobile money account or bank account in as little as 20 minutes". The initiative was rolled out in Kenya, Nigeria, Uganda and Tanzania. Another example is Nigeria’s SureRemit, a remittance service provider using block chain and its in-house crypto token, RMT, to facilitate remittance transfers to home countries from the global diaspora and the company hosts a global network of over 1,000 merchants and partners; African e-commerce giant Jumia is among this network (Dev, 2006).

2.4.2 Protecting savings of households and businesses against rising inflation (Adrian & Natalucci, 2022), argued that "Many African countries have a long history of much higher inflation rates than the global average and Countries such as Ethiopia, Ghana, Nigeria and Zimbabwe are known for having years of above-region average levels of inflation. In addition to the inflation effects, many countries suffer from depreciation of their national currencies". (Adrian & Natalucci, 2022) claimed "that the pandemic further worsens the situation and Overall consumer price inflation in Sub-Saharan Africa rose by three percentage points in 2021, spurred by supply disruptions and increased energy and food prices experienced since the beginning of the pandemic and likewise, the war in Ukraine and sanctions on Russia are fuelling inflation further with soaring prices in food (e.g., wheat and corn) and energy. The relatively high and still rising inflation threatens the wealth and purchasing power and thus the livelihoods of households in the SSA region, with a disproportionate impact on poor and vulnerable households".

2.5 Theoretical Framework

The theories used for the research are: Public service theory of financial inclusion and Public good theory of financial inclusion. These theories are relevant to the study because they focus on financial inclusion.

2.5.1 Public service theory of financial inclusion

As explained by (Sahay et al, 2015), "Public service theory of financial inclusion states that financial inclusion is a public responsibility which the government owe its citizens, and the citizens expect the government to deliver formal financial services to citizens". (Sahay et al, 2015)"This theory argues that formal financial services should be delivered to all citizens by the government through public institutions. Under this theory, only the government is instrumental in achieving financial inclusion. The public service theory of financial inclusion has some merits. One, the theory suggests that financial inclusion can be achieved when the government takes responsibility for financial inclusion. Secondly, the government has control over the financial system, economic and social structures in the country which the government can use to achieve its financial inclusion objectives". For example, the government can create public banks in the most remote areas of the country to reach the excluded members of the population in those areas. Thirdly, there is increased public confidence when the government assumes full responsibility for financial inclusion through public institutions. (Sahay et al, 2015) Members of the population are confident that financial inclusion programs will work for the greater good of everyone when the government takes full responsibility for financial inclusion

2.5.2 Public good theory of financial inclusion

According to (Ozil, 2018), "The public good theory of financial inclusion argues that the provision of formal financial services should be treated as a public good. The theory argues that formal financial services is a public good, and should be provided to everyone for the benefit of all". There should be unrestricted access to finance for everyone. As a public good, access to formal financial services to one individual does not reduce its availability to others. (Ozil, 2018) This means that all members of the population can be brought into the formal financial sector and everyone will be better-off. Under this theory, all members of the population are beneficiaries of financial inclusion and nobody is left out. Under the public good theory of financial inclusion, an individual or small business that opens a formal bank account can be offered free debit cards (Ozil, 2018).

METHODOLOGY

The researcher adopted the use of Survey research design. Survey is a research method used for collecting data from a predefined group of respondents to gain information and insights into various topics of interest. Kerlinger (1986) define a research design is a plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The study focused on the contribution of cryptocurrencies to the Financial Inclusion and Entrepreneurship Development in Africa using Lagos South West and Abuja North Central Nigeria which are all already predefined and established group of respondents. Bearing this in mind, the researcher employed the use of Survey research method to best cover this pool of respondents.

The population of the study is Lagos and Abuja citizens. Avwokeni (2006), refers to population of study as the "set of all participants that qualify for a study. It is any group of people or objects that are similar in one or more ways which form the subject of the study of the research.

The sample size for this research was a total of two thousand (2000) respondents from Lagos and Abuja, who are well informed about crypto currencies and its impact. The sample size is the subset of subjects that are representatives of the entire population. The sample size was conveniently

chosen from a population of Lagos and Abuja citizens across the two (2) Geopolitical zone in Nigeria (South West-Lagos and North Central-Abuja). One thousand respondents each was drawn from each of the state to represent the zone. The sample size of One thousand (1000) was based on Wimmer Dominic's (1987) recommendation for choosing sample size for multivariate studies- where it was asserted that a sample size of 50 is very poor; 100 is poor; 200 is fair; 300 is good; 500 is very good while 1000 is excellent.

Detailed research instrument was developed and administered. A comprehensive online questionnaire was designed and administered to respondents. The item was carefully administered and meticulously edited bearing in mind the research objectives and question. In this method, data are collected with the help of questions. Through this method, selected respondents of this study had to answer questions via online Questionnaire. Both structured and semi structured questions were used in helping the researcher to get answers and relevant information from respondent. The online questionnaire had a total of twelve (12) questions in total. Some part of the Questionnaire sought some background information about the respondents as well as the contributions of Cryptocurrencies to financial inclusion and Entrepreneurship development in Africa using Forced choice rating scale.

The data was quantitatively and qualitatively analyzed. Quantitative data analysis was done by the use of the on Microsoft Excel on a personal computer and was used to analyze the contribution of cryptocurrencies to the Financial Inclusion and Entrepreneurship Development in Africa. Specifically, frequency tables and pie charts were also used to analyze the data. The study adopted the use of both primary and secondary data. Primary data was obtained through the use of structured online questionnaire to obtain information from respondents which was used to carry out data presentation and analysis. Secondary data was adopted through the use of online journals, articles, books, etc. to support relevant literature.

DATA PRESENTATION AND DISCUSSION

The data collected from the 2 Geo-political zone (South West-Lagos, and Abuja-North Central) was interpreted according to research objectives and research questions.

4.1 Analysis on Southwest, Lagos State

4.1.1 Gender of Respondents

Table 4.1

Valid	Frequency	Percentage %
Male	897	89.7
Female	103	10.3
Total	1000	100.0

Source: Field Survey, 2023

Analysis: Table 4.1. Above indicates the Gender of respondents. 897 respondents representing 89.7% were male, while 103 representing 10.3% were female, this depicts that male respondents were more than female Respondents.

4.1.2 Age Bracket of Respondents

Table 4.2

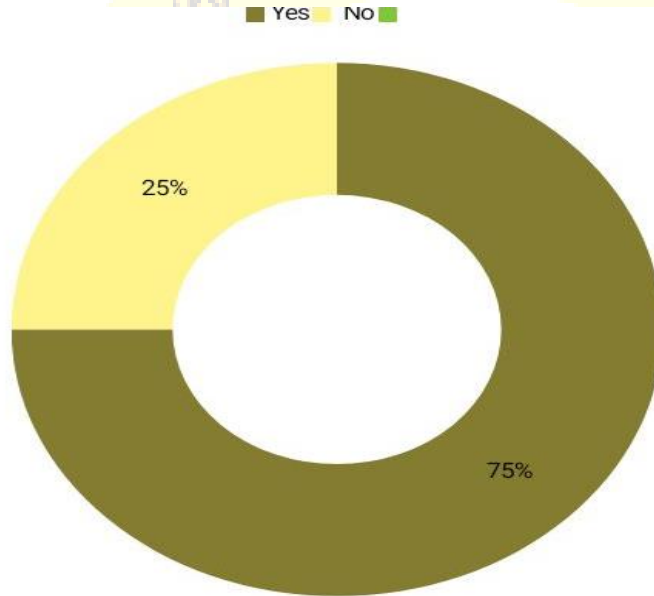
Valid	Frequency	Percentage %
22-25 years	430	43.0
26-30years	475	47.5
31-35 years	80	8.0

36 years and above	15	1.5
Total	1000	100.0

Source: Field Survey 2023

Analysis: Table 4.2 above indicated that 430 respondents representing 43.0% falls within 22-25 years of age, 475 respondents representing 47.5% were within 26-30 years of age and 80 respondents representing 8.0% falls within 31-35 years of age brackets and 15 respondents representing 1.5% falls within the 36 years and above. This indicated that respondents who fall within the age bracket of 26-30 years representing 47.5% were more than other respondents.

4.1.3 Do you understand the term



Cryptocurrencies or Block chain technology?

Figure 2

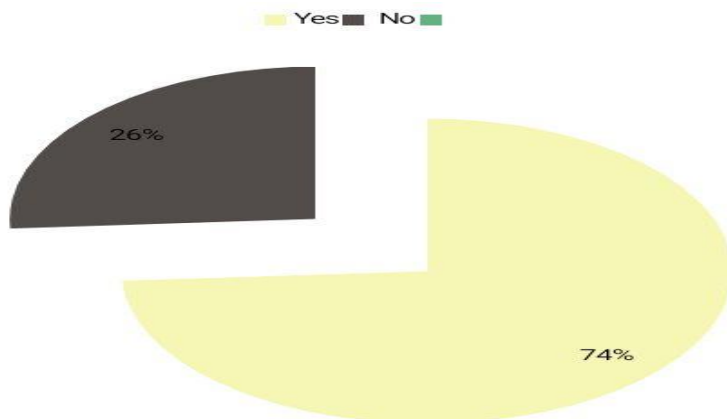
Source: Field Survey, 2023

Analysis: Figure 2 above shows that 75% of the respondents who participated in the study understand the term Cryptocurrencies/Blockchain technology while the remaining respondents represents No.

4.1.4 If Question 5 is Yes, have you engaged in Cryptocurrencies transactions of any form?

Figure 3

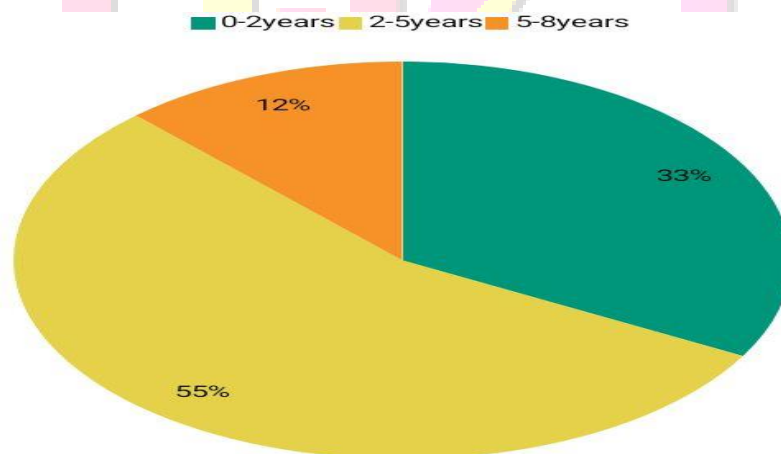
Analysis: figure 3 above shows that 74% of the Respondents representing yes have engaged in Cryptocurrencies transactions. While the remaining 26% represents No. This shows that majority of the Respondents have engaged in Cryptocurrencies transactions before.



Source: Field Survey, 2023

4.1.5 If yes, for how long have you been doing transactions with Cryptocurrencies?

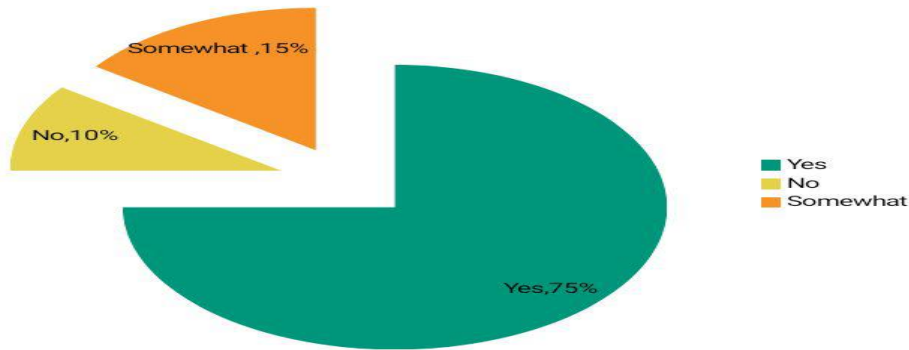
Figure 4



Source:
Field Survey, 2023

Analysis: Figure 4 above indicates that 55% of the respondents have been doing transactions with Cryptocurrencies between 2-5years. While 33% of the respondent represents between 0-2years. 12% of the respondents represents between 5-8 years. Therefore, the respondents with experience ranging from 2-5years are more than the others.

4.1.6. Has the



Contributions of Cryptocurrencies to financial inclusion helped Africa further foster economic growth?

Figure 5

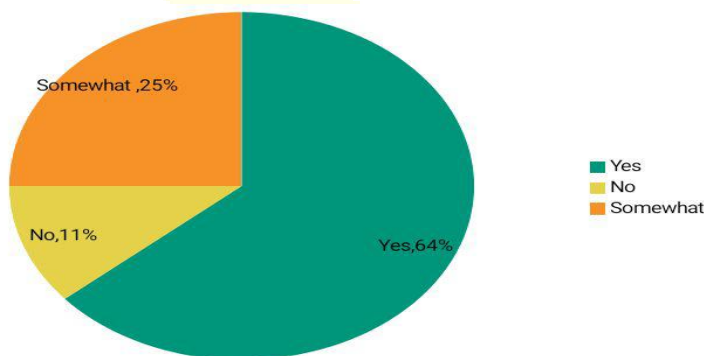


Source: Field Survey, 2023

Analysis: Figure 5 above shows that 75% of the respondents agrees that the contribution of Cryptocurrencies to financial inclusion has helped Africa further foster economic growth. 10% represents No and 15% of the respondents somewhat agrees but to a limited extent. This indicates that majority of the respondents agrees that the contribution of Cryptocurrencies to financial inclusion has helped Africa further foster economic growth.

4.1.7 Do you consider Cryptocurrencies as another avenue for entrepreneurship development in Africa?

Figure 6

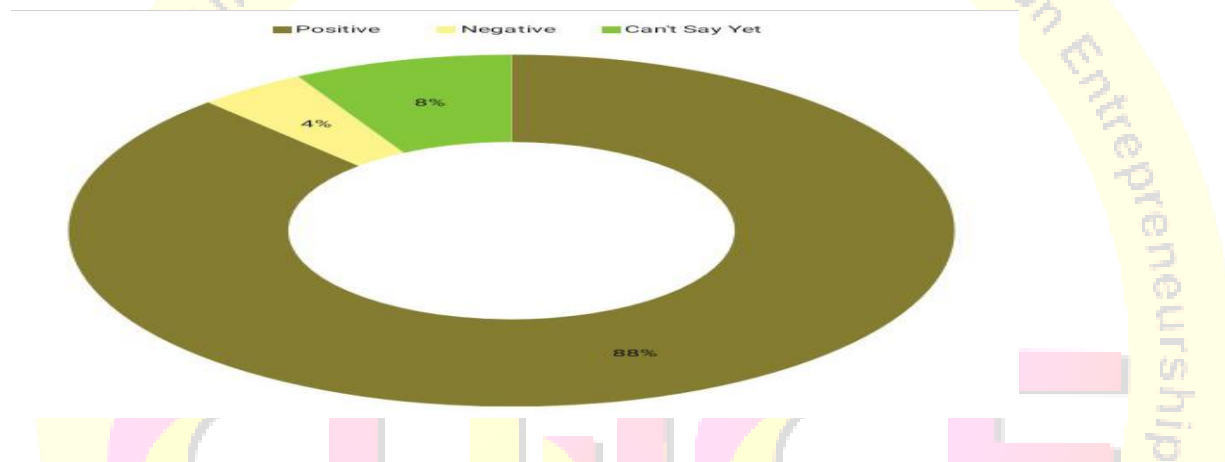


Source: Field Survey, 2023

Analysis: Figure 6 above shows that 70% of the respondents considers Cryptocurrencies as another avenue for entrepreneurship development in Africa. 22% of the respondents represents No and 8% of the respondents somewhat. This indicates that majority of the respondents considers Cryptocurrencies as another avenue for entrepreneurship development in Africa

4.1.8 Do you think the legislation of Cryptocurrencies in the banking sector in Africa will contribute to the economies of Africa and Further improve standard of living?

Figure 7

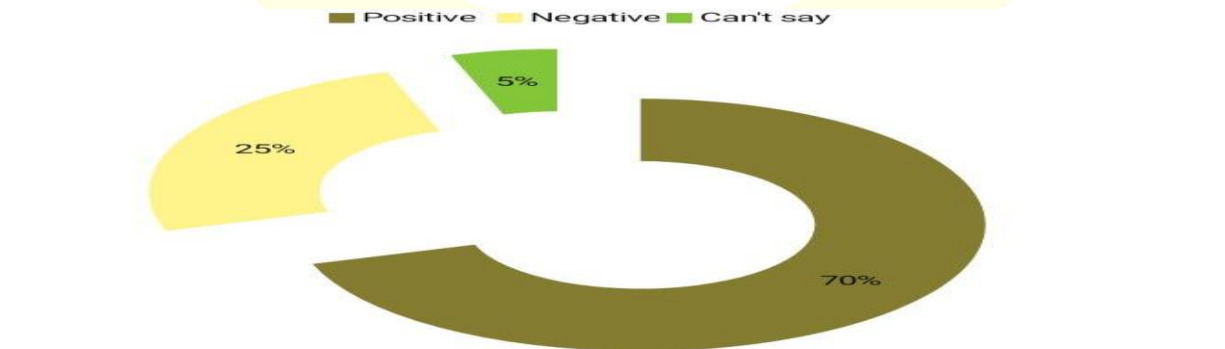


Source: Field Survey, 2023

Analysis: Figure 7 above indicated that 64% of the respondents strongly agrees that the legislation of Cryptocurrencies in the banking sector in Africa will contribute to the economies of Africa and Further improve standard of living. 11% represents No while the remaining 25% agrees Somewhat. This shows that respondents who falls within the 64% were more than other respondents

4.1.9. What kind of impact do you think the financial inclusion of Cryptocurrencies will have on the banking sector in Africa?

Figure 8



Source: Field Survey 2023

Analysis: Figure 8 indicated that 88% represents Positive impact, 4% represents negative impact while the remaining 8% cannot say. This shows that 88% of the respondents who represents Positive impact were more than other respondents.

4.1.10 What kind of impact will the legislation or financial inclusion of Cryptocurrencies to banking sector in Africa have on the African society at large?

Figure 9

Source: Field Survey 2023

Analysis: Figure 9 above indicated that 70% represents Positive impact, 25% represents negative impact while the remaining 5% cannot say. This shows that 70% of the respondents who represents Positive impact were more than other respondents.

4.1.11 Do you consider Cryptocurrencies as one of the answers to Africa's economic challenges?

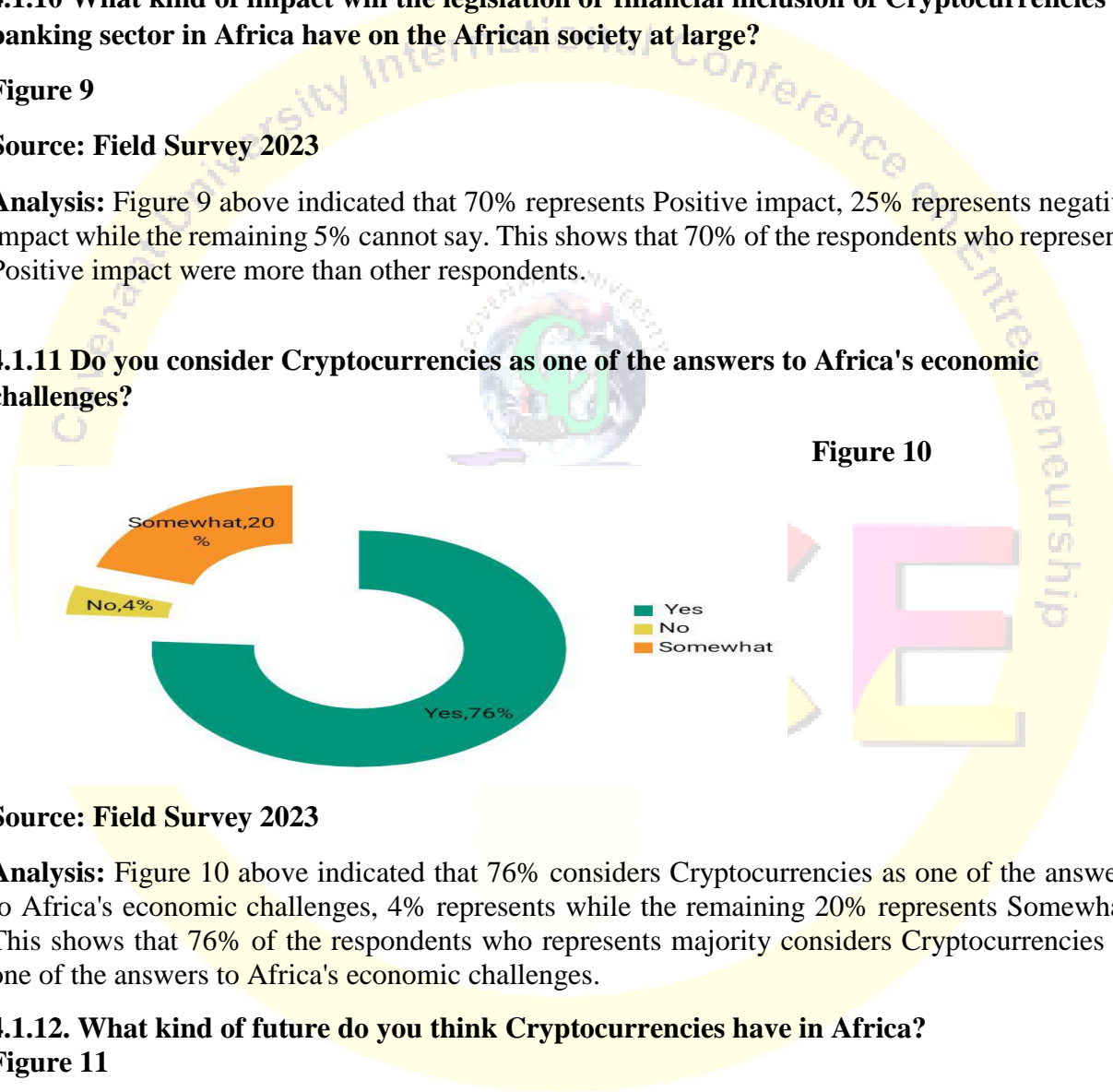


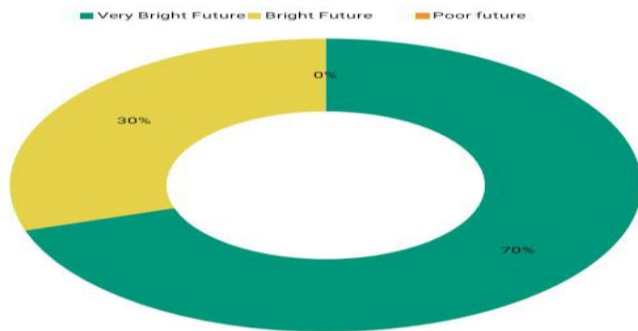
Figure 10

Source: Field Survey 2023

Analysis: Figure 10 above indicated that 76% considers Cryptocurrencies as one of the answers to Africa's economic challenges, 4% represents while the remaining 20% represents Somewhat. This shows that 76% of the respondents who represents majority considers Cryptocurrencies as one of the answers to Africa's economic challenges.

4.1.12. What kind of future do you think Cryptocurrencies have in Africa?

Figure 11



Source: Field Survey 2023

Analysis: Figure 11 above indicated that 70% of Respondents thinks Cryptocurrencies has a very Bright future while the remaining 30% shows that it has a bright future.

4.2 Analysis on North Central, Abuja

This segment focused on obtained data from Abuja which represented North Central which is one of the 6 Geo-political zone in Nigeria.

4.2.1 Gender of Respondents

Table 4.5

Valid	Frequency	Percentage %
Male	920	92.0
Female	80	8.0
Total	1000	100

Source: Field Survey, 2023

Analysis: Table 4.5 Above indicates the Gender of respondents. 920 respondents representing 92.0% were male, while 80 representing 8.0% were female, this depicts that male respondents were more than female Respondents.

4.2.2 Age Bracket of Respondents

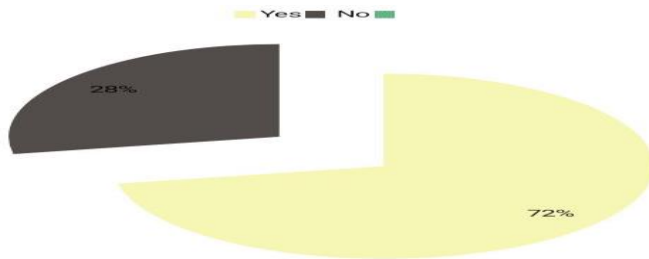
Table 4.6

Valid	Frequency	Percentage %
22-25 years	450	45.0
26-30years	300	30.0
31-35 years	200	20.0
36 years and above	50	5.0
Total	1000	100.0

Source: Field Survey 2023

Analysis: Table 4.6 above indicated that 450 respondents representing 45.0% falls within 22-25 years of age, 300 respondents representing 30.0% were within 26-30 years of age and 200 respondents representing 20.0% falls within 31-35 years of age brackets and 50 respondents representing 5.0 g% falls within the 36 years and above. This indicated that respondents who fall within the age bracket of 22-25 years representing 45.0% were more than other respondents.

**4.2.3 Do you understand the term Cryptocurrencies or Block chain technology?
Figure 12**



Source: Field Survey, 2023

Analysis: Figure 12 above shows that 73% of the respondents who participated in the study understand the term Cryptocurrencies/Blockchain technology while the remaining 27% respondents represents No.

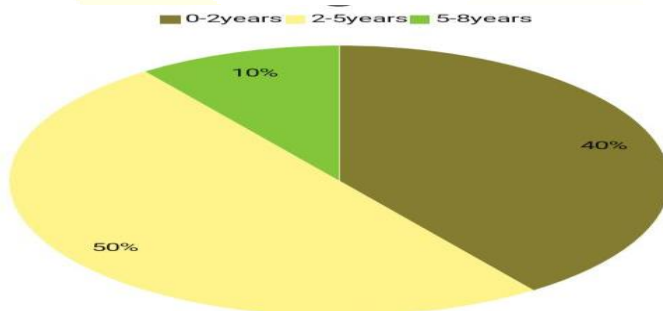
**4.2.4 If Question 5 is Yes, have you engaged in Cryptocurrencies transactions of any form?
Figure 13**

Source: Field Survey, 2023

Analysis: figure 13 above shows that 72% of the Respondents representing yes have engaged in Cryptocurrencies transactions. While the remaining 28% represents No. This shows that majority of the Respondents have engaged in Cryptocurrencies transactions before.

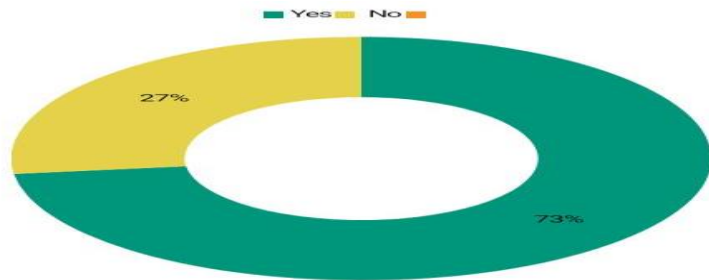
4.2.5 If yes, for how long have you been doing transactions with Cryptocurrencies.

Figure 14



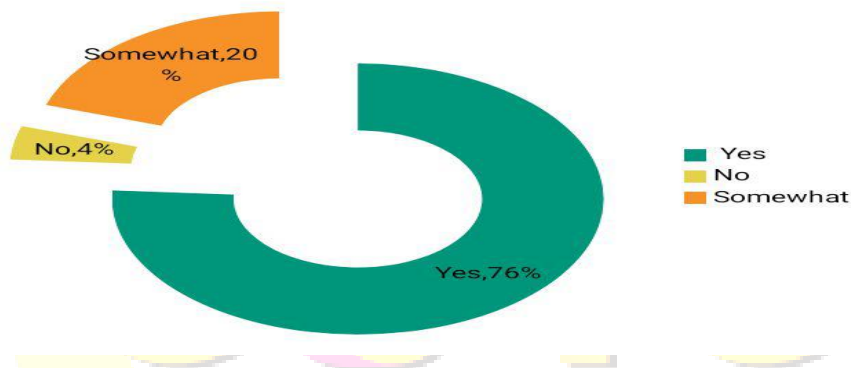
Source: Field Survey, 2023

Analysis: Figure 14 above indicates that 50% of the respondents have been doing transactions with Cryptocurrencies between 2-5years. While 40% of the respondent represents between 0-2years. 10% of the respondents represents between 5-8 years. Therefore, the respondents with experience ranging from 2-5years are more than the others.



4.2.6. Has the Contributions of Cryptocurrencies to financial inclusion helped Africa further foster economic growth?

Figure 15

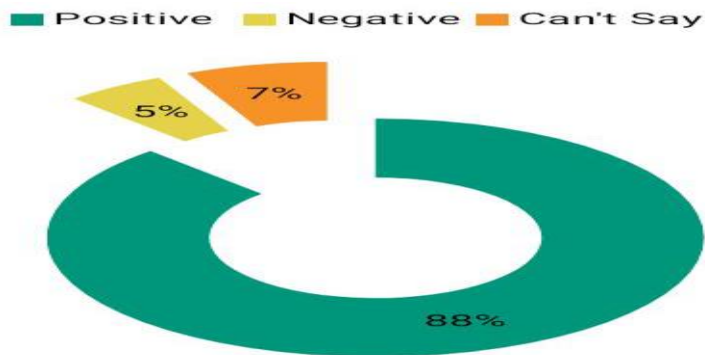


Source: Field Survey, 2023

Analysis: Figure 15 above shows that 76% of the respondents agrees that the contribution of Cryptocurrencies to financial inclusion has helped Africa further foster economic growth. 4% represents No and 20% of the respondents somewhat agrees but to a limited extent. This indicates that majority of the respondents agrees that the contribution of Cryptocurrencies to financial inclusion has helped Africa further foster economic growth.

4.2.7 Do you consider Cryptocurrencies as another avenue for entrepreneurship development in Africa?

Figure 16

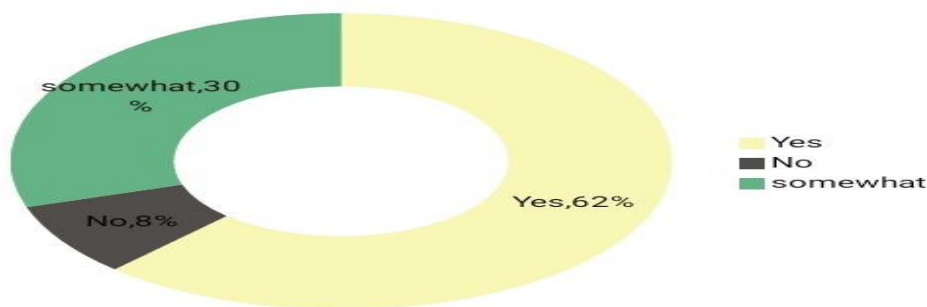


Source: Field Survey, 2023

Analysis: Figure 16 above indicated that 62% of the respondents strongly agree that the legislation of Cryptocurrencies in the banking sector in Africa will contribute to the economies of Africa and Further improve standard of living. 8% represents No while the remaining 30% agrees Somewhat. This shows that respondents who falls within the 62% were more than other respondents

4.2.8 Do you think the legislation of Cryptocurrencies in the banking sector in Africa will contribute to the economies of Africa and Further improve standard of living?

Figure 17

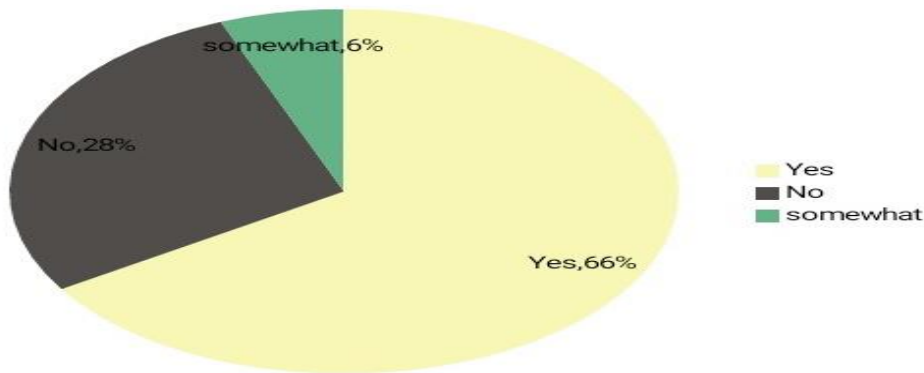


Source: Field Survey, 2023

Analysis: Figure 17 above shows that 70% of the respondents consider Cryptocurrencies as another avenue for entrepreneurship development in Africa. 16% of the respondents represents No and 14% of the respondents somewhat. This indicates that majority of the respondents considers Cryptocurrencies as another avenue for entrepreneurship development in Africa.

4.2.9. What kind of impact do you think the financial inclusion of Cryptocurrencies will have on the banking sector in Africa?

Figure 18

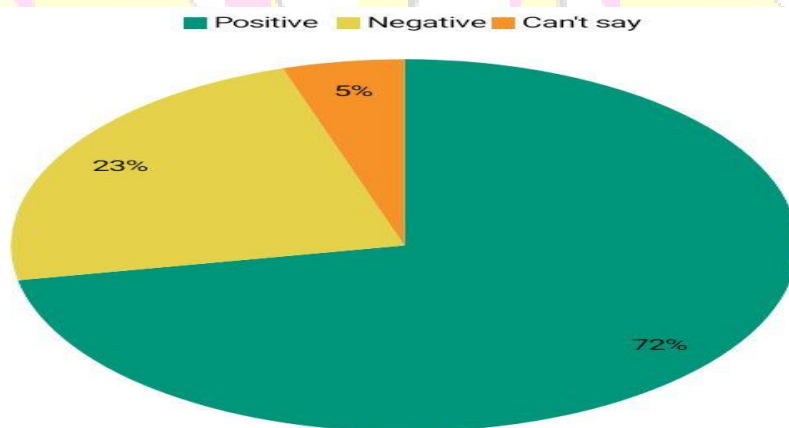


Source: Field Survey 2023

Analysis: Figure 18 above indicated that 66% represents Positive impact, 28% represents negative impact while the remaining 6% cannot say. This shows that 66% of the respondents who represents Positive impact were more than other respondents.

4.2.10 What kind of impact will the legislation or financial inclusion of Cryptocurrencies to banking sector in Africa have on the African society at large?

Figure 19

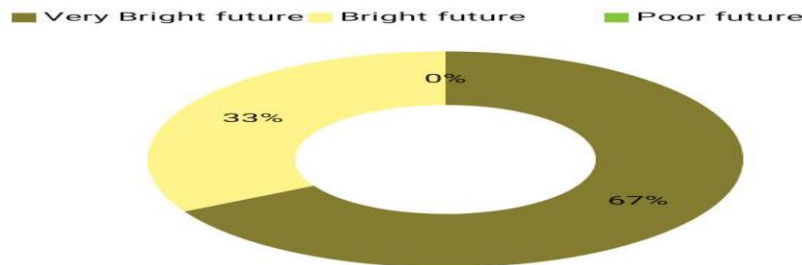


Source: Field Survey 2023

Analysis: Figure 19 above indicated that 72% represents Positive impact, 23% represents negative impact while the remaining 5% cannot say. This shows that 72% of the respondents who represents Positive impact were more than other respondents.

4.2.11. Do you consider Cryptocurrencies as one of the answers to Africa's economic challenges?

Figure 20



Source: Field Survey 2023

Analysis: Figure 20 above indicated that 66% considers Cryptocurrencies as one of the answers to Africa's economic challenges, 28% represents No while the remaining 6% represents Somewhat. This shows that 66% of the respondents who represents majority considers Cryptocurrencies as one of the answers to Africa's economic challenges.

4.2.12 What kind of future do you think Cryptocurrencies have in Africa?

Figure 21

Source: Field Survey 2023

Analysis: Figure 21 above indicated that 67% of Respondents thinks Cryptocurrencies has a very Bright future while the remaining 33% shows that it has a bright future.

4.3 Discussion of Findings

Findings showed that in both Lagos and Abuja, majority of the Respondents were males (89.9% and 92%) respectively. Study indicated that not everyone who took part in the study understands

the term Cryptocurrencies/Blockchain technology and not the Respondents have engaged in using Cryptocurrencies for transactions. 74% and 72% of the respondents representing Lagos and Abuja respectively claimed to have used it for transactions before. 75% of Lagos respondents and 76% of Abuja respondents affirms that Cryptocurrencies has helped fostered Africa's economy. While 70% from both states equally considers Cryptocurrencies as another avenue for entrepreneurship development in Africa. 64% and 62% of the respondents in Lagos and Abuja respectively thinks that the legislation of Cryptocurrencies in the banking sector in Africa will contribute to Economy of Africa countries and have a positive impact on the banking sector as well as the African society. 76% and 66% of the respondents representing Lagos and Abuja respectively considers Cryptocurrencies as one of the answers to Africa's economic challenges and they likewise believe that Cryptocurrencies have a very bright future in Africa.

CONCLUSION AND RECOMMENDATIONS

The study qualitatively seeks to discover the contributions of Cryptocurrencies to financial inclusion and Entrepreneurship development in Africa Using respondents from Lagos and Abuja to justify study. Advances in innovation have ushered in new approaches to digital transformation and financial service provision. With the growth in internet connectivity in sub-Saharan Africa, emerging technologies such as block chain and cryptocurrencies have the potential to advance financial inclusion. Based on findings, 75% and 76% of the Respondents from Lagos and Abuja respectively believes Cryptocurrencies has helped further foster Africa's economic growth. Many of the Respondents also indicated that Cryptocurrencies is an avenue for Entrepreneurship development in Africa and the legislation of crypto in Africa banking sector will further benefit Africa's economy and improve standard of living. There is no doubt that based on Literature and related academic study conducted by other researchers, Cryptocurrencies has greatly and is still contributing to financial inclusion in Africa and economic development. Cryptocurrencies has come to stay and the legislation will further help be an avenue to contribute to Africa's economic and Entrepreneurship development.

The study recommended that digital partnership among African states can help foster the legislation and regulations of Cryptocurrencies. This will reduce the risk associated with fraudulent activities. The major limitation of the study is the limited time the study has. Also, further research could quantitatively model the contributions Cryptocurrencies have to financial inclusion and Entrepreneurship development in Africa.

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QUESTIONNAIRE

Please tick the appropriate box or write in the space provided.

1. Gender

Male [] Female []

2. Indicate your age bracket within the options:

21-25 years [] 26-30 years [] 31-35 [] 36-40 [] 41-45 [] 46-50 [] 50years & above []

3. Do you understand the term Cryptocurrencies or Blockchain technology?

Yes. No

4. If Question 5 is Yes, have you engaged in Cryptocurrencies transactions of any form?

Yes. No

5. If yes, for how long have you been doing transactions with Cryptocurrencies?

Below 1 year [] 1-3 years [] 4- 6 [] 7-10 years [] 11 years and above []

6. Has the Contributions of Cryptocurrencies to financial inclusion helped Africa further foster economic growth?

Yes. []. No []. Somewhat []

7. Do you consider Cryptocurrencies as another avenue for entrepreneurship development in Africa?

Yes. []. No []. Somewhat []

8. Do you think the legislation of Cryptocurrencies in the banking sector in Africa will contribute the economies of Africa and Further improve standard of living?

Yes. []. No []. Somewhat []

9. What kind of impact do you think the financial inclusion of Cryptocurrencies will have on the banking sector in Africa?

Positive. []. Negative []. Can't say yet []

10. What kind of impact will the legislation or financial inclusion of Cryptocurrencies to banking sector in Africa have on the African society at large?

Positive. []. Negative []. Can't say yet []

11. Do you consider Cryptocurrencies as one of the answers to Africa's economic challenges?

Yes. []. No []. Somewhat []

12. What kind of future do you think Cryptocurrencies have in Africa?

Very Bright future. []. Bright future. []. Poor future. []

ICT AND AGRICULTURAL SKILLS ACQUISITION FOR ENTREPRENEURSHIP DEVELOPMENT

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Abstract

The entrepreneurship and sustainable development in the 21st century require information and Communication Technology (ICT) and skill acquisition among others things . The purpose of this research is to discover different skills that can be acquired for the development of entrepreneurship spirit among farmers and young people in general, and to use them to support sustainable development and growth of the economy. This paper uses qualitative data

from past review work in literature to discover different area where skill are needed in Agricultural production process in order to make good entrepreneur out of rural farmers

The finding shows that most important skills in agriculture as an entrepreneur include interpersonal skills, analytical skills, management skills, technical skills, problem-solving skills such as competence and knowledge of post-harvest skills and the causes of their reduction. Moreover, this paper identify the different ways by which an entrepreneur can improve their agricultural skills which include the involvement in the farming community; . reading of agricultural books and magazines;;watching of farming videos available online and on TV; participation in farming events and enrolment for agriculture courses In additions the paper submit that an entrepreneurs require the following ICT skills: : Competence in sending e-mail; Ability to receive e-mail ;;Ability to use word processor to produce documents;; Knowledge of using contra vision electronic software to create agenda; Ability to use the spreadsheet to do accounting jobs ;Ability to use the internet to receive vocal messages; ability to use the internet to conduct research, while in agriculture farmers require skill of managing their farms from planting to maturity in crop production, raising a day old bird to maturity, irrigation skill and more importantly marketing skills and record keeping skill

Therefore, it is recommended that capacity building programme should be organized for the farmers in the rural area and other entrepreneur in order to enhance their competency, production efficiency, profitability level and sustainable development

Keywords: *Entrepreneurship, Agriculture, ICT, Skill acquisition, Sustainable development*

Introduction

The concept of entrepreneurship development according to Obaniyi (2022) require a viable inclusion of Entrepreneurship Agricultural Dynamic Curriculum (EADC) which can help to sustain entrepreneurship now and in the future. According to the author, the introduction of EADC into Nigeria Educational Curriculum will go a long way in reducing poverty and unemployment rate in the country, The essence of this curriculum is to provide a training guideline for entrepreneurship development. However, the importance of agricultural skill acquisition in entrepreneurship development can never be undermine because of global demand there is a need to incorporate Information communication technology (ICT) and Agricultural skill Acquisition for an effective sustainable entrepreneurship development in the 21st century.

Entrepreneurship is an act of decision making, in which an entrepreneur decide to take full responsibility about his or her action (Obaniyi, 2022). Therefore, there is a need for appropriate training in ICT and technical skills for effective decision which will eventually lead to high profitability. In Nigeria, global technological advancements and Nigeria's current economic trends have prompted graduates to acquire proper ICT skills for entrepreneurship development. The federal government has mandated that in all higher education training institutions, an entrepreneurship education should be integrated into academic programs to provide students with appropriate entrepreneurial skills. Students who learn these skills properly will be able to start their own businesses, become self-sufficient, and excel in the modern business world after graduation. In Nigeria, entrepreneurship has been challenged by many constraints such as poor electricity supply, bad transportation system, poor communication system, insecurity problems and policy

instability (Anyadike et al., 2012, Obaniyi, K.S. 2022). Therefore there is a need to incorporate ICT and skill development in reducing the effects of these constraints.

Researchers (Remeikiene et al., 2013; Neneh, 2014; Pulka et al., 2014, 2015; Qu and Krause-Ono, 2016; Premand et al., 2016; Ahmad et al., 2018, Obaniyi,2022) have devoted their time to research on entrepreneurship education but the ICT training and skill acquisition in decision making in agriculture resulting to a sustainable entrepreneurship development is still under study. The goal of entrepreneurship education is to encourage and train graduates of secondary schools and higher education institutions to pursue self-employment. Students' entrepreneurial skills enable them to launch personal businesses and become self-sufficient after graduation.

Skill has been defined as the ability to perform many times better than your peers on the same assignment because of an endowment that you have that make you distinguished on your job. This may be expressed in inform of creativity in the work of your hand . Skill can be summarized as having a touch of excellent in whatever you do which make people to be attracted to you and want to patronize you. Skill can be as manual dexterity acquired through the repeated execution of an operation. In a relatively short period of time, information and communication technology (ICT) has become one of the fundamental building blocks of modern society. Many countries already consider ICT learning and mastery of essential ICT skills and principles, such as reading, writing, and numeracy, to be part of core schooling. ICTs (Information and Communication Technologies) are computer devices used for data retrieval and recovery The potential to create a synergistic relationship between scientific advances and human values defines design in part. . According to Abefe-Balogun (2015), the symptom is youth unemployment. It is found in the fields of socio-economics, justice and politics and it is very dangerous to Ignore this topic as it foresees risks to security, peace, harmony and development nation. It is against this background that this research seeks to identify different skills that can be acquired for the development of entrepreneurship among farmers and young people in general, and to use them to support sustainable development and growth of the economy. Therefore , this paper is divided into various sections : introduction: concept of ICT, Agricultural skills needed in becoming an entrepreneur and how to improve farmers skills as an entrepreneur and conclusion and recommendation

Concept of Information Communication Technology and entrepreneurship

Information and communication technology (ICT) encompasses all forms of technology used to generate, process, and use information. This includes data, voice, image, and multimedia presentations that help and improve communication. It also entails the interconnectedness of microelectronics, computers, and telecommunications, allowing data, text, and video to be transmitted anywhere in the world where signals can be received. The application of Information and Communication Technology (ICT) skills has resulted in significant information innovations in teaching, learning, and industry, allowing graduates to become more involved in their work and be more result-oriented. On the other hand, it encourages students to be active participants in the learning process rather than passive recipients of educational materials. However, the information on the application of ICT in agriculture has hitherto scarce. This is the area these researches want to fill, knowledge in this area is scarce in the rural area. Indeed before the issue of food security can be solved proper application of ICT is needed in the developing countries like Nigeria. Farmers are entrepreneur because they always take decision every day in order to be productive. Below are the area where ICT is highly needed According to Okoro (2013), entrepreneurs require the following ICT skills: Competence in sending e-mail; Ability to receive e-mail; Ability to use

word processor to produce documents; Knowledge of using contra vision electronic software to create agenda ; Ability to use the spreadsheet to do accounting jobs ;Ability to use the internet to receive vocal messages; Ability to use the internet to conduct research ; Skills for merging mails by adding Skills for merging mails by deleting Ability to edit texts by inserting materials on the screen; Skills for performing basic data processing;

Others include ability to log on or shut down a computer system ;Skills for keying in data; Ability to use text editing and layout; Ability to key in Microsoft word package ;Ability to design and decorate typed documents using borders; Skills for copying, pasting and inserting in other locations ;Skills for identifying and using documents as well as formatting existing ones. Skills for identifying and opening a spreadsheet Ability to insert and delete figures in tables, rows and columnsSkills for identifying cells, arranging, re-arranging, naming or re-naming them.. All these are the skills that will make farmers productive in their business because farming is a business . However, learning all these skill in computer appreciation and application will be very difficult for illiterate farmers. An illiterate farmer will see it as a punishment and this call for adult learning programme among the farmers . Therefore adult education programme should be organized across different geopolitical zone

Different Areas of Skill in Agriculture

All professions have certain skills they need to be successful, and farming is no exception. Agricultural careers include a variety of specializations such as science, finance, engineering, and management. The most important skills in agriculture include interpersonal skills, analytical skills, management skills, technical skills, problem-solving skills such as competence and knowledge of post-harvest skills and the causes of their reduction. Farming gives you the following skills

Technical Skills

They don't have to be experts in top technical skills, but they should at least be able to understand the techniques involved in agriculture. like a T How they are related and how they are applied plays an important role. The ability to apply technology to agricultural irrigation, cultivation techniques, harvesting, storage and transportation is of great importance. At a minimum, farm owners or farm operators must introduce new technological know-how and methods of applying such technology, as well as new tools, techniques, and other advances into their efforts. Today's agriculture faces many challenges such as extreme weather and increased demand, all of which must be resolved through the introduction of new technologies. Internet of Things (IOT) in agriculture can be applied through livestock monitoring, smart greenhouses, agricultural drones, farm management systems, crop management systems or devices, especially in developed countries.

Interpersonal Skills

The ability to communicate effectively and interact well with others is also important in agriculture. If you work in agriculture and are involved in supply chain management, interpersonal skills are useful as you often interact with farmers and other stakeholders until the product reaches the consumer. Agricultural Supply As her chain management expert, you must listen carefully and respond to the needs of both suppliers (farmers and other intermediaries) and consumers. We need to ensure that the needs and expectations of both sides are met. Farmers also need to have effective communication skills as this will

help them when interacting with buyers and other employees. Bargaining power is also important in the agricultural sector. Stakeholders representing farmers must demonstrate interpersonal skills when interacting with various stakeholders.

Knowledge of post harvest skills

Food loss and waste have many negative economic and environmental consequences. Economically, they represent wasted financial investments that can eat up farmers' incomes and increase consumer spending. From an environmental perspective, waste and food loss have multiple impacts, including unnecessary greenhouse gas emissions and inefficient use of land and water, leading to the degradation of natural ecosystems and their benefits. There is a possibility. The ability to understand how to minimize post-harvest losses and waste is beneficial to agricultural professionals.

Monitoring and evaluation in agriculture

Agricultural professionals should strive to acquire knowledge on how to design efficient agricultural policies to meet the growing demand for sustainable food and nutrition. Currently, the agricultural sector is facing various unforeseen events such as climate change. Therefore, we need to find ways to ensure higher productivity, greater resilience of farmers to market shocks, and better adaptation to climate change. Agricultural stakeholders need to be well trained in policy evaluation to address the various challenges of the sector. Efficient agricultural policies must be coherent and effective to help the agricultural sector realize its potential and achieve key policy objectives. For example, knowledge of monitoring and evaluation in agriculture can help project managers adapt their activities to the needs and constraints of farmers and provide planners and policy makers with relevant information on changes in agriculture. M&E also helps agricultural professionals remove all perverse political incentives for resilience and sustainability.

Adaptability

Adaptability can be transferred from one industry to another. Whatever was taught in class should be applied in real life scenarios. As in any field, agricultural professionals must adequately address various challenges and obstacles through the introduction of new technologies. You should be open to change.

Farming

Farming is an important agricultural skill that allows you to grow crops and raise livestock. Farmers are responsible for producing the food we eat, and it takes a lot of knowledge and skill to do the job well. Farming requires a lot of planning and preparation. Farmers must decide when to plant which crops and when and how to market their produce. You also need to know how to care for your crops and livestock, and often have to deal with weather and other factors that can affect the success of your work.

Crop rotation

Crop rotation is an important agricultural technique as it helps improve soil quality, prevent soil erosion and conserve water. Crop rotation can also help control pests and diseases and improve crop growth. Crop rotation involves planting different types of crops in different parts of a field or farm each year. This can also prevent pests and diseases from accumulating in

the soil and improve plant growth. Crop rotation also helps prevent soil erosion and improve soil quality.

Soil management

Soil management is an important agricultural skill that helps farmers grow healthy and productive crops. Proper soil management includes crop rotation, soil testing, and addition of nutrients and organic matter. These practices help improve soil structure and fertility, which aids plant growth.

Irrigation

Irrigation is the artificial supply of water to plants. It is used to support the cultivation of crops and plants and help them grow in areas where there is not enough rainfall. It can also be used to water an entire garden. Irrigation is an important agricultural technique as it allows farmers to grow crops in areas that lack sufficient rainfall. It also helps plants grow faster and produce more crops.

Fertilization

Fertilization is the process of adding nutrients to the soil to promote plant growth. An important skill in farming as it helps plants grow larger and produce more food. Fertilization can be done by adding fertilizer to the soil or by fertilizing directly on the plant. Fertilization is important because it helps plants grow taller and produce more food. It also makes plants grow faster, improves the quality of the food they produce, and increases the nutritional value of food.

Pest control

Pest control is an important agricultural skill as it helps farmers protect their crops from insects, rodents and other pests. Pest control may include the use of pesticides, crop rotation, or other methods. Pest control is important as it helps farmers produce higher quality crops and also helps reduce production costs.

Harvesting

Harvesting is the process of gathering crops. This is an important farming skill as it allows you to collect and market the crops grown by farmers. Crop harvesting is a time-sensitive process and must be done at the right time to ensure that the crop is fresh and of high quality. Harvesting crops can be a daunting task, especially for large crops. Having the right equipment and knowing how to use it is critical to harvesting crops safely and efficiently. Harvesting is a skill that must be mastered, but it is an important skill every farmer should learn. There is a right to harvest your crop for profitability. However, with ICT you can monitor your field time

Animal Husbandry

Animal husbandry is the process of raising and caring for animals for food, fiber, or other products. This includes breeding, feeding, housing and caring for animals. This also includes the sale and marketing of animals and animal products. Animal husbandry is an important agricultural skill as it helps ensure an adequate supply of animals for food, fiber and other products. It also helps keep animals safe and healthy.

Operating Agricultural Machinery

Operating Agricultural Machinery is an important agricultural skill as it allows farmers to work more efficiently and effectively. Agricultural machinery can be used not only for raising livestock, but also for planting and harvesting. Well-functioning agricultural machinery helps farmers meet production deadlines while ensuring crop and livestock quality. To operate agricultural machinery safely and effectively, farmers must have a thorough understanding of the machinery they are using and the appropriate safety precautions.

Food Safety

Food safety is important in agriculture because farmers and ranchers are responsible for producing safe food for their consumers. Farmers and ranchers should be aware of potential hazards that can contaminate food and take steps to prevent them. Hazards that can contaminate food include bacteria, viruses, parasites, chemicals, and allergens. Farmers and ranchers should be aware of these hazards and how to prevent them from contaminating food. They should also be aware of the signs and symptoms of food poisoning and how to treat them.

How To Improve Your Farming Skills

Get involved in the farming community

Skill can be improved upon because we are in technological age and it takes technological innovation to meet up with the technological age. Farming skill can be developed and One of the best ways to learn about farming is to join a farming community. There are many online and offline farming communities that can provide information, resources and support.

Read agricultural books and magazines

Agriculture books and magazines are a great way to learn about different aspects of farming. You can find many books and magazines at your local library or bookstore.

Watch farming videos

There are many farming videos available online and on TV. These videos are a great way to learn about different growing techniques.

Participate in farming events

Farming events are a great way to learn about different aspects of farming. You can find many agricultural events at your local fairgrounds and agricultural centers.

Take an agriculture course . Agriculture courses are offered at many community colleges and universities. These courses are a great way to learn various farming techniques.

Entrepreneurs in Nigeria typically start their businesses with small capital, low value-added, and it takes time to establish a business. While establishing their business, this type of entrepreneur must collect funds, find a better location, deal with suppliers and other intermediaries, manpower issues, and other pertinent issues .

Technology now allows businesses to save time and money during the e-business startup phase. Rather than traditional entrepreneurs, information and networking systems have enabled today's entrepreneurs to succeed. As technology advances, more traditional businesspeople can venture into ICT entrepreneurship ICT jobs are among the fastest growing in the modern labor market. Computer programmers, computer information system analysts, data communication analysts, data base programmer and administrators, desktop/application support specialist, network and system security specialty, website developers, wireless network technician technical sale specialist, sales engineers, computer graphic artist, computer education/instructor, computer operation, data entry.

Entrepreneurship Skills

Global relevance, means being on time with global demands. With globalization, no country can exist in isolation. Every country must do its part to meet the demands of the global economy. A global relevance entails producing goods and providing services that meet international standards. This means that goods and services produced in one country have a comparative value on a global scale. Thus, in order to compete favorably, Nigerian entrepreneurship education must strive for global relevance. In this vein, the following entrepreneurship skills required by students and graduates for global relevance are discussed:

Accounting Skills: Accounting skills are a subject that must be studied in order to provide recipients with the knowledge, attitude, and competency needed for accurate financial record keeping, occupational pursuit, and other economic and organizational activities. This includes the ability to assess, document, and communicate relevant economic reports to interested individuals and businesses.

Marketing Skills: marketing skills Is the ability to attract and retain customers' patronage, the ability to promote and market the organization's products, the ability to study market forces of demand and supply, the ability to possess the demeanor for effective salesmanship, and so on. If the economy is to survive effectively, marketing must cross all boundaries. Marketing is defined as the activities involved in creating and delivering goods and services to customers. The key to effective marketing is to understand your target customers' needs, wants, and demands and to be able to act before your competitors offer them products and services that meet those needs. It also entails providing convenient and valuable customer services that will make you appreciate their patronage.

Managerial Skills: some management skills include the ability to plan, organize, and manage small-scale businesses, the ability to maintain business ethics, the ability to use market information, the ability to develop skills for effective supervision and coordination, and the ability to apply integrating skills. Management abilities are required for effective job performance in organizations, both as employers and as employees. Management skills are acquired competencies that aid in the process of running, directing, or administering an organization. It primarily refers to effectively directing human endeavors and capabilities and coordinating the whole as a team. However, management skills required for effective job performance include a number of components, including:

Planning: This is the process of establishing future targets or objectives, as well as an outline of the appropriate means to achieve them. The exertion of influence on people to work towards the organizational goal is referred to as directing. It is related to the interpersonal aspect of management. It entails clarifying, directing, teaching, and encouraging employees to work effectively, zealously, and confidentially.

Controlling skill: This is the process of ensuring that organizational objectives are met and correcting lapses as they occur. Its components include setting standards, measuring performance, analyzing results, and implementing corrective measures

Conclusion and Recommendation

This paper conclude that Agricultural skill acquisition by entrepreneurs (farmers) is diversified ranging from technical skill, managerial skill, accounting skill. financial literacy, networking skills, confidence, the ability to accept feedback and recognize patterns, and a growth mindset and controlling. The proper engagement in training by farmers will go a long way to develop their skills in realizing the objectives of Sustainable development goals (SDG1 and 2) with ultimate

aim of ensuring food sufficiency and economy boom. Therefore this paper recommend that special training in the usage of android phones in receiving vital agricultural information and other ICT tools should be organized at local, state and federal level in order to build the capacity of farmers entrepreneur thereby increasing their productivity and production efficiency, which will culminate to higher income and improved standard of living. Moreover, Farmers should be encouraged to improve their skill through reading of agricultural books and magazines; watching of farming videos available online and on TV; participation in farming events and enrolment for agriculture courses. Finally, literate farmers entrepreneurs should be trained in the following ICT skills: Competence in sending e-mail; Ability to receive e-mail ;Ability to use word processor to produce documents;; Knowledge of using contra vision electronic software to create agenda; Ability to use the spreadsheet to do accounting jobs ;Ability to use the internet to receive vocal messages; ability to use the internet to conduct research, while in agriculture farmers require skill of managing their farms from planting to maturity in crop production, raising a day old bird to maturity, irrigation skill and more importantly marketing skills and record keeping skill.

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Does the Effect of Information and Communications Technology (ICT) Infrastructure on Foreign Direct Investment (FDI) Inflow Depend on the Level of ICT Penetration? Evidence from West Africa

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Abstract

The present study examines the role of Information and Communications Technology infrastructure in relation to Foreign Direct Investment (FDI) inflow to West Africa. Specifically focusing on mobile phone and internet, this study explores whether ICT infrastructure is significant for FDI inflow and whether high levels of ICT infrastructure play a role in such infrastructure affecting FDI inflow as measured by Net FDI inflow in West African countries. The study employed Panel Data Random effects estimation in analysing the data in pursuit of the objectives of the study. The study found that ICT infrastructure in the form of both Mobile phone and internet were both significant for boosting FDI inflow to West Africa. Further, while Internet was significant for FDI inflow in high internet use countries, mobile phone was significant for FDI inflow in high mobile phone use countries. The study consequently recommends amongst others based on its findings that governments of respective West African countries must of a necessity leverage on their country strengths in respective ICT infrastructure as reflected by their respective country ICT penetration levels, via ICT infrastructure provision in order to attract sizeable amounts of FDI inflow in light of increased global competition for capital in the world and the dire need of West African countries for increased levels of capital for domestic investment.

Keywords: Information and Communications Technology (ICT), Mobile use, Internet Use, Foreign Direct Investment inflow, West Africa

1. Introduction

The centrality of Information and Communications Technology (ICT) for the progress of an economy is enshrined in the Leap frogging hypothesis put forward by Steinmueller (2001), that developing and emerging economies with the aid of ICT can leapfrog developmental stages and so have an advantage over their developed counterparts in their pursuit of development. Consequently, increased investments in ICT infrastructure have been observed especially in the

last three decades and this has resulted in the increasing use of modern ICT applications (Alshubiri, Jamil, & Elheddad, 2019; Roztock, Soja, & Weistroffer, 2019).

ICT varies in its definition as observed from the literature (Kaware & Sain, 2015; Niebel, 2014; Wang & Law, 2007). Ajayi (2009) however highlights ICT as a technological means of collecting, collating, and conveying information via technology. Thus Information generation and sharing may be argued as central outcomes of greater ICT use. There exists various ICT infrastructure in countries of the world today including Fixed line telephones, internet, mobile phone, fixed broad band, secured servers, computers, and so on (World Bank, 2022). These have ensured the wide application of ICT to the progress of countries of the world. An important contribution of ICT to domestic economies however especially in the context of developing countries as those of West Africa is Foreign Direct Investment inflow.

Foreign Direct Investment (FDI) inflow constitutes a major source of capital for developing countries in particular in addressing their existing capital shortage on account of the wide investment-savings gap that are a persistent feature of developing countries as highlighted by Todaro and Smith (2011). This is more so as capital has high productivity in such developing countries owing to their capital deficiency relative to developed countries that are capital-abundant.

With recourse to ICT infrastructure, developing countries may be appropriately positioned to attract greater inflows of FDI which as highlighted in the literature portends various benefits for the local economy including increased employment, reduced poverty. inflow of foreign skill and technical know-how, sector development, greater domestic enterprise, and greater standards of living. On account of ICT infrastructure provision, economic agents emerge to profit from various opportunities that may result. For instance, the economic agents may utilize digital platforms to acquire intelligence regarding market conditions locally and internationally, as well as local and international developments having the potential to affect their objectives (Arvin, Pradhan & Nair, 2021). In addition, unprecedented rise in global trade flows and Foreign Direct Investment may result from global knowledge and innovation networks arising from ICT on account of increased Return on Investment (ROI) and Return on Value (ROV) and enhanced investment opportunities majorly for stakeholders in an economy. Evidence in support is provided by Mensah and Traore (2022) and Warsame (2021) who argue the potential of ICT infrastructure to promote FDI inflow in Africa, while in respect of increased international trade occasioned by ICT, Abeliensky and Hilbert (2017) and Nath and liu (2017) provide empirical evidence. Centrally, ICT may promote FDI inflow via its role in reducing transaction costs of multinational enterprises that establish in host countries.

Foreign Direct Investment (FDI) is engaged in by multinational enterprises and is defined by OECD (2008) as the establishment of a lasting interest by a resident enterprise in one economy (direct investor) as reflected by the direct or indirect ownership of 10% or more of the voting power, in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor. ICT may facilitate the investment decision of the multinational enterprise seeking to invest in a host country in several ways. First, it enables information such as market characteristics, country policies and so on regarding host countries to be obtained prior to the foreign direct investor making the decision to enter a host country through FDI. Second, savings in search time and related costs and increases in efficiency and productivity may result from the utilization of ICT infrastructure by multinational enterprises establishing in host countries through FDI as highlighted by Gani and Sharma (2003). Third, ICT infrastructure may enable the exchange of information and promote the development of new ideas and the creation of wealth. Fourth ICT

may ensure that multinational enterprises establishing in host countries are able to ensure the existence of effective means of communication in establishing new customer relationship, while old customer relationships are also being maintained, amongst other benefits and so on. For the host country on the other hand, ICT enhances the country's productive capacity in all industries, and at the same time, it integrates the country with the global economy while promoting competitiveness (Hassan, 2004; Warsame, 2021).

Countries in Sub-Saharan Africa (SSA) such as Nigeria, Liberia, Ghana are highlighted by United Nations Conference on Trade and Development (2018) to have experienced substantial inflows of FDI. This is especially in light of the growth potentials of such countries as well as the enabling environment for such investment in a number of the countries. For instance, West African countries such as Nigeria have abundance of natural resources and are in close proximity to the sea which aids their openness to international trade and consequently provides opportunities for access to a wider market than those countries further away from the sea. In the case of Ghana, she has abundant mineral resources, a stable political climate, and bright prospects for mining and commerce and banking, which has enabled improvement in her FDI performance over the last decade. Further for Cote D'Ivoire, another major West African country economy, it is a major cocoa exporter in the world which provides a prospect for future improved FDI performance inspite of her low FDI inflow performance over the last decade.

FDI inflows into West Africa as at 2020 were at \$ 9.8 billion with countries as Nigeria emerging as the third economy that attracted inflows in Africa and Senegal also among the few economies that received higher FDI inflows with a 39% increase to \$1.5 billion (UNCTAD, 2021). On the other hand, World Bank (2022) highlights the advanced level of ICT penetration in West African countries which may provide evidence of the high level of performance of the countries as regards ICT infrastructure. For instance, Cote D'Ivoire, The Gambia, Ghana and Mali are countries which on average have achieved mobile subscriptions of greater than 100 per 100 individuals in Africa. Also as regards internet penetration, Cape Verde is a country with internet penetration at an advanced level compared to most other West African countries. Thus this gives rise to the probable link of ICT infrastructure with FDI inflow, for which studies – especially those utilizing a diverse set of countries as those of West Africa, are rather inexistent in general, while no study exists on West Africa to the best of the researcher's knowledge. In addition, the heterogeneity in the levels of ICT penetration across West African countries suggests that levels of ICT penetration may further play a role in how ICT affects FDI inflow in West Africa. This is most especially taking into account the close proximity of West African countries as Ghana, Nigeria, Cote D' Ivoire, Sierra Leone, Guinea, Guinea-Bissau to the sea which has positioned the countries appropriately for FDI inflow over the years especially since 2009 with the arrival of fibre optic submarine internet cables on the sea shores of African countries as highlighted by Warsame (2021).

On the basis of the above, the present study explores the contribution of ICT infrastructure to FDI inflow in West Africa focusing on selected ICT infrastructure namely, mobile phone and internet which have the highest levels of penetration amongst ICT variables in West African countries. In particular, the study tests two related hypotheses. First, whether ICT significantly influences FDI inflow to West Africa, and whether the level of respective ICT infrastructure provision informs the extent to which such ICT infrastructure affects FDI inflow to West Africa. Previous studies relating ICT and FDI inflow as Menash and Traore (2022), Warsame (2021), Gold, Rasiyah and Kwek (2019), Fakher (2016), Kok and Ersoy (2009) have not focused on West Africa as a major destination of FDI in Sub-Saharan Africa on account of its attractive characteristics, and hence the present study is the first in the literature on West Africa differing from previous studies. Further

no previous study to the best of the researcher's knowledge has investigated the contribution of high and low ICT penetration for the role of ICT infrastructure for FDI inflow in the world in general and in West Africa in particular. Consequently, on account of the aforementioned, this present study makes a significant and germane contribution to the ICT and FDI literature. The present study in being performed utilises data covering the period of 2010 to 2020 and covers all the sixteen countries in West Africa.

While the present section has introduced the study, the study unfolds over subsequent sections. Section 2 highlights relevant literature, while the methodology of the study is discussed in section 3. In section 4, results of the study are presented, interpreted and discussed, while the conclusion and recommendations of the study constitute the final section of the study.

2. Literature Review

The literature on ICT infrastructure and FDI indicates a paucity in recent time in relation to studies focusing on countries of the world in general, and Africa in particular. However most recent studies are concentrated in the last two decades aligning with the turn of the century when there has been a sizeable penetration of ICT in developing countries of the world especially. The importance of infrastructure for FDI inflow is brought to the fore by Pribadi et al. (2019) who highlight the contribution to FDI as a result of boost in productivity of good physical infrastructure such as highways, ports, and ICT. Further infrastructure facilities, such as communications, transportation, and energy supply determine production and transaction costs, thus influencing incentives for the attraction of FDI into a country.

Studies having been performed in Asia and Africa have highlighted the importance ICT for Foreign direct investment inflow. In respect of Asian countries, Chodhury (2018) find both mobile subscription and internet penetration as important for foreign private equity in India's E-commerce sector over the period of 2000 to 2016. Further in respect of Foreign Direct Investments in Turkey Tandogan and Karis (2020) utilizing the Toda-Yamamoto causality testing find that increased internet use boosts FDI to Turkey while a bi-directional causal relationship between Foreign Direct Investment and Internet was found. ICT can in addition promote outward FDI to a host country as found in China by Huang, Jiang and Zhang (2021) where Internet security is a crucial determinant for Chinese firms to make location decisions overseas

Studies on Africa relating ICT to FDI inflow are limited as observed from the literature, although consistent with the literature in other parts of the world as Asia that ICT boosts FDI inflow. Warsame (2021) examined ICT infrastructure and FDI inflow to Africa using panel data for 53 countries, over the period of 1988 to 2014, and applying both the Fixed Effect and difference-in-difference in estimating their specified model, the study provided evidence in support of the argument that ICT has facilitated FDI inflow to Africa especially for those countries with access to the sea on account of the presence of fibre optic internet cables on the shores of African countries since 2009. Consequently, landlocked countries have been at a disadvantage when it comes to FDI due to their far distance from the fibre optic internet cables location in Africa. Consistent with the aforementioned argument, Mensah and Traore (2022) showed using granular data on FDI projects that the arrival of high-speed internet played a crucial role in stimulating FDI in the banking and technology sectors in Africa and also showed that where reliable electricity is present, high speed connectivity is associated with Increased Investment in the finance and technology sectors.

Ibrahim, Yakubu and Sare (2018) find for a panel data set of 46 countries from 1980 to 2016 that well developed ICT infrastructure robustly spurs FDI regardless of the measure of ICT. In support Kok and Ersoy (2009) find telephone mainlines as the most important determinant of FDI in a sample of 24 developing countries over the period of 1983 to 2005. Including telephone, mobile

phone and internet as ICT infrastructure in influencing FDI inflow to D-8 countries, Wang and Rukh (2021) find over the period of 1997 to 2018, positive and significant effect of the infrastructure on FDI inflows. Further Asongu and Odhiambo (2020) find based on the Generalized Method of Moments that both Internet penetration and mobile penetration overwhelmingly modulate FDI to induce overall positive net effects on various economic growth dynamics in 25 countries in Sub-Saharan Africa for the period of 1980-2014. However, Gold, Rasiah and Kwek (2019) found that infrastructure as measured by fixed telephone had a significantly negative impact on Chinese FDI inflow to 18 oil-exporting African countries from 2003 to 2015 thus highlighting possible adverse effect of ICT infrastructure on FDI inflow as it is crowded out. On the other hand, Jahan and Paul (2021) find Mobile phone penetration positive but insignificant for influencing FDI inflow to Next 11 (N-11) countries. This is further consistent with findings of an insignificant positive relationship between ICT investments and FDI in Egypt by Fakher (2016) over the period of 1995 to 2013 and which was explained as resulting from the weakness of the ICT infrastructure in Egypt. Nonetheless the study of Fakher (2016) is the only country-specific study in the literature while generally reflecting the inadequacy of ICT infrastructure amongst other infrastructure in a developing country as Egypt despite the potentials of ICT for FDI inflow and in line with the literature highlighting the inadequacy and poor quality

3. FDI inflow and Information and Communications Technology performance in Africa

FDI inflows to West Africa relative to that attracted by Africa in general were sizeable as at the turn of the century with most of the inflows being attracted by Nigeria according to Akanegbu and Chizea (2017). At the same time, outflow of FDI from West African countries on account of various economic, political and social factors, give rise to considerable heterogeneity in net FDI inflow performance across West African countries from 2010 to 2020 as observed from table 1 where Nigeria is observed to have had the highest mean net FDI inflow at US\$4.235 Billion, followed by Ghana at US\$3.122 Billion and Liberia at US\$0.914 Billion. Guinea-Bissau on the other hand has the lowest net FDI inflow amongst West African countries.

Table 1: Average Values of FDI inflow and selected ICT indicators of West African Countries from 2010 to 2020

Country	Net FDI inflow (In Billions of US\$)	Mobile Cellular Subscription Per 100 Individuals	Internet Users Per 100 Individuals
Benin	0.212	85.11	13.02
Burkina-faso	0.233	76.48	8.92
Cabo Verde	0.113	101.58	46.19
Cote d'Ivoire	0.533	110.42	25.04
Gambia	0.069	109.27	25.53
Ghana	3.122	114.33	27.21
Guinea-Bissau	0.024	69.11	11.89
Guinea	0.392	78.96	10.38
Liberia	0.914	59.83	10.99
Mali	0.406	107.99	11.78
Mauritania	0.537	96.91	13.35
Niger	0.633	36.75	4.81
Nigeria	4.235	77.74	23.52

Senegal	0.588	95.83	22.79
Sierra Leone	0.406	66.48	8.62
Togo	0.211	64.28	9.6

Source: Computations based on data collated from World Bank World Development Indicators

In relation to performance of West African countries concerning mobile use and internet use, on the average mobile use is substantial in all West African countries with heterogeneity observed across countries as Ghana, Cote D'Ivoire and Gambia have the highest levels of Mobile users per 100 individuals on average at 114.27, 110.42, and 109.27 respectively. Internet use relative to mobile use is observed to be low across West African countries, however Cabo Verde has the highest internet users at 46.19 per 100 individuals, followed by Ghana at 27.21 per 100 individuals and Gambia and Cote D'Ivoire at approximately 25 users per 100 individuals.

Combining the heterogeneous performance of West African countries together towards providing an overview of FDI inflow and ICT in West Africa, Figure 1 provides the trend of the averages of each of the aforementioned variables over the period of 2010 to 2020.

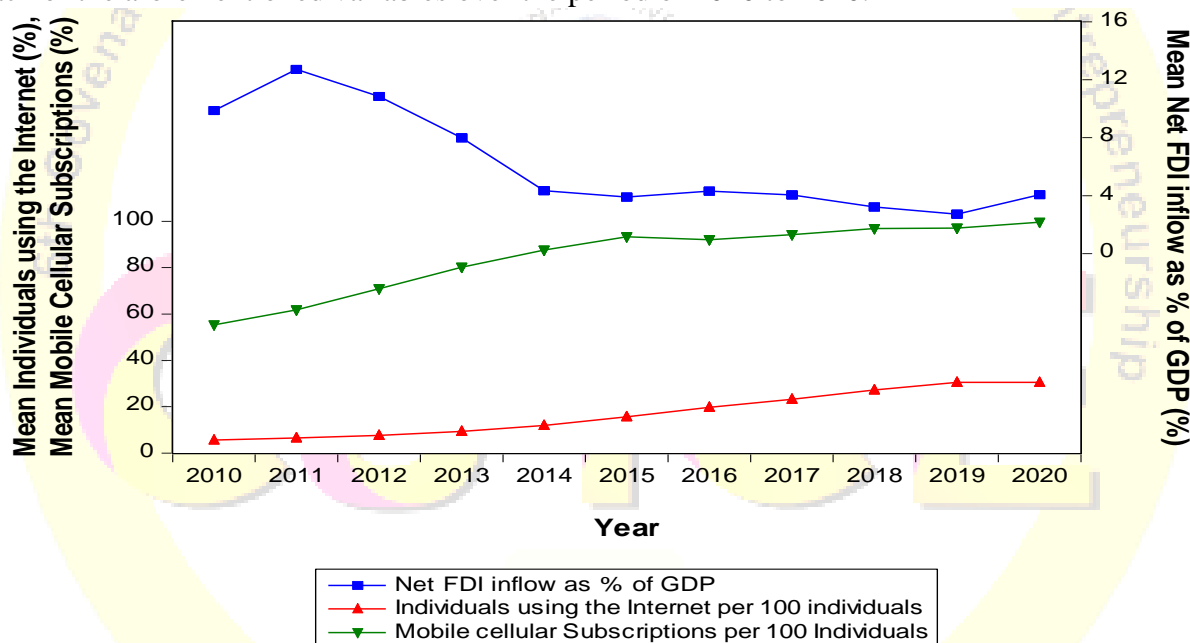


Figure 1: Trend of Annual Mean of ICT Indicators and Net FDI Inflow of West Africa over the Period of 2010 to 2020

Figure 1 shows that in West Africa, whereas the trend of the mean values of both Internet and mobile phone use were on the rise from 2010 in line with the rapidly rising penetration of ICT in African countries in general since the early 2000s till present, mean net FDI inflow has been generally on the decline. for which a variety of factors

4. Data and Methodology

This present study utilizes a balance panel data set comprising all sixteen West African countries namely: Benin republic, Burkina-faso, Cote D' Ivoire, Cape Verde, The Gambia, Guinea, Guinea-Bissau, Ghana, Liberia, Mali, Mauritania, Niger, Nigeria, Sierra Leone, Senegal and Togo and covering the period of 2010 to 2020. The data set thus features heterogeneity in country characteristics in terms of the size of respective country economies, growth potentials, population size, natural resources, access to the sea as a gateway to international trade with the rest of the

world, ICT penetration and so on which may play a role in countries potentials to attract substantial FDI inflows out of that which flows to globally. The choice of 2010 to 2020 is on account of the observation of significant penetration of ICT in developing countries in general, especially those of Sub-Saharan Africa which include West African countries since 2009. Mensah and Traore (2022) and Warsame (2021) explain the significant penetration of ICT in developing countries including those of SSA since 2000 but more impressively since 2009 as resulting from the arrival from Europe and the Middle East, of fiber optic submarine internet cables in African countries having access to the sea and which has enabled the dramatic development and increase of ICT infrastructure in Africa generally.

This study is founded on the Eclectic paradigm theory of foreign direct investment and in particular is related to the 'Location' dimension of the theory wherein ICT acts as a factor attracting FDI to the location that is West African countries primarily on account of ICT as well as other appealing characteristics of the countries. The model employed by this study is based on the adaptation of the model of Warsame (2021) specified in equation (1).

$$FDI = f(\text{INTERNET, MPHONE, PC, GDP, INC}) \quad (1)$$

Where, FDI = Foreign Direct Investment Inflow of Host Country, INTERNET = Internet users per 100 individuals in Host Country, MPHONE = Mobile cellular subscriptions per 100 individuals in Host Country, PC= Personal Computers per 1000 inhabitants in Host Country, GDP = Gross Domestic Product of Host Country, INC = Per Capita income of Host country

Adapting Equation (1), for the present study and including necessary controls reflecting fundamental characteristics of West African countries as GDP Growth rate (GDPGR), Agriculture as a share of GDP (AGGDP) – which reflects the agriculture sector dependence of host West African countries, Trade openness (TROP), Inflation (INFL) and rule of law index – measure for institution quality, equation (2) is the model employed for this present study.

$$FDII = f(\text{ICT, GDPGR, AGQ, TROPN, INFL, RL}) \quad (2)$$

Where, FDII = Foreign Direct Investment Inflow of Host Country, ICT = Information and Communications Technology Infrastructure in Host country, GDPGR = GDP Growth Rate of Host country, AGQ = Agriculture as a share of GDP of Host Country, TROPN = Trade Openness of Host Country, INFL = Inflation in Host Country, RL = Rule of Law in Host Country

Disaggregating ICT infrastructure into Mobile Phone and Internet use while maintaining all other variables in the model, Equation (3) results:

$$FDII = f(\text{MPH, INTERNET, GDPGR, AGQ, TROPN, INFL}) \quad (3)$$

Where, FDII = Foreign Direct Investment Inflow of Host Country, MPH = Mobile phone users per 100 individuals in Host country, INTERNET = Internet users per 100 individuals in Host country, GDPGR = GDP Growth Rate of Host country, AGQ = Agriculture as a share of GDP of Host Country, TROP = Trade Openness of Host Country, INFL = Inflation in Host Country, RL = Rule of Law in Host Country

The econometric specification of Equation (3) is as in Equation (4), allowing for controls for country and year effects (as reflected by dummy variables)

$$FDII_{it} = \alpha_0 + \alpha_1 MPH_{it} + \alpha_2 INTERNET_{it} + \alpha_3 GDPGR_{it} + \alpha_4 AGQ_{it} + \alpha_5 TROPN_{it} + \alpha_6 INF_{it} + \alpha_7 RL_{it} + \alpha_8 \delta_i + \alpha_9 \omega_t + \varepsilon_{it} \quad (4)$$

Where, FDII = Foreign Direct Investment Inflow of Host Country, MPH = Mobile phone users per 100 individuals in Host country, INTERNET = Internet users per 100 individuals in Host country, GDPGR = GDP Growth Rate of Host country, AGQ = Agriculture as a share of GDP of Host Country, TROP = Trade Openness of Host Country, INFL = Inflation in Host Country, RL =

Rule of Law in Host Country, δ = Country dummy, ω = Year Dummy, ε = Error Term, i = country 1-16, t = 2010 – 2020

From Equation (4) the α s are the respective parameters of the model to be estimated, with α_0 as the constant of the model and $\alpha_1 \dots \alpha_9$ as the coefficients of respective independent variables. While FDI inflow is measured using Net FDI inflow, the variables MPH and INTERNET are the respective variables of interest in the above model in line with the research hypotheses. The δ and ω are country and year effects and captures the specific-effect of location and time on FDI inflow, respectively. The panel data random effects estimation was used in estimating the above specified model based on evidence from the insignificant Hausman test statistic.

Data employed for this present study is secondary data with data on all variables except Rule of law sourced from the World Bank World Development Indicators (WDI) while Data on Rule of Law was sourced from the World Bank World Governance Indicators.

In light of the twin objectives of this study equation (4) is estimated in relation to the full sample of West African countries and also in relation to the countries disaggregated into high and low ICT infrastructure countries on the basis of the levels of penetration of the ICT infrastructure of interest –Mobile phone and internet. A country is deemed to be a high ICT infrastructure country on the basis of the ICT infrastructure of interest, if the mean value of ICT penetration for the ICT infrastructure for the country is higher than the mean value of ICT penetration in regard to the ICT infrastructure for the full sample of West African countries. The inverse is equally true for a low ICT infrastructure country.

4. Results

The descriptive statistics of variables employed in this study are shown in Table 2. All variables depict heterogeneity in their levels of variability, while in respect of ICT infrastructure, West African countries have a higher level of Mobile phone relative to Internet use.

Table 2: Descriptive Statistics of Variables

Descriptive Statistics	Net FDI Inflow	Mobile Cellular Subscriptions (% of Population)	Individuals Using the Internet (% of Population)	GDP Growth (%)	Agric as a % of GDP	Trade Openness (% of GDP)	Inflation Rate (%)	Rule of Law (In Decimals)
Mean	0.789	84.43	17.14	4.33	26.75	15.94	4.88	-0.649
Median	0.339	83.00	13.00	4.99	22.88	13.27	2.64	-0.672
Maximum	8.84	152.00	62.00	20.72	60.61	55.26	23.56	0.635
Minimum	-0.884	22.00	1.00	-20.60	4.63	3.83	-3.23	-1.586
Std. Dev.	1.33	27.85	14.46	4.19	12.21	10.53	5.54	0.471
Skewness	3.10	0.00	1.10	-1.56	0.798	2.39	1.25	0.670
Kurtosis	14.54	2.50	3.66	12.65	3.234	8.76	4.27	3.435
Observations	176	176	176	176	176	176	176	176

Analysing data using Random effects estimation, the results of data analysis are presented in table 3. While column (1) are the random effect estimates for the full sample of observations, columns (2) and (3) are the results from estimating random effects model for the sample of countries with high and low mobile phone penetration, while columns (4) and (5) are the results from estimating random effects model for the sample of countries with high and low internet penetration

Table 3: Panel Data random Effects Regression Estimates

Sample	Total Sample	High Mobile Phone penetration	Low Mobile Phone Penetration	High Internet penetration	Low Internet Penetration
Equation	(1)	(2)	(3)	(4)	(5)
Dependent Variable	FDII	FDII	FDII	FDII	FDII
Constant	-0.414 (0.645)	-0.0554 (0.527)	1.737** (0.869)	0.969 (1.450)	-0.221 (0.318)
MPH	0.0104** (0.00493)	0.00997* (0.00551)	-0.00205 (0.0105)	-0.00563 (0.0135)	0.000895 (0.00269)
INTERNET	0.0253** (0.0120)	-0.0219* (0.0127)	0.169*** (0.0307)	0.0925*** (0.0331)	-0.0122 (0.0140)
GDPGR	0.0401*** (0.0150)	0.0680*** (0.0224)	0.0378 (0.0350)	0.137*** (0.0470)	0.0232** (0.0104)
AGQ	0.00283 (0.0129)	-0.00306 (0.0123)	0.00397 (0.0130)	-0.0847 (0.0519)	-0.000247 (0.00560)
TROPN	-0.0108 (0.0133)	-0.0139 (0.00975)	-0.0557* (0.0306)	-0.0553* (0.0291)	0.0374*** (0.0111)
INFL	-0.0173 (0.0189)	0.143*** (0.0201)	0.0217 (0.0251)	0.297*** (0.0413)	-0.00186 (0.0107)
RL	-0.678* (0.383)	1.108*** (0.298)	0.788* (0.472)	-0.560 (0.587)	0.0731 (0.221)
Country Dummies	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Countries	16	8	8	6	10
Observations	276	88	88	66	110
R-Squared	0.2246	0.6624	0.5234	0.6662	0.2453
Wald Chi-Sq (17)	39.42***	137.36***	76.86***	95.78***	45.89***

P-values in parenthesis. *, **, * indicates significance at 1%, 5% and 10% levels.**

Table 2, Column (1), shows that both ICT infrastructure - mobile phone (MPH) and internet are positive and statistically significant for FDI inflow to West Africa. Specifically, a unit rise in each of Mobile phone and internet results in 0.0104-unit and 0.0253-unit increases respectively in Foreign direct investment inflow to West Africa, with both contributions of ICT infrastructure important for FDI inflow to West Africa. However, internet relative to Mobile phone ICT infrastructure makes a greater positive contribution to FDI inflow to west Africa by 0.0149 units – reflecting a greater marginal impact of internet relative to mobile phone on FDI inflow to West Africa. The finding of positive and significant effect of both mobile phone and internet use on FDI

inflow is evidence that Information and Communications Technology (ICT) boosts Foreign Direct Investment inflow to West Africa, and is consistent with similar findings by Mensah and Traore (2022), Warsame (2021), Wang et al (2021), and Asongu et al (2020). This may be explained by the reduction of transaction costs for business associated with the provision of ICT infrastructure and which ensures that multinational enterprises are attracted to host countries on account of their expected profitability as a result of their utilisation of the ICT infrastructure on establishing their enterprise in the host country.

Further Mensah and Traore (2022) and Warsame (2021) in particular associate the boost of FDI inflow to Africa resulting from ICT infrastructure provision, to submarine internet cables arrival to Africa. This will especially be the case for countries close to the sea which includes most West African countries. Specifically, with the exception of Burkina-Faso, Mali, and Niger that are land-locked countries, all other West African countries have close proximity to the sea. However, this present study is germane to the ICT - FDI literature to the extent that it focuses on West Africa which has received little focus in the literature despite the evident heterogeneity of countries in terms of infrastructure and FDI inflow and the importance of the country region for rapid progress of Sub-Saharan Africa in virtually all metrics of development.

The control variables from Table 3, column (1), GDP growth rate (GDPGR) and Rule of Law (RL) are significant for FDI inflow, Rule of law however adversely affects FDI inflow while GDP growth as expected boosts FDI inflow to West African countries. The adverse effect of rule of law may reflect the weak enforcement of laws which impedes FDI inflow, while the boost in FDI inflow resulting from GDP growth highlights the importance for FDI inflow to West Africa of the presence of a large and expanding market as that present in West Africa for the sale of goods and services, which informs the FDI inflow decision of multinational enterprises located in foreign countries. Note however that the present study is unable to determine the source countries of FDI inflow to West African countries and so does not distinguish between FDI inflow that may emanate from other West African countries and those that emanate from countries that are not in west Africa.

Agriculture as a share of GDP (AGQ), Trade Openness (TROPN) and Inflation (INFL) which are further control variables in the estimated model are found to be insignificant for FDI inflow to west Africa from column (1) in Table 3.

The estimates in columns (2) – (5) in Table 3 result from testing the hypothesis whether the level of respective ICT infrastructure provision as measured by level of respective ICT penetration informs the extent to which such ICT infrastructure affects FDI inflow to West Africa. In respect of columns (2) and (3) mobile phone is positive and statistically significant for FDI inflow in High penetration mobile phone ICT infrastructure West African countries, while it is negative but not statistically significant in low penetration mobile phone ICT infrastructure West African countries. This highlights the value of high mobile phone penetration in West Africa resulting from the high demand for mobile phones possibly due to their affordability, as well as, the possibility that such West African countries with high penetration can leverage on such ICT infrastructure to attract substantial FDI inflows from the global economy. However, the coefficient of mobile phone for high penetration mobile phone ICT infrastructure countries of 0.000997 while statistically significant is low which possibly reflects the saturation of the mobile phone market in West African countries and thus the adverse effects of rising costs of access to mobile phones due to high demand for the phones. Such high demand for mobile phones in West African countries is likely to harm the potential high levels of FDI inflows to West African countries which could have been attained with the aid of internet in the high penetration mobile phone ICT countries as

potential new purchasers of mobile phones may be dis-incentivised from purchasing new mobile phones for undertaking business transactions. Rule of law as a control variable is in addition found to be positive and statistically significant for FDI inflow in high and low mobile phone countries highlighting the importance of strong institutions for the potency of mobile phone infrastructure to translate to FDI inflow in high and low mobile phone infrastructure countries. Interestingly GDP growth is of importance and boosts FDI inflow only in high penetration mobile phone infrastructure countries.

Further as regards high penetration internet ICT infrastructure countries in comparison with low penetration internet ICT infrastructure countries, column (4) reveals that, internet is statistically significant for boosting FDI inflow to high penetration internet ICT infrastructure countries and resulting in a sizeable impact given the coefficient of 0.0925. On the other hand, column (5) reveals that internet ICT infrastructure while adversely affecting FDI inflow to low penetration internet ICT infrastructure countries is insignificant. GDP growth however boosts FDI inflow in both high and low penetration internet ICT infrastructure countries.

The aforementioned findings from the results of columns (2) – (5) regarding ICT infrastructure and FDI inflow are a further significant contribution to the ICT infrastructure – FDI literature as previous studies such as Mensah et al (2022), Warsame (2021), Wang et al (2021), Pribadi et al (2019), and Ibrahim, Yakubu and Sare (2018) have not explored the role of high or low ICT penetration for FDI inflow in the context of any country or group of countries, whether African or not. Such an analysis enables an assessment of the ICT strengths of countries for positioning the countries for sizeable and invaluable inflows of the share of world FDI inflows.

5. Conclusion and Recommendations

This present study examined whether the effect of Information and Communications Technology (ICT) on Foreign Direct Investment (FDI) inflow was dependent on the level of ICT penetration in West Africa for a balanced panel data of sixteen West Africa countries from 2010 to 2020. The study found evidence suggesting ICT infrastructure – mobile phone and internet, to significantly boost FDI inflow to West Africa. Further while mobile phone was found to be significant for boosting FDI inflow to High penetration Mobile phone ICT infrastructure countries, and internet was found significant for boosting FDI inflow to High internet penetration ICT infrastructure countries, both mobile phone and internet were found negative and insignificant for FDI inflow in low penetration mobile phone and internet ICT infrastructure countries. The findings are germane for the ICT infrastructure - FDI literature especially in the contest of Sub-Saharan Africa in general and West Africa in particular. Arising recommendations are certain to inform the use of FDI inflow in maximizing of the potentials of ICT infrastructure – both mobile phone and internet, in West Africa. Future studies may look to control for other indicators of ICT infrastructure and use alternative model specifications and estimation techniques in testing the robustness of findings.

This present study makes a number of recommendations based on the findings of the study. First, governments of respective West African countries must of a necessity leverage on their country strengths in respective ICT infrastructure as reflected by their respective country ICT penetration levels, via ICT infrastructure provision in order to attract sizeable amounts of FDI inflow in light of increased global competition for capital in the world and the dire need of West African countries for increased levels of capital for domestic investment. Second, the use of ICT in the form of mobile phones and internet by individuals in West African countries must be promoted and encouraged in order to raise the levels of ICT infrastructure so that it may serve as a tool for attracting FDI inflow to West African countries. Third, Governments of West African countries should develop their ICT infrastructure including its quality in enabling the effectiveness of ICT

in acting as a tool that can promote FDI inflow. Fourth, correlates with ICT such as GDP growth rate, trade openness and inflation should be given focus by West African country governments so as to ensure that they can act as channels through which ICT infrastructure may impact FDI inflow to West African countries.

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Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers) in Ikeja, Lagos State, Nigeria.

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Abstract

Customers this day are trendy and willing to imbibe changes as regards to what gives satisfaction after purchases are made as well as how convenient making purchases. Introduction of Information and Technologies (IT) and the use of internet have brought about cheaper, time saving and convenient ways for customers to shop now. Many business organisations are doing sales online in order to be to increase their sales volume hence; dealers in mobile phones in Nigeria also need to adopt this online selling in order to make more sales to boost their efforts on organisational performances. This research work will examine the impact of Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers) in Ikeja, Lagos State, Nigeria. The objectives of the study are to: the application of e-marketing to improved customers' convenience to benefit from online buying; use of digital marketing has helped to improvement customer satisfaction that can increase customer base. Questionnaires was distributed among the mobile phones dealers at Ikeja environment 146 sample was received out of, the results of the responses from the questionnaire will be grouped together and analysed in accordance with the research questions, while the stated hypotheses will be tested with Pearson's Product Moment Correlation Matrix through SPSS. The outcome revealed that both tested hypotheses are positive and that the dealers have taken the right steps by implementing online sales, other business owners can also join to do online sales.

Introduction: The face of marketing has dramatically changed with the new media channels emerging every time in this dispensation as many people are into online buying of goods and services at any given time, even as this new media threatened the elongated commenced business models of marketing and corporate communication approaches, it also initiate abundant opportunities for growth. With this innovative adaptive strategies, businesses are now accepting the new media principally to be promoted by internet with interactive economical and convenience (Belch & Belch, 2013). The paradigm shift in marketing communication and advertising scenery is remarkably a landmark and this has been made possible by the evolution of Information Technology (IT) using internet and innovation. Digital or Electronic marketing (E-marketing) is the conducting and promotion of a marketing organisation's products on the internet (Singh, 2016). This is a successful and resourceful chance to conveniently transaction business and advertises messages to the current and potential buyers of an organisation's products. It also afford organisations to open up business 24/7 thereby giving buyers unrestricted access to transact business from anywhere universally as well as allowing organisations to commune with diverse audience with targeted advert with accuracy and at the right time (H & K, 2013). There are mixtures of benefits offered by digital marketing to the customers (Zourikalatehsamad, Payambarpour, Alwashali & Abdolkarimi, 2015). The rapid technological diffusion makes the internet the best way to provide customers with banking services regardless of the limits of time and geography. And that is what makes banks consider the internet as an important part of their strategic plans. Internet technology has changed the design and the way of delivering the financial

services and as a result, the banking industry has made continuous innovations - especially in the field of marketing communications and information technology - that ultimately led to the emergence of the idea of what is known as the "E-marketing or Digital Marketing". Marketing of banking services through the internet is a way to keep the existing customers and attract others to the bank (Mathew, Ogedebe & Ogedebe, 2013).

There is the need for customers' convenient marketing and service delivery in Nigeria as one of the largest economy in Africa, the effectiveness and viability of digital marketing was due to the high degree of interactivity with feedback mechanism which allows customers to transact business as well as lodge complaints as contributions to likely advert messages adjustment for product enhancement (Tavor, 2011). By way of comparison, digital marketing is cheaper than traditional that entails more money for prints and traditional communication media, the digital marketing is highly cost efficient for a divergent and widely targeted audience hence it is said that digital marketing cost effective (Zourikalatehsainad et.al, 2015). Belch & Belch (2013) assert that e-marketing campaign can possibly attract global attention for the organisation's product which means that it has a wider reach of as many people that have accepted the online media of communication. It also has the speed in accessibility and message delivery and it is faster than the conventional or offline advertising channels in terms of message delivery (Hashimova, 2015). Furthermore, the assessing digital marketing objective by the number of visits of customers can easily be measured online marketing effectiveness, unlike the brick-and-mortar marketing that lacks easy measurement of the sales impact of the product after launching the marketing campaign (Ayo, Adewoye & Oni, 2011).

Customers are very crucial asset to organisations, for an organisation to have good customer base is to ensure a continuous source of future revenue due to repeat purchases by the customers (Onwudiwe, Agwamba, Ugwuegbu & Opara, 2018). Organisations spending much money to attract new customers need to retain their existing customer base and be sure not to by any means loose customers and continue to replenish the lost customers (Ibid). The expansion and sustenance of customer base in an organisation posed to be a huge problem particularly in organisations facing high competitive disadvantage with inconsistent cost of brand that are relatively low. Customer base is the group of customers who repeatedly buy products offered by an organisation and they are the major source of income for that organisation. Customer base is the total number of customer who is loyal to a particular organisation. It is the organisation's target markets that exhibit the customers' behaviours to be understood through market research or the past experiences (Dawes, 2009). Customers are the life blood of any organisation, so it's vital they are kept by generating leads and retaining the existing customers, customer base is the main concern of organisations for businesses with more than one in three product-lines in the organisations saying that generating new business is their biggest worry. Therefore, organisation that wants to grow its customer base need to be acquainted with both the clients and the prospects, hold up the existing purchasers and search for new ones and present incredible and value services to the customers. This research study is based on conducting of e-marketing in relation to increase customer base and satisfaction in mobile business and based on this background that this study is set out to examined Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers) in Ikeja, Lagos State, Nigeria

The emergence of IT using internet is a landfall in the delivery of marketing mix cum marketing communication in the Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers). Digital marketing being a distinctive beneficiary of gamut of benefits provided by internet, however, many Nigerians in particular are

yet to key in to enjoy these benefits intrinsic in e-marketing (Heinonen & Rozenveld, 2013). Many have perceive risks and therefore lack the trust of operating digital marketing transactions as they have confidence in the brick-and-mortar business more thereby still find their ways to the open markets regularly. Hence the major issue is the internet facilities with its epileptic nature that could cause people not to fully explore and exploit the online business even if it is cheaper and less time consuming with speed to transact online. Also, the internet facilities and services in Nigeria are yet to be fully explored and exploited as the connectivity is rarely stable. Perhaps that is why many banks are yet to fully harness the full potential of e-marketing as a more convenient, speedy, less costly, more messages focused, interactive, and easy to evaluate in terms of return on investment conduit to market their products and services. In the same vein and metaphorically, bank customers lack the confidence and trust of the online media too (Okolo & Ehikwe, 2015). Due to the cursory reassess of literature that showed that digital marketing have attracted a lot of scholarly attention with most of these studies focusing on the application of ICT in banking but none or very few have done studies on the application and digital marketing as customer satisfaction among the SME operating mobile phone business hence, creating a gap in literature. The reason is that many businesses fail to understand the nature of this new but powerful tool of selling. They must learn to live and compete in a world where location is less important and the consumer is used to 24-hour service as customers want to do business online according to their own time schedules. Many unsuccessful online businesses fail to satisfy their customers because the expectation of the online customers is often higher and may even be different from that of those using traditional marketing. Marketing in the world of the Internet, therefore, presents new challenges to businesses and marketers world-wide. Building long-term customer relationships through customer satisfaction is one of the crucial keys to a successful business. An organization exists to satisfy customers' wants and needs while meeting the organizational objectives of increased sales and higher profit.

Consequently this study aims to investigate Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers) while conducting this study is to effectively assess the application of e-marketing to improved customers' convenience to benefit from online buying; use of digital marketing has helped to improvement customer satisfaction that can increase customer base. Hence the questions for the study are: to what extent can the applications of e-marketing improve customer's convenience to benefit from online buying? To what extent does digital marketing have to improve customers' satisfaction that can increase customer base? The hypotheses to be tested are:

H₀: Application of application of digital marketing has not significantly improved customers' convenience to benefit from online buying.

H₀: Use of E-marketing has not significantly helped to improvement customer satisfaction that can increase customer base.

Customer satisfaction is a collective outcome of perception, evaluation, and psychological reactions to the consumption experience with a product or service. According to Kottler, 2000, satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product perceived performance or outcome in relation to his or her expectations. Customer satisfaction means those customers' needs, wishes and expectations are met or overcome during the consumption of product or service period thereby giving way to re-purchasing and customer loyalty (Anton, 1996). In other words, "customer satisfaction is the assessment of the pre-purchasing expectations from the product, with the results reached after the act of purchasing," a

highly satisfied customer continues his shopping for a long time; buys more as long as the organisation produces new products and the existing products are improved; speaks of the organisation and its products with praises; keeps indifferent to the trademarks that are in competition with the products of the organisation and does not place emphasis on the price; but offers the organisation suggestions and ideas about products and services (Kocoglu and Kimaci, 2012). Customers are the reasons organisations exist for profitability sakes, early concept of satisfaction research has typically defined satisfaction as a post choice evaluation judgment concerning a specific purchase decision (Churchill, Gilbert and Carol, 1982). Yanz, & Fang, (2004) believes that online customers still demand many services available through traditional channels even if they choose pure Internet-based suppliers with basic customer services. Although expectations seem to be of lesser importance as a comparison standard in e-commerce, customers appear to use experience-based norms and traditional services as comparison standards for e-services. Establishing and achieving customer satisfaction is the main goal of businesses nowadays because there is a strong relationship between the quality of product, customer satisfaction and profitability.

It is said that IT personify a convergence of interest between electronics, computing and communication. Chowdhury (2012) posits that the ICT covers technologies that can develop diverse kinds of information (audio, video, text and data) and assist different types of communications among individual mediators and among information systems. The usage of information and communication technology has since improved functions and accomplishments of commerce in Nigeria hence, it is expected that the impact of the consolidation will increase the employ of information and communication technology by motivating some types of competitive advantage, precision and proficient business deals to develop the quality of service delivery in Nigeria industries (Obasan, 2011; Akinkugbe, 2016).

There is no singular definition of a small business because the classification of businesses into large-scale or small-scale is a subjective and qualitative judgment. Small and medium scale enterprises in Nigeria has a work force estimated between 10 and 300 employees and a maximum asset base of N200million and registered with the Corporate Affairs Commission in compliance with Companies and Allied Matters Act (CAMA 1990). SMEs in newly industrialized countries are characterized by simple, labour-intensive manufacturing methods. Equipment is often second hand, and the manufacturing process is often inefficient compared with larger industries. Small scale and medium sized enterprises (SMEs) have been the major factor contributing to the growth of the developed economies of the world. The SMEs serve as the backbone on which any country's economic growth and stability rests. The American economy, the largest economy in the world, depends largely on the success of SMEs for innovation, productivity, job growth and stability of small business (SBA Report, 2000). Therefore, promotion of such enterprises in developing economies like Nigeria is of paramount importance since it brings about a great distribution of income and wealth, economic self-dependence, entrepreneurial development employment and a host of other positive, economic uplifting factors (Aremu, 2004). Moreover, in a country like Nigeria with an adverse Balance of Payment situation, the growing contribution of the Small Scale Industries sector in Nigeria's export portfolio goes a long way in generating foreign exchange and smoothening out the adverse Balance of payment situation.

Mambula (1997) asserts that since the independence, Nigerian government have spent huge sum of money made from external funding institutions for the sake of entrepreneurial and small business development programs which have generally succumbed to insufficient results.

According to Eze & Okpala (2015) Small and Medium Scale Enterprises (SMEs) are expected to facilitate economic growth and development of both human and capital resources in the direction of the broad-spectrum economic development and the rural sector most especially, it is based on these expectations from SMEs that Nigerian government formulated procedures and inducements for the development. However, these efforts by the government at all levels to ensure the growth of SMEs in Nigeria, it was discovered that SMEs still failed due to certain reasons. In other to shield SMEs from being abandoned, the government implemented the use of high import tax rate to dampen importations of some the industrial goods that could be manufactured domestically and in other cases placed total ban on selection of industrial and agricultural goods (ibid). Obviously, ICT has brought about great changes in the ways businesses are conducted amongst SMEs as they play major roles in storing, retrieving, processing and disseminating information. SMEs account for major sources of employment, technological advancements and competitive advantages for both developed and developing countries Ghobakhloo, Benitez-Amado and Aria-Aranda (2011). Currently, all sizes of business are looking for ways to reinforce their competitive position and improve their productivity since there is an increasing consciousness of necessity to obtain proceeds through investment in IT in SMEs Premkumar (2003). According to Irefin, Abdul-Azeez and Tijani (2012) IT usage is expected to be an important factor for competitive growth of SME both global and regional markets because growth of competitive pressure forces SMEs to fight for new markets, new products and new distribution channels, hence Irefin et al (2012) posited that Small Scale Enterprises play an important role in the economics of any country in accordance with their relative levels of development.

H₀: Impact of application of digital marketing has not significantly improved customers' convenience to benefit from online buying.

Pearson's Product Moment Correlation Matrix for Hypothesis One

		Q9	Q6
Q6	Pearson Correlation	1	.303**
	Sig. (2-tailed)		.000
	N	146	146
Q9	Pearson Correlation	.303**	1
	Sig. (2-tailed)	.000	
	N	146	146

Decision rule: If the p-value is less than 5% ($\alpha = 0.05$) level of significance, the null hypothesis is rejected and the alternate hypothesis accepted.

Decision: Given the above test result, the p-value (0.000) is less than alpha (0.05), hence the null hypothesis is rejected. The result also shows a correlation coefficient of $r = 0.303$ which further implies that positive association exists between application of digital marketing to improve customers' convenience to benefit from online buying.

Conclusion: With evidence from the sample data, it can be concluded that application of E-marketing has significantly improved customers' convenience to benefit from online buying.

H₀: Use of E-marketing has not significantly helped to improvement customer satisfaction that can increase customer base.

Pearson's Product Moment Correlation Matrix for Hypothesis Two

		Q13	Q14
Q14	Pearson Correlation	1	.160
	Sig. (2-tailed)		.043
	N	146	146
Q13	Pearson Correlation	.160	1
	Sig. (2-tailed)	.043	
	N	146	146

Decision rule: If the p-value is less than 1% (alpha = 0.01) level of significance, the null hypothesis is rejected and the alternate hypothesis accepted.

Decision: Given the above test result, the p-value (0.043) is less than alpha (0.05), hence the null hypothesis is rejected. The result also shows a correlation coefficient of $r = 0.160$ this further implies that there is an association between use of e-marketing has significantly helped to improve customer satisfaction that can increase customer base

Conclusion: With evidence from the sample data, it can be concluded that application of use of e-marketing has significantly helped to improvement customer satisfaction that can increase customer base

Discussion of Findings

By examining the Digital Marketing for Customer Satisfaction among the Small and Medium Scale Enterprises (Mobile Phone Business Dealers) in Ikeja, Lagos State, Nigeria was presented and analyzed and the findings are outlined as follows: the results indicated that the use of E-marketing has not significantly helped to improvement customer satisfaction that can increase customer base. The majority of the respondents strongly agreed and agreed that the use of digital marketing by mobile phone dealers have increases their customer base, the use of digital marketing keeps customers informed about new products and services, that electronic marketing has opened up business to the global market space, that the interactive marketing platforms of the business attracts new customers, social media marketing campaigns and interactions with the public impacts positively on its customer's base. These submissions agree with Nizam (2015), who noted that adoption of e-marketing attracts new customers. The extent to which use of E-marketing has significantly helped to improvement customer satisfaction that can increase customer base as indicated that many of the respondents agreed that adoption of online marketing has made customers to no longer physically go to buy traditionally as almost all financial transactions can be done virtually now via mobile application done online. This concurred with Ayo, Adewoye and Oni (2011), who averred that E-marketing enhances ease of doing business. Lastly, the Correlation test of the stated hypotheses confirmed that application of e-marketing has significantly improved customers' convenience to benefit from online buying and that the use of e-marketing has significantly helped to improvement customer satisfaction that can increase customer base.

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Tract 3A: Multidisciplinary Practices and Sustainable Entrepreneurship

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Abstract: *Executive compensation has been a topic of significant interest and debate among scholars and stakeholders due to the persistent increase in pay for top executives. This paper presents an overview of executive compensation, its impact on a company's performance, and the traditional belief that high compensation is tied to performance. The paper also examines the different components of CEO compensation in developing countries such as Nigeria. The paper explains the agency theory, which concerns resolving the conflict that arises from the difference in objectives between the principal (shareholders) and the agent (executives). Corporate governance measures such as executive and board compensation plans have been put in place to improve internal control and align the goals of management with those of shareholders, thereby reducing the agency issue. The study highlights the need to align CEO compensation with their performance for sustained returns for shareholders.*

Introduction

Executive compensation has been a widely discussed topic in recent times because of the persistent increase in pay for top executives. The systems and processes for determining compensation at publicly traded companies have sparked debate among scholars. Shareholders anticipate that a CEO with a high salary will perform well and justify their pay, as stated in the study by Akinwunmi (2020).

The traditional belief was that CEO pay was directly tied to their performance and that high compensation was a result of their expertise and abilities. However, studies have shown that CEO pay has risen significantly regardless of performance, as reported in a study by Akinwunmi (2020). To tackle this challenge, corporate governance measures such as executive and board compensation plans have been put in place to improve internal control and align the goals of management with those of shareholders, thereby reducing the agency issue.

Chief Executive Officers play a vital part in the management and running of companies, occupying the top executive position. They are responsible for devising and executing high-level strategies, supervising the company's activities and resources, making crucial decisions, and serving as a link between senior management and the board of directors. (Akewusola & Saka, 2018; Ismail, Yabai, & Hahn, 2014).

According to Akewusola and Saka (2018), the CEO plays a vital role in the day-to-day functioning of a company. As the top level executive, CEOs are appointed by the board of directors and are responsible for developing and executing high-level strategies, overseeing company operations and resources, participating in corporate decision-making, and acting as a link between top management and the board of directors, as highlighted in the study by Ismail, Yabai, and Hahn (2014).

The impact of CEO compensation can be observed on a company's performance, organizational efficiency, and employee capabilities. It is sometimes thought to create a divide between the CEO and employees due to the significant difference in pay, including salary, bonuses, benefits, and insurance coverage, as stated by Ismail et al. (2014). Aligning CEO compensation with their performance is crucial for achieving sustained returns for shareholders, as outlined by Deysel and Kruger (2015).

As reported by Akinwunmi (2020), CEO compensation has not been a significant topic of discussion in countries like Nigeria, which are still developing. Unlike in developed countries such

as the United Kingdom and the United States, where CEO compensation is made up of multiple elements, in Nigeria, CEO compensation mainly consists of cash bonuses, salaries, and additional payments, as mentioned by Odum (2018).

Definitions

Executive

According to Chijioke (2014), executive directors usually reach their position by climbing the corporate ladder, and as a result, they automatically become members of the board.

The CEO, who holds the highest executive position in a company, has the power to make significant business decisions and is responsible for the overall performance of the organization. According to the agency theory, the CEO, who acts as an agent, is chosen by the shareholders, who act as the principals, to maximize their value. Executive directors, who are usually appointed by the board, typically receive a base salary and performance-based rewards, making them among the highest-paid members of the company.

Long-term contracts are commonly used for executive directors of major corporations, with renewals taking place on a yearly basis, as stated in ACCA (2012). The CEO and CFO are often examples of executive directors that hold high-level positions within the organization and are responsible for making vital strategic decisions, as noted by Akinwunmi (2020).

Compensation

Compensation, also referred to as wages and salaries, is a means of offering financial rewards to employees in exchange for their work in the organization. This compensation includes both cash payments and non-cash benefits such as incentives and benefits, aimed at motivating employees. As per Gary (2012), employee compensation encompasses all forms of remuneration received by employees as part of their employment.

Milkovitch, Newman, and Cole (2005) define compensation as all financial rewards, tangible benefits, and services given to employees as part of their employment. This includes the basic salary, both long-term and short-term incentives, as well as benefits such as insurance, pension plans, employee discounts, and paid time off.

Executive Compensation

Executive compensation refers to all forms of monetary and non-monetary rewards given to executives for their work in the company. This can include a base salary, benefits, performance-based bonuses, perks, and stock options, which are typically designed to meet regulatory requirements, adhere to tax laws, align with the company's goals, and incentivize the CEO's performance (Emmanuel, Michael, Akanfe & Oladipo, 2017).

Executive compensation, or "executive pay," refers to the financial rewards and benefits provided to top-level executives, such as CEOs and senior managers, as compensation for their services to the company.

As stated by Sun Xianging and Huamg (2013), "executive compensation" refers to the financial rewards and benefits given to top-level managers and executives, particularly the CEO, within a company. These pay packages are typically distinct from those offered to other employees in terms of scale and perks, often featuring a substantial base salary and stock options. Additionally, some companies opt to provide a lower base salary to their CEO in exchange for a greater number of stock options to minimize tax liability (Emmanuel et al., 2017).

Agency Theory

Murphy (2002) explains that agency theory concerns resolving the conflict that arises from the difference in objectives between the principal (shareholders) and the agent (executives), as well as the cost of monitoring the agent (the board of directors). This theory has been widely examined in regards to executive compensation and performance by various researchers.

Agency theory proposes that when a principal, like shareholders, gives decision-making authority to an agent, such as a CEO, a mismatch in objectives and interests may occur. This leads to a situation known as the "principal-agent problem," where the agent's actions may not align with the principal's best interests. Scholars have utilized this theory to examine executive compensation and performance.

An agent is someone who acts on behalf of a principal, using their resources to make decisions and carry out actions. The principal, in this case, entrusts their resources to the agent without having direct involvement in the day-to-day operations. The agent makes decisions without incurring much risk, as any losses will be borne by the principal.

According to Kopp (2021), agents, such as financial planners and portfolio managers, are given the responsibility of managing assets on behalf of their principals. The lessee, in this case, may be responsible for protecting and maintaining assets that do not belong to them, but they may have less of an interest in preserving these assets than the actual owners.

Different solutions have been suggested by agency theory experts to address the issue of disagreement between agents and principals. These solutions are referred to as "reducing agency loss," which means minimizing the losses suffered by the principal due to the agent's actions that are not aligned with the principal's interests.

To address the principal-agent problem, agency theory suggests various methods for aligning the interests of agents and principals. One such method is the use of incentives, such as stock options, to motivate corporate managers to act in the best interest of their principals. Additionally, linking executive compensation to shareholder returns is another example of how agency theory is applied in corporate governance.

One way to align the interests of corporate managers with those of shareholders is by providing incentives, such as stock options, to executives. However, this can lead to concerns that management may prioritize their own pay and short-term profits over the long-term growth of the company. One solution to this is to implement a compensation scheme where a portion of executive pay is linked to long-term goals and deferred to a future date. This can help to ensure that management is focused on the long-term well-being of the company.

These strategies for resolving agency conflicts are not unique to the corporate world. Similar methods, such as linking pay to performance, implementing performance guarantees, and terminating the agency relationship, can be seen in other areas where an agent is acting on behalf of a principal.

Components of Executive Compensation

Executive compensation can take on various forms, each providing its own set of tax advantages and performance incentives, such as:

Base Salary:

The base salary is the most typical element of executive compensation. Most executives are provided with a base salary. These salaries are typically determined through a process known as

competitive benchmarking, which involves comparing the salary to similar positions within the same industry and organization size (Murphy, 1999). It is also worth noting that there is a correlation between the size of the organization and the level of compensation offered (Okasmaa, 2009).

The base salary is a standard component of executive pay and is usually determined by using competitive benchmarking, which compares salaries based on the organization's performance, within the same industry. It is also worth noting that there is a correlation between the size of the organization and the level of compensation. Historically, executives in larger companies have been compensated more than those in smaller organizations. However, the significance of base salary in executive compensation negotiations has increased in recent years, particularly since the 1990s.

The Bonus:

Executive bonuses are a prevalent form of remuneration, particularly for top executives. They are usually paid out yearly and based on previous performance. The calculation of bonuses often involves a percentage of the executive's base salary, emphasizing the significance of the base salary in determining overall compensation. There are various types of bonuses that can be distinguished (Okasmaa, 2009).

The bonus is a commonly used form of compensation among executives, and is often tied to financial goals, such as reaching a certain revenue or profit. The amount of the bonus can vary depending on how well these goals are met. If the results exceed expectations, the bonus may be increased, but if the goals are not met, the bonus may be cancelled altogether.

The third type of bonus is not linked to specific targets, but rather to overall positive performance. Unlike the other types, this bonus does not have to be awarded consistently and may be granted when the executive has made a significant impact on the organization's results.

The stock options:

Stock options have become a prevalent means of executive compensation in recent years. These options give executives the chance to buy company shares at a predetermined price for a specified duration, with the aim of aligning the executives' objectives with those of the company. The options usually vest gradually, with a certain portion becoming exercisable after a set period, as described by Murphy (1999).

Stock options have become a popular form of compensation in recent years. These contracts give executives the right to purchase shares at a pre-determined price for a specific period of time. The options can be exercised over time, with a certain percentage becoming "vested" after a predetermined period. While stock options can serve as an incentive for executives to align their interests with the company's, they should not make up a large portion of the compensation package, as they may lead to a focus on short-term stock price rather than other important aspects of the company.

Long-term incentive plans:

Long-term incentive plans (LTIPs) are a type of compensation that link an executive's pay to the company's long-term strategic goals. These plans are typically based on an average of past performance over a period of several years. Unlike stock options, LTIPs are not necessarily tied to the stock price. Executives may be eligible to receive free shares after a certain period, subject to certain conditions such as remaining with the company or achieving certain goals. This system is designed to keep executives invested in the company for a longer period, as they cannot receive benefits until several years have passed, unlike stock options, which can be exercised after just one

year. As a result, LTIPs are more effective at fully engaging executives in the company's development and performance.

Perquisites/Benefits:

Executive compensation packages, besides cash remuneration, often include various non-cash benefits known as perquisites or perks. These perks are utilized by employers to attract, retain, and inspire executives and generally consist of benefits like company vehicles, housing allowances, club memberships, and similar privileges. These non-cash benefits are given in addition to salaries, commissions, or incentives.

Executive remuneration frequently incorporates non-financial benefits, commonly known as perquisites or perks. These are supplementary benefits given by employers to entice, compensate, and enhance the efficiency of executives. These perks can comprise of company-supplied vehicles, compensated meals and lodgings, access to recreational amenities, reimbursement for entertainment expenses, educational reimbursement programs, free parking, holiday packages, memberships to prestigious clubs, and various electronic devices like smartphones and laptops.

Executives in some organizations may have access to additional health and welfare benefits beyond the standard offerings. These benefits may be fully covered by the employer or may be offered as part of a pretax payment plan. Alternatively, the executive may have the option to pay for these benefits out-of-pocket on an after-tax basis.

Executive benefits can include life insurance, split-dollar life insurance, disability insurance, long-term care insurance, job liability insurance, medical insurance or reimbursement, and additional vacation days or sabbatical leave.

In the past, many organizations have provided executives with a variety of perks and fringe benefits as a way to attract, retain, and reward them. However, in recent years, due to increased scrutiny and government regulations, many organizations have begun to reduce or eliminate the perks they offer to executives. Additionally, the value of all fringe benefits must be included in an employee's income for tax purposes, unless they are specifically exempt or excluded by law.

The provision of perks to executives at smaller organizations should be closely examined, as excessive use of such benefits may lead to financial struggles for the company, including bankruptcy or ongoing deficits.

Uses of Executive Compensation

The main objective of executive compensation is to recruit and retain top executives and at the same time, communicate with stakeholders such as investors, other executives, and employees. The compensation package for executives is negotiable between the employer and the potential executive and may not align with the norms for regular employees. The significance of executive compensation lies in its ability to influence the behavior and performance of the company's leaders.

- **Achievement of Organizational Goals**
An effective executive compensation program aligns with an organization's goals, objectives, and strategies and contributes to creating value for shareholders, employees, and customers. This alignment helps to bring consistency and harmony to the overall purpose and operations of the organization.
- **Attract and Retain Talent**
Effective executive compensation programs also align with the organization's goals by linking the incentives and rewards of the executives with the company's mission and performance. This helps to attract and retain the right kind of talent and promote the values and behaviors that align with the company's objectives.

The role of senior management and executive-level employees is vital for the success of a company, as they are responsible for creating and implementing strategies, making important decisions, and more. To ensure that they remain motivated and satisfied in their roles, it is essential to establish an appropriate compensation package. Without the proper incentives, executive-level employees may not act in the best interest of shareholders, which can result in financial losses for those shareholders.

Abuse of Executive Compensation

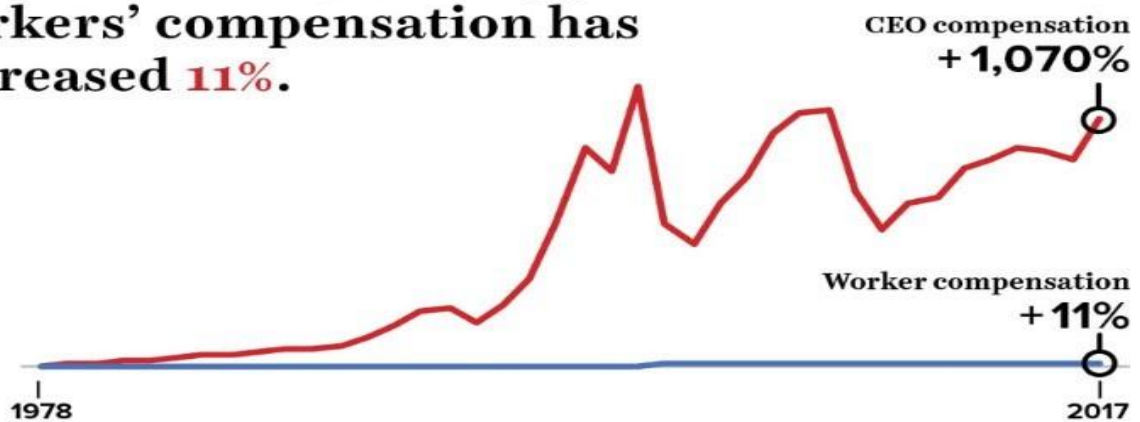
A recent study by the Institute for Policy Studies (2022) revealed a wide gap in compensation between the top CEOs at 300 major US companies and their median employees. On average, CEOs in the sample earned \$10.6 million per year, while the median worker earned just \$23,968. The study also revealed that many of the companies in the sample received substantial government contracts, with 40 of them receiving a total of \$37.2 billion from October 2019 to May 2022. Amazon, the second-largest contractor in the sample, received \$10.3 billion in federal contracts, and its CEO, Andy Jassy, was paid a package worth \$212 million, which was 6,474 times greater than the median pay for Amazon employees.

This disparity in pay has been the subject of criticism, with many CEOs facing accusations of excessive compensation and overly generous perks, such as those listed by Forbes (2011).

Basketball Tickets

Aubrey McClendon, the CEO of Chesapeake Energy, used \$5.9 million of the company's funds to purchase tickets to the Oklahoma City Thunder basketball games in 2010, despite being a partial owner of the team.

In the last 40 years, CEOs' compensation has increased 1,070%. Typical workers' compensation has increased 11%.



Source: Economic Policy Institute, *CEO Compensation Surged in 2017*, (2018).

go.epi.org/ceopay2018

Economic
Policy
Institute

In 2009, to save his company from bankruptcy, Lonnie Pilgrim, the founder of Pilgrim's Pride, invested his own money into the company. As a form of repayment, the company bought his egg farm for \$12 million, along with repaying the loan, interest, and an annual consulting fee of \$1.5 million.

Aubrey McClendon, CEO of Chesapeake Energy, sold his collection of antique maps to the company for \$12.1 million, in addition to his interest in sports.

CEO Martha Stewart generated \$2 million in profit by granting her company the rights to produce and air her TV show.

Relocation Expenses

James Bernhard, CEO of the Shaw Group, has the most unusual and extravagant perk when it comes to relocation expenses. While it is common for companies to provide significant sums of money to their CEOs and corporate executives to prevent them from divulging company secrets or competing with the company if they are hired by a rival firm, Bernhard's perk goes beyond this norm. His agreement with the company includes a provision that his heirs will receive \$15 million plus interest for two years after his death, in order to ensure that the company's secrets remain protected even after his passing.

Designing an Executive Compensation Plan

Organizations must consider various accounting, tax, and regulatory factors when creating an executive compensation plan. A comprehensive strategy should be developed to effectively utilize each component of the plan and ensure that the overall compensation package aligns with the organization's goals.

When crafting a compensation strategy, it's important for employers to consider the following internal factors within the organization:

1. Business philosophy, mission, and vision.

The values and beliefs of an organization, as outlined in its mission and vision statements, play a significant role in shaping the total compensation strategy for executives. Additionally, the objectives and performance metrics outlined in the organization's business plan also inform the design and implementation of the executive compensation plan.

2. Legal, Tax, and accounting regulations.

In Nigeria, there are no specific guidelines for determining the maximum limit of share options or bonuses for companies, according to Udo Udoma and Belo-Osagie (2021). However, the Nigerian Code of Corporate Governance 2018 and the Securities and Exchange Commission Code of Corporate Governance for Public Companies in Nigeria, 2011, do outline regulations for executive director compensation. These regulations state that executive compensation should be tied to long-term performance and may include share options and bonuses. The company must disclose such compensation in their annual report.

According to Section 295(1) of the Companies and Allied Matters Act 2020 (CAMA 2020):

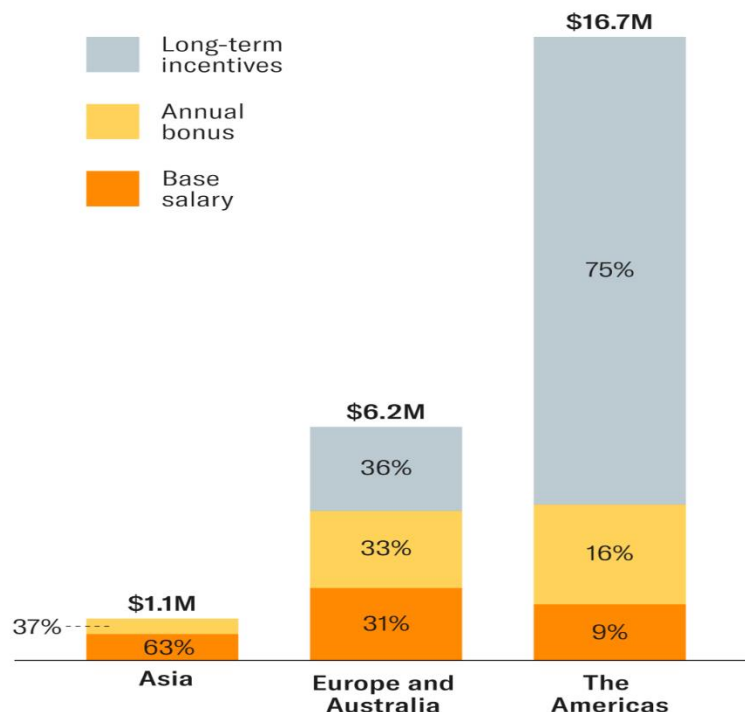
It is illegal for a company to provide a director with compensation, whether as a director or in any other capacity, that is exempt from income tax, that is based on or affected by the amount of income tax they pay, or that is determined by the rate of income tax.

Any additional incentives given to employees beyond what is legally allowed will be subject to taxation according to the Personal Income Tax Act, which states that they can be up to 24% of the employee's total compensation. This is outlined in Chapter P8 of the Laws of the Federation of Nigeria 2004, and the Personal Income Tax (Amendment) Act 2011.

3. Workforce composition, region, and demographics.

Location is a crucial factor in determining the cost of living and, in turn, compensation. Major cities tend to have a higher cost of living, including housing expenses, which is why wages for similar roles are often higher in these areas compared to rural regions.

Median CEO Total Compensation, by Region



Source: 2018 Global Top 250 Compensation Survey, by FW Cook, FIT Remuneration Consultants, and Pretium Partners Asia Limited

HBR

When creating a compensation package for CEOs, it is important to take into account the location and demographics of the workforce, as demonstrated by the disparity in executive pay between the US and Asia, with the latter being significantly lower. This difference would likely be even more pronounced when compared to Africa.

4. Industry and competition

Depending on the industry and level of competition, companies must decide compensation on four dimensions;

- Fixed versus variable. The fixed component is the base salary, which is a predetermined amount that is paid in cash. The variable component includes short-term and long-term incentives, which are based on the achievement of certain goals

and are not guaranteed. These incentives can be determined by a set formula or by the discretion of management or the compensation committee of the board.

In the illustration depicted below, there is a consistent distribution between fixed and variable compensation across different industries, although some, such as telecommunications, technology, and energy, pay a slightly greater proportion of variable compensation while others, such as financial services, materials, and utilities, pay a slightly greater proportion of fixed compensation.

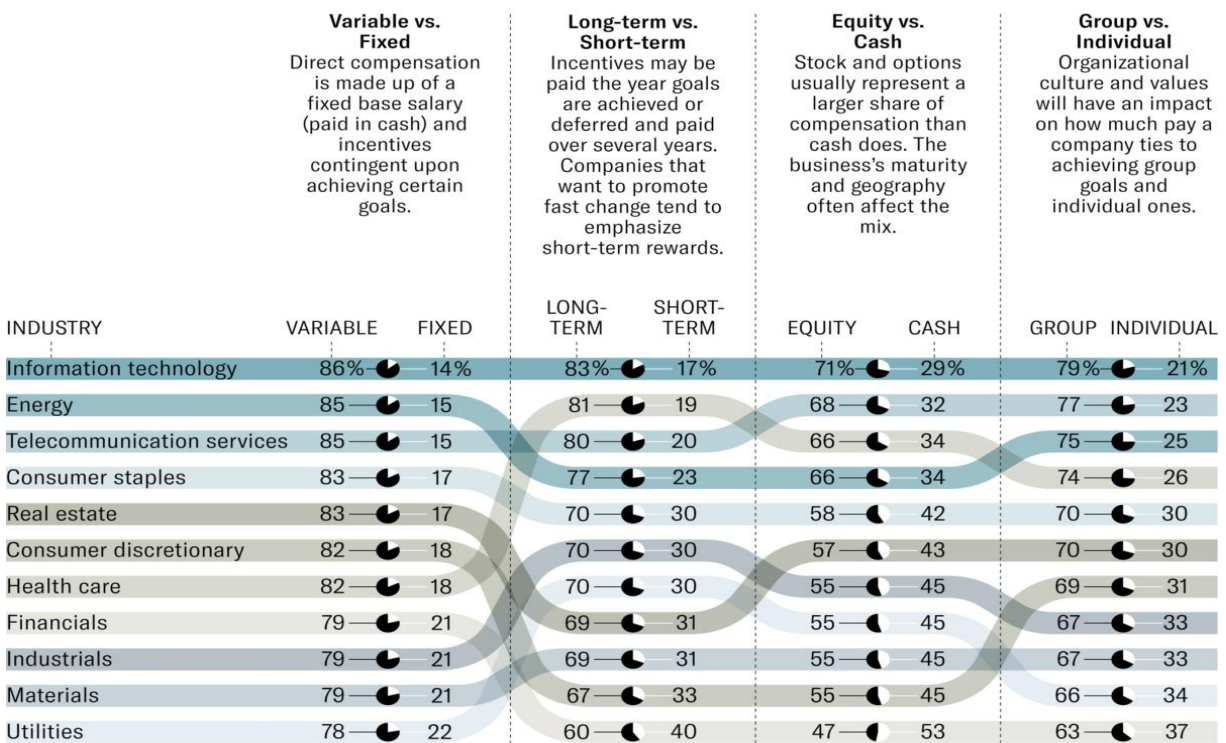
- Short- versus long-term. Another aspect to consider is whether variable compensation is paid out immediately or deferred to be distributed at a later time. Awards that are linked to achieving specific goals in the future are typically given in the form of equity, such as stock options, restricted stock, and performance shares. In contrast, short-term variable compensation is usually provided in the form of cash.

On average, 72% of variable compensation for senior executives is deferred and paid in future years, with the remainder paid out in the year it is awarded. Industries such as technology, healthcare, and telecom have a higher proportion of long-term awards, with 83%, 81%, and 80%, respectively. In contrast, financial firms have a lower proportion of long-term awards at 60%.

- The distribution of cash and equity in executive compensation is an important factor to consider. Based on our study, the average of 41% of senior executive compensation is given in the form of cash, while 59% is provided as equity. The allocation of cash and equity often varies based on the stage of the business, with start-ups relying more on equity to entice and retain key personnel in the absence of a large amount of cash. Furthermore, our findings indicate that equity compensation makes up a higher percentage of total pay in larger companies (63%) compared to smaller ones (48%). Industries such as technology, telecom, healthcare, and energy tend to have a higher proportion of pay delivered in equity form.

How Industries Compare on the Four Dimensions of Compensation Design

When setting executive pay, companies must decide how much will be variable or fixed, awarded in the short term versus the long term, delivered in the form of equity versus cash, and tied to group versus individual performance. Compensation committees often use the pay practices of their firms' peers as benchmarks. Here are the norms in selected industries.



Note: Data reflects the compensation of the five highest-paid executives at each of the companies in the Russell 3000.

Source: FW Cook proprietary research

HBR

- Individual versus group On average, 29% of senior executive compensation is based on individual performance, while 71% is based on the performance of the organization or company as a whole. The proportion of compensation linked to individual versus organizational performance can vary depending on a company's culture and values. Companies that place a high emphasis on personal accountability and individual contributions tend to have a higher proportion of compensation tied to individual performance, while companies that focus more on overall organizational results tend to have a higher proportion of compensation tied to organizational performance. Factors such as the industry and the type of business can also play a role in determining this balance.

5. Pay for Performance

The purpose of executive compensation agreements is to harmonize their behavior with the company's success, as per the direction of company boards (McClure, 2021). The concept is that a CEO's efforts should generate value for the organization. Many businesses refer

to their compensation plans as "pay for performance," indicating that a CEO's compensation is connected to the company's performance.

The idea behind "pay for performance" is that a CEO's compensation should be connected to the success or failure of the organization. This means that as the company performs well, the CEO's pay will rise, and if it performs poorly, the CEO's pay will decrease. This concept links a CEO's financial stability to the success of the company, implying that they are taking on a certain level of risk.

Determining appropriate executive pay based on performance can be challenging, as performance can be measured by various factors such as financial metrics, revenue growth, return on equity, or share price appreciation. However, using these metrics alone may not accurately reflect an executive's performance. To incentivize executives to meet both individual and company objectives, companies often use cash bonuses that are linked to performance.

Conclusion

According to some experts, CEOs have become increasingly valuable in today's competitive global economy as companies have grown larger and generated more wealth. Thompson (2013) argued that when executives fail, the consequences of their actions can have a greater impact than before. Supporters of this perspective often point out that while CEO compensation has risen, so have earnings for other highly skilled professionals whose abilities are critical to the success of their companies. With increased globalization, the demand for specialized skills has also increased, and thus, their value has risen.

The opposing viewpoint is that CEOs have a significant amount of influence over their corporate boards, allowing them to determine their own compensation packages with the help of supportive compensation consultants. This theory is known as "management power" (Weissmann, 2013).

Therefore, it is important to proceed with caution when considering CEO compensation. While it is understandable for a highly successful CEO to receive certain benefits, it becomes problematic when these perks negatively impact shareholders and employees, particularly during times of financial difficulty. In such cases, it may be necessary for boards to reevaluate their executive compensation plans.

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BAD LEADERSHIP: A BANE TO SUSTAINABLE DEVELOPMENT

SAM-AGUIHE, Sarah Adaeze

Abstract

Sustainable Development is development that meets the need of the present without compromising the ability of the future generations to meet their own needs. In essence, Sustainable Development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potentials to meet human needs and aspiration. The dire need for sustainability arose when Millennium Development Goals (MDG) set by different countries and world leaders were not implemented to target. These goals brought a new dimension on the understanding of economic matters and related policies but it was not so successful because issues surrounding economic and political structures were not properly addressed; therefore, the need for Sustainable Development Goals. As laudable as Sustainable Development is, bad leadership is a hindrance to its achievement. A certain type of leadership is required for the achievement of Sustainable Development Goals. A responsive leadership is acceleration to Sustainable Development. A leadership that is participatory and inclusive. Sustainability draws its strength from our own conviction of being the compass of our action and it requires legislation and

regulation. Leaders who spearhead the implementation of Sustainable Development Goals should embrace forward-looking policies focusing on the three dimensions of Sustainable Development which are ecological, social and economic to foster stability and peaceful exchange. Leaders are the catalysts to the implementation, realization and achievement of Sustainable Development Goals. Unfortunately, the leadership of today is such that a few individuals run the entire affairs of the people. The current form of leadership especially in Nigeria does not seem fit for Sustainable Development Goals. Sustainable Development is transformational and requires a more vibrant leadership that will facilitate the achievement of the Sustainable Development Goals.

Word count: 295

Keywords: *Sustainable Development Goals, sustainability, leadership*

Introduction

According to Wiktionary, Sustainable Development is any development which seeks to produce sustainable economic growth while ensuring future generations' ability to do the same by not exceeding the regenerative capacity of nature. Sustainable Development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs (JDPC, 2017). In essence, Sustainable Development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.

The dire need for sustainability arose when the Millennium Development Goals (MDGs) set by the different countries' and world leaders did not yield as much fruits as was expected. The agreement reached by the world leaders in 2000 on the Millennium Development Goals (MDGs) brought a new dimension to the understanding of economic matters and related policies but it did not succeed as expected because issues surrounding economic and political structures were not addressed (JDPC, 2017). There were many issues surrounding the implementation of MDGs. MDGs focused mainly on eradication of poverty, but, Nigeria as a country, for instance, did not key into MDGs until after five years and therefore could not have implemented the goals as they should. Though very few countries realized the MDGs, the rate of formal poverty was reduced (Ngoyi, 2019).

JDPC (2017) opined that Sustainable Development Goals (SDGs) have been developed to fill the gap created by Millennium Development Goals by expanding the Millennium Development Goals agenda to meet the context of a world's increasingly aware of Human Rights capabilities, growing inequalities as well as the urgency of addressing the concern for climate change threatening the ecosystem and humanity. The key lesson learnt by MDGs is the capacity to count and target. The need for data was highlighted. Achieving sustainability has to become the focus of politicians, government, companies and the society at large. In a world that is interconnected and interlinked to an unprecedented extent, it is evident that our actions have impact beyond national borders. Sustainability requires legislation and regulation. It draws its strength from the conviction of being the compass of human action (German Council for Sustainable Development, 2018). Sustainability is timeless and perpetually topical especially in relation with the way it is firmly embedded in the cultural history of mankind. Sustainability requires data revolution.

For sustainable development to get to the nook and corners of the society, the following goals have been set.

- End poverty in all its forms everywhere

- End hunger, achieve food security and improved nutrition; and promote sustainable agriculture
- Ensure healthy lives and promote well-being for all at all ages
- Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
- Achieve gender equality and empower all women and girls
- Ensure availability and sustainable management of clean water and sanitation for all
- Ensure access to affordable, reliable, sustainable and modern energy for all
- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Reduce inequality within and among countries
- Make cities and human settlements inclusive, safe, resilient and sustainable
- Ensure sustainable consumption and production patterns
- Take urgent action to combat climate change and its impacts
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Protect, restore and promote sustainable use of terrestrial ecosystems; sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all; and effective, accountable and inclusive institutions at all levels
- Strengthen the means of implementation and revitalize the global partnership for sustainable development (JDPC, 2017)

The 2030 agenda on Sustainable Development is based on a vision of just, equitable, tolerant, open and socially inclusive world in which the needs of the vulnerable are met. Through the agenda, all countries have made the commitment to build a peaceful, just and inclusive societies that provide equal access to justice for all and that are based on respect of the fundamental human rights (Task Force on Justice, 2019). Because the 2030 Agenda was designed to be integrative and universally applicable, the goals are multidimensional intertwining elements of the three main dimensions of the agenda: the society, the environment and the economy (CSCSD, 2022).

Achievement of Sustainable Development and its goals is largely dependent on the implementation of policies laid down for its achievement. Leaders are key instruments to such implementation and achievement. However, most bosses are likely to be threats to sustainable development. Being a leader doesn't just fill a job title. One must have the capacity to motivate one's team to enable them to deliver their tasks in a timely manner and in line with the overall goals of the organisation. Leaders today are under a magnifying glass, with people searching for their every weakness and mistake. Their decisions and actions are constantly scrutinized, criticized and rebuked (Pixonality.com, 2021). Leaders should create conducive environment for achievement of goals that would lead to Sustainable Development. The style of leadership of a people is most likely to affect the people's development. A leadership style is a leader's style of providing direction, implementing plans, and motivating people. It is the result of the philosophy, personality, and experience of the leader (Robert 1995, [Salazar](#) 2009).

REVIEW OF LITERATURE

Concept of Leadership

According to Drucker (2022) leadership is about taking risks and challenging the status quo. Leaders motivate others to achieve something new and better. Interestingly, leaders do what they do to pursue innovation, not as an obligation. They measure success by looking at the team's achievements and learning. Different situations call for different leadership styles. In an emergency, when there is little or no time to converge on an agreement and where a designated authority has significantly more experience or expertise than the rest of the team, an autocratic leadership style may be most effective; however, in a highly motivated and aligned team with a homogeneous level of expertise, a more democratic or [Laissez-faire](#) style may be more effective. The style adopted should be the one that most effectively achieves the objectives of the group while balancing the interests of its individual members ([Lewin, Lippitt, & White, 1939](#)). A field in which leadership style has gained strong attention is that of military science, recently expressing a holistic and integrated view of leadership, including how a leader's physical presence determines how others perceive that leader. The factors of physical presence are military bearing, physical fitness, confidence, and resilience. The leader's intellectual capacity helps to conceptualize solutions and acquire knowledge to do the job. A leader's conceptual abilities apply agility, judgment, innovation, interpersonal tact, and [domain knowledge](#). Domain knowledge for leaders encompasses tactical and technical knowledge as well as cultural and geopolitical awareness (Headquarters, Department of the Army, 2006).

Researchers had argued that the actual influence of leaders on organizational outcomes is overrated and romanticized as a result of biased attributions about leaders (Meindl & Ehrlich, 1987). Despite these assertions, however, it is largely recognized and accepted by practitioners and researchers that leadership is important, and research supports the notion that leaders do contribute to key organizational outcomes. Leaders are positively influential. There had been assertions that groups flourish when guided by effective leaders. According to Baumeister, Senders, Chesner, and Tice, (1988), the [bystander effect](#) (failure to respond or offer assistance) that tends to develop within groups faced with an emergency is significantly reduced in groups guided by a leader. Moreover, it has been documented that group performance, [creativity](#), and [efficiency](#) all tend to climb in businesses with designated managers or CEOs (Zaccaro & Banks, 2001; Larson, Christensen, Abbot & Franz, 1996; Jung, Wu & Chow, 2008). Leaders who focus on personal gain by employing stringent and manipulative leadership styles often make a difference, but usually do so through negative means (Lipman-Blumen, 2005).

Stories of bad leadership seem to be a familiar litany. Public officials pursue their own private interest rather than those of public good. Tandler (1997) observed that governments overextend themselves in hiring and spending; clientelism runs rampant with workers being hired and fired on the basis of kinship and political loyalty rather than merit. People are poorly treated; badly conceived and implemented programmes and policies create a myriad of opportunities for bribery, corruption, influence peddling and other forms of malfeasance. All these add up to the disappointing inability of many governments to deliver good public services and to cope with persistent problems of corruption, poverty and economic mismanagement.

Drucker (2022) identified that a good leader must possess majority of the following as qualities: **Honesty, Integrity, Inspiration, Self-Motivation, good Communication Skills. Vision, Intuition, Problem-Solving, Empathy, Objective, Intelligent, Open-Minded, Creative, Patient and Flexible**

Consequences of Bad Leadership

An article in Pixonality.com, 2021 identified the following six consequences of bad leadership:

Bad leaders do not inspire confidence: The integrity of leaders has always been a source of concern because they are synonymous with scandals that have tarnished leaders around the world in recent years. Leaders worthy of trust are more in demand now than ever. The ability to inspire confidence is associated with the values of taking responsibility for the consequences of decisions, fulfilling professional obligations and behaving irreproachably with team members. The more people perceive these qualities among leaders, the more they grant them credibility and legitimacy. And the ability of leaders to inspire confidence gives the organization's reputation benefits.

Bad leaders are seldom influential: Whether formal or informal, influence is the cornerstone of leadership. Putting someone in a leadership role doesn't necessarily mean people will follow them; they will follow them if they inspire confidence with their vision and values. It takes others to recognize leaders and confer that status upon them. Influential people use a combination of their character traits, such as charisma, and strategies to promote their ideas, get the merit of their positions across and convince others to buy in and put effort into their projects. People who show poor leadership will not be able to get employees, colleagues or their boss to achieve the desired results.

Bad leaders have difficulty promoting alignment: Leaders may find themselves in situations where they have to choose among ideas, visions or action plans. If only one option can be chosen, a good leader has to be able to promote alignment and ensure stakeholders respect the decision taken. If leaders cannot make a decision and ensure clear alignment, their reputation may be at risk. Leaders who adopt the wrong approach may be perceived as inconsistent or indecisive. They may alienate people involved in the decision-making process or create divisions on the team.

Bad leaders hardly build high-performance teams: Leaders cannot do much on their own, therefore, the need for an effective team. They have the important job of creating and nurturing that team to achieve ambitious results. Good leaders adopt management practices that allow people to put their talents to use, feel like their efforts are important, make a positive contribution to accomplishing organizational goals and achieve success. Leaders have to provide team members with support and opportunities for professional development and also give them responsibilities suitable to their talents. These would help generate commitment and motivate subordinates to take responsibility for and put effort into their professional development. Leaders who exercise poor leadership will have a hard time finding and developing effective subordinates and identifying key players who can help them balance their weaknesses. And this will have an impact on the overall performance of the team.

Bad leaders do not create a collaborative environment: Organisations that adopt collaborative work strategies that are effective, both within and outside the organisation are more likely to survive difficult situations. To create a collaborative work environment, leaders need strong interpersonal skills that allow them to build bridges and maintain useful connections within their network. A poor leader's behaviour can harm the work environment and affect the quality of partnerships outside the organization.

Bad leaders have difficulty creating meaning: People are looking for meaning in their jobs and want to understand the impact of their day-to-day activities on the organisation. Employees want to feel that people see their work as important and that their ideas and points of view are taken into account. Good leaders provide inspiration and highlight the positive contributions of each member of the team. Poor leaders have difficulty demonstrating the added value of every employee, which makes it harder to establish sincere relationships. This leads to loss of motivation, decline in performance and the unceremonious departure of staff.

Edeh (2021) identified the following as effects of bad leadership:

Underdevelopment: Bad governance leads to retrogression and underdevelopment. For example, as a result of bad governance, Nigeria, the first nation in Africa to have a Television Station, is yet to digitalize her transmission after over 60 years of such achievement.

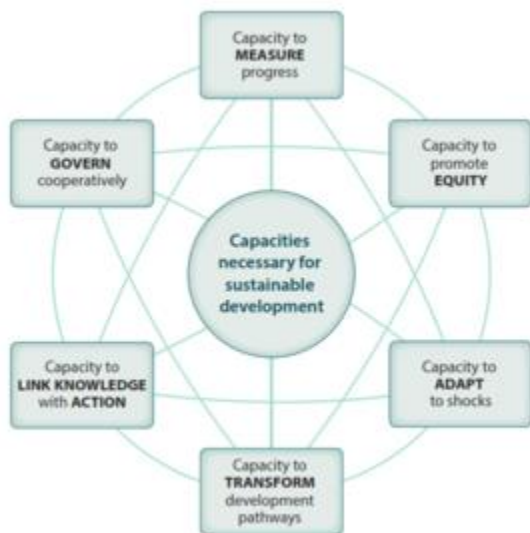
Poverty and Economic Stagnation: A situation where the collective wealth of the nation is concentrated in the hands of only few individuals (the political class and their cronies), the effect is poverty on the populace. Again, when funds earmarked for building and development of infrastructures are embezzled, there is economic stagnation which in turn causes loss of jobs and sources of livelihood, and in the long run, massive poverty on the citizens. A nation with a stagnant economy is poor.

Insecurity: Insecurity cannot be in isolation from bad governance. It is a direct consequence of bad leadership by successive governments of the country.

4. Loss of Reputation in the eyes of the international community: A country with bad leaders loses her reputation she enjoyed also loses international influence as other countries are skeptical of citizens from such countries. Citizens of such country are subjected to different forms of dehumanizing scrutiny in other nations of the world.

Concept of sustainable development

[Brundtland Report](#) (1987) defined sustainable development as the idea that human societies must live and meet their needs without compromising the ability of future generations to meet their own needs. Specifically, sustainable development is a way of organizing society so that it can exist in the long term. This means taking into account both the imperatives present and those of the future, such as the preservation of the environment and natural resources or social and economic equity. *Clark, William; Harley, Alicia (2020)* identified that sustainable development requires six central capacities as illustrated in the model below.



Sustainable development is an [organizing principle](#) that aims to meet [human development](#) goals while also enabling natural systems to provide necessary [natural resources](#) and [ecosystem services](#) to humans. The desired result is a society where living conditions and resources meet [human needs](#) without undermining the [planetary integrity](#) and stability of the natural system (*United Nations General Assembly (1987)*). Sustainable development was first institutionalized with the Rio Process initiated at the [1992 Earth Summit in Rio de Janeiro](#). In 2015 the [United](#)

[Nations General Assembly](#) (UNGA) adopted the [Sustainable Development Goals](#) (2015 to 2030) and explained how the goals are integrated and indivisible to achieve sustainable development at the global level. Sustainable development is interlinked with the [normative concept](#) of [sustainability](#). [UNESCO](#) formulated a distinction between the two concepts as follows: "*Sustainability* is often thought of as a long-term goal (i.e. a more sustainable world), while *sustainable development* refers to the many processes and pathways to achieve it.

Since the [Brundtland Report](#), the concept of sustainable development has developed beyond the initial intergenerational framework to focus more on the goal of "socially [inclusive](#) and environmentally [sustainable economic growth](#)". In 1992, the [UN Conference on Environment and Development](#) published the [Earth Charter](#), which outlines the building of a just, sustainable, and peaceful global society in the 21st century. The action plan [Agenda 21](#) for sustainable development identified information, integration, and participation as key building blocks to help countries achieve development that recognizes these interdependent pillars. Furthermore, Agenda 21 emphasizes that broad public participation in decision-making is a fundamental prerequisite for achieving sustainable development. [The Rio Protocol](#) was a huge leap forward: for the first time, the world agreed on a sustainability agenda. In fact, a global consensus was facilitated by neglecting concrete goals and operational details. The [Sustainable Development Goals](#) (SDGs) now have concrete targets (unlike the results from the Rio Process) but no methods for sanctions. The concept of sustainable development has been criticized from different angles. While some see it as paradoxical (or an [oxymoron](#)) and regard development as inherently unsustainable, others are disappointed in the lack of progress that has been achieved so far (*Brown 2015*). Part of the problem is that "development" itself is not consistently defined (*Berg 2020*). According to Turner (1988), the concept of sustainable development has been and still is, subject to criticism, including the question of what is to be sustained in sustainable development. It has been argued that there is no such thing as sustainable use of a [non-renewable resource](#), since any positive rate of exploitation will eventually lead to the exhaustion of earth's finite stock; this perspective renders the [Industrial Revolution](#) as a whole unsustainable.

The sustainable development debate is based on the assumption that societies need to manage three types of capital (economic, social, and natural), which may be non-substitutable and whose consumption might be irreversible (*Dyllick & Hockerts, 2002*). [Natural capital](#) can not necessarily be substituted by economic capital. While it is possible that we can find ways to replace some natural resources, it is much less likely that they will ever be able to replace [ecosystem services](#), such as the protection provided by the ozone layer, or the climate stabilizing function of the Amazonian forest (Daly 1992).

An unsustainable situation occurs when [natural capital](#) (the total of nature's resources) is used up faster than it can be replenished. Sustainability requires that human activity only uses nature's resources at a rate at which they can be replenished naturally. The concept of sustainable development is intertwined with the concept of [carrying capacity](#). Theoretically, the long-term result of [environmental degradation](#) is the inability to sustain human life (*Nayeripour et al, 2011*).

Conclusion

In a bid to find solution to the challenges of today and to limit the damage the public sector leaders have done in developing countries, some solution tips were proffered and they include:

1. Reducing government size by getting rid of excess workers
2. Terminating many policies and programmes that provide opportunities for bureaucrats to exert undue influence on the citizens

3. Subjecting public agencies to market-like pressures and incentives to perform (Tendler, 1997)

Leaders who spearhead the implementation of Sustainable Development Goals should embrace forward-looking policies focusing on the three dimensions of Sustainable Development which are ecological, social and economic to foster stability and peaceful exchange. Most people lack the choices and opportunities to participate in and benefit from development processes. Such people could be considered as 'left-behind' who endure the disadvantages and deprivations that limit their choices and opportunities relative to others in the society (Ngoyi, 2019). From the lesson learnt from MDGs, the need for data becomes glaringly imminent. Since SDGs aim at having targets and indicators, a leadership that does not understand the need for data cannot commit itself to sustainable development. An inclusive and participatory government which is void of discrimination; provides good governance; and lifts the people's socio-economic statuses will bring its citizens to a certain level of stability.

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Entrepreneurship and Poverty Eradication in Akwa Ibom State: An Appraisal

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One of the major challenges facing Akwa Ibom State is poverty. This is due to the high rate of unemployment especially among the youths. Although more than 5000 young entrepreneurs have been trained and certified through My Entrepreneurship Goal Programme (MEGP), majority of citizens live in extreme poverty. Despite the state's relative oil wealth, reports from the National Bureau of Statistics (NBS) (2022) pegged the state's unemployment rate at 51 per cent and the misery index indicated that 71.3 percent of Akwa Ibom citizens are economically backward. Being an oil producing state, there is little employment of manpower due to her capital-intensive nature. The oil sector contributes less than five percent to employment with high rural populations and low business attractions for investors. With over 52 percent of the youth in the State unemployed and poor, entrepreneurship becomes an alternative means to not only traditional economic development strategies and policies but also as the best strategy for eradicating poverty. This is because, entrepreneurial skills are require to create income and employment opportunities, promote sustainable business environment as well as build

institutional and human capacities that will encourage and support sustainable development. This paper aims at examining the importance and challenges of entrepreneurship in poverty eradication as well as strategies for promoting entrepreneurship among Akwa Ibomites. Data was gathered from secondary sources such as relevant books and internet materials. Findings indicated that entrepreneurship have significant effects on poverty eradication. The paper concluded that poverty goes beyond lack of resources. It extends to malnutrition, poor sanitation, lack of access to safe drinking water, education, health care, social inequality, insecurity, total lack of opportunity for personal growth and self-realization. These problems can only be remedied through the development of entrepreneurship skill among the citizens. The study recommended among others that entrepreneurship development should be inculcated into the school's curriculum to promote human empowerment and development through entrepreneurial education and training.

Keywords: *Entrepreneurship, Poverty, Eradication, Unemployment, Poverty Eradication*

3. Introduction

Entrepreneurship has increasingly gained the attention of many governments as an alternative strategy for poverty eradication. This is due to the believed that entrepreneurial development does not only have direct positive impact on the masses but equally generates greater returns to the public than other alternative strategies such as industrial recruitment, or retention and expansion. According to Umoh (2022), entrepreneurial skills are require to reduce poverty, create income and employment opportunities, promote sustainable business environment as well as build institutional and human capacities that will encourage and support sustainable development. In support of this argument, Ogundele (2007) held that the promotion and development of entrepreneurial activities would aid the dispersal and diversification of economic activities and induce even development which plays significant roles in poverty eradication. Entrepreneurship development equips the people with skills for constant improvement and innovation. It is therefore, universally acknowledged that entrepreneurship is an important stimulant of economic growth, poverty reduction and sustainable development.

Akwa Ibom State is face with the challenges of high rate of poverty although the state is naturally endowed with several entrepreneurship opportunities. This has been attributed to the high rate of unemployment that characterizes the state. The realization of the full potential of these opportunities has driven successive governments to come out with many industrial intervention policies aimed at stimulating and promoting entrepreneurship development. Between the year 2015 and 2022, over 85,000 entrepreneurs have been trained, certified and empowered with start-up funds through entrepreneurship empowerment programmes like Women Agro Entrepreneurship Development Programme (WAEDEP), My Entrepreneurship Goal Programme (MEGP) and Akwa Ibom State Covid-19 Action Recovery and Economic Stimulus (AK-CARES) Programme. Despite these efforts, there is still widespread of poverty in the state especially among the rural dwellers. The situation keeps on deteriorating up to this moment (Evans, 2019). It is therefore imperative at this point in time to critically evaluate not just the principles of entrepreneurship but the practice and its crucial role in fostering economic growth and development.

Presently, the state's economy is characterized by low industrial capacity utilization, deteriorating infrastructural facilities, rising level of unemployment and poverty (Bale, 2017). *With over 51*

percent of the citizens in the State unemployed and poor, entrepreneurship programmes need to be properly harnessed to positively engage school leavers while providing employment opportunities to the masses. This study is therefore undertaken to appraise the relationship between entrepreneurship and poverty eradication in Akwa Ibom State.

4. Statement of the Problem

One of the major challenges facing Akwa Ibom State is poverty. This is due to the high rate of unemployment especially among the youths. Although more than 85,000 young entrepreneurs have been trained and certified in Akwa Ibom State between 2015 and 2022 through Women Agro Entrepreneurship Development Programme (WAEDEP), My Entrepreneurship Goal Programme (MEGP) and Akwa Ibom State Covid-19 Action Recovery and Economic Stimulus (AK-CARES) Programme, majority of citizens still live in extreme poverty. Despite the state's relative oil wealth, proceeds from the monthly allocation from federation account, excess crude oil and internally generated revenue, reports from the National Bureau of Statistics (NBS) (2022) pegged the state's unemployment rate at 51 per cent and the misery index indicated that 71.3 percent of Akwa Ibom citizens are economically backward. This was calculated by adding the seasonally adjusted unemployment rate to the May, 2022 inflation rate (Nigeria Multidimensional Poverty Index (MPI), 2022). Being an oil producing state, there is little employment of manpower due to her capital-intensive nature. The oil sector contributes less than five percent to employment with high populations and low business attractions for investors (Ndidi, 2018).

Although the governments have adopted various measures to address the high poverty incidence in the state, there is always the problem of government's nonchalant attitude towards the funding of entrepreneurial training. Whenever fund is approved, it is sometimes diverted or it is not released on time, and when released at all, the corrupt officials will demand for certain percentage resulting to insufficient funds for the implementation of the programme (Kara and Potter, 2008).

There is also the issue of lack of access to capital for entrepreneurial programmes. Worst still, banks are reluctant to grant credit facilities to entrepreneurs without adequate collateral or securities. The lack of fund to start business places limitation on entrepreneurship development in the state. This capital will aid registered and trained people to develop their businesses, thereby creating employment in the process (Como, 2018). This is also couple with the inconsistencies and unfavourable government policies which equally constitute major setbacks to entrepreneurial programmes. New administrations always come with new policies which, sometimes adversely affect the profitability of business owners. Also the processes of getting permits, carrying out registrations, and obtaining licenses can be needlessly tedious due to protocols in place or corruption (Kelvin, 2008).

Entrepreneurs need training and regular orientation to innovate always. This should happen in a conducive operating environment (Lucas, 2015). If basic infrastructural facilities that aid training are still in poor state as they are, the trainers cannot do anything about entrepreneurial training. For example, power supply is epileptic in the state and at times, power is completely out for days. On the basis of this, this paper examines the major challenges to the roles of entrepreneurship in poverty reduction.

9. Theoretical Framework

This paper adopts the Max Weber "theory of social change" to explain the relationship between entrepreneurship and poverty eradication in Akwa Ibom State. The central figure of this theory consists in his treatment of the protestant ethic and the spirit of capitalism. Max Weber contended

that entrepreneurial growth is dependent upon ethical value system of the society concerned. According to Weber (1964), the spirit of rapid industrial growth depends upon rational use of technology, acquisition of money and its rational use for productivity and multiplication of money. These elements of industrial growth depend upon a specific value orientation of individuals, i.e., the tendency of acquisition and rational attitude towards actions which are generated by ethical values.

Weber analyzed his theoretical formulation by the relationship that he found between protestant ethic and the spirit of capitalism. He found his thesis true about other communities also. He held that Protestants progressed fast in bringing capitalism because their ethical value system provided them with rational economic attitude, while the Jews failed to develop industrial capitalism because of the value of 'partita' (the restriction on having any contact with other communities). Furthermore, the 'spirit of capitalism' shapes attitudes towards the acquisition of money and the activities involved in it. This spirit of capitalism can be generated only when mental attitude in the society is favourable to question of wealth and protestant ethic provides this mental attitude. For people who believe in this belief (Protestant ethic), hard-work in life is not only to enable them to have their worldly desires met but also to have their spiritual needs satisfied (Tutor, 2023).

This paper adopts this model on the assumption that no entrepreneurship programme or an entrepreneur can succeed with proper orientation and training in line with the ethical values of such programme. This is the only means the entrepreneurs can develop positive mental attitude towards the entrepreneurship programme for poverty reduction. However, societal values play significant roles in the success of any business. The orientation or training given to the entrepreneurs by the Akwa Ibom State government practically brought out the values of the programmes in line with the agenda of the government to eradicate poverty.

10. Conceptual Clarification

4.1 Entrepreneurship

There is a consensus among entrepreneurship scholars that entrepreneurship is not just running a small business that already exists rather, it is change management, creative thinking, opportunity seeking, and innovativeness. It is summarily considered as self-employment perpetuated by an entrepreneur. According to Imaga (2002), an entrepreneur is someone who brings things like money, materials and labour together in new business, productive process or improved organization to ensure business success by perhaps creating something new. Patti (2018) views an entrepreneur as someone who creates new combinations of production factors such as new methods of production, new products, new markets, finds new sources of supply and new organizational forms and is someone who is willing to take risks, or a person who, by exploiting market opportunities, eliminates disequilibrium between aggregate supply and aggregate demand, or as one who owns and operates a business.

Entrepreneurship is the ability and readiness to an entrepreneur to develop, organize and run a business enterprise, along with any of its uncertainties in order to make a profit. The entrepreneur is defined as someone who has the ability and desire to establish, administer and succeed in a startup venture along with risk entitled to it, to make profits (Byjus, 2023).

Entrepreneurship is also conceptualize as the identification of a new business opportunities and the mobilization of economic resources to initiate a new business or regenerate an existing business, under the conditions of risks and uncertainties, for the purpose of making profits under

private ownership. It involves a process which may develop a single entrepreneur or enterprise with the main objective of making profit by using scarce resources (Evans, 2019).

Entrepreneurship is also concerned with creating long term value and regular cash flow streams on an individual or the group of individuals for the future through the process of imagination, initiative and innovation for the purpose of maximizing profits and minimizing risk with the view of long term expansion. With this, entrepreneurship remains the key to the growth and development of local industries through the processing of local raw materials into finished and semi-finished goods for the domestic and foreign markets. It also promotes the utilization of improved and cost-effective technology in small and medium-scale enterprises which enhances higher factor productivity at the local level especially in low-income countries where the traditional rural economy is predominant (Ali and Ali, 2017).

According to Havert (2021), entrepreneurship is a dynamic process of vision, change and creation. It include a process whereby an individual or a group of individuals use organized efforts and means to pursue opportunities to create value and grow by fulfilling wants and needs through innovation and uniqueness, no matter what resources are currently controlled.

To Abonahor (2009), entrepreneurship is the willingness and ability of an individual to seek out investment opportunities, establish and run an enterprise successfully. It is the effective manipulation of human intelligence, as demonstrated in a creative performance and an unrehearsed combination of economic resources instigated by the uncertain prospect of temporary monopoly profit.

Tijan – Alaniye (2016) defines entrepreneurship as the process of increasing the supply of entrepreneurs or adding to the stock of existing small, medium and big enterprises available to a country by creating and promoting many capable entrepreneurs who can successfully run innovative enterprises, nurture them to grow and sustain them, with a view to achieving broad socio – economic development goals.

For Ossai (2008), entrepreneurship is the process of creating some new or different values by devoting the necessary time, assuming the accompanying financial, psychic and social risks and receiving the resulting rewards of most personal satisfaction. It is the process of bringing together creative and innovative ideas and coping them with management and organizational skill in order to combine people, money and resources to meet an identified need and thereby, creating wealth. It is therefore, universally acknowledged that entrepreneurship covers immense potentials that can stimulate economic growth and sustainable development.

4.2 Poverty

Poverty is among the most familiar and enduring of human conditions. Umoh (2022) pointed out that despite the rising discovery of natural resources and unprecedented prosperity of nations, mass poverty continued to exist especially in areas such as Africa. As contain in Britannica Dictionary (2023), poverty is seen as the state of one who lacks a usual or socially acceptable amount of money or material possessions. It exists when people lack the means to satisfy their basic needs. In this case, the identification of poor people first requires a determination of what constitutes basic needs. These may be defined as narrowly as “those necessary for survival” or as broadly as “those reflecting the prevailing standard of living in the community.” The first criterion would cover only those people near the borderline of starvation or death from exposure; the second would extend to people whose nutrition, housing, and clothing, though adequate to preserve life, do not

measure up to those of the population as a whole. Poverty is about not having enough money to meet basic needs including food, clothing and shelter. However, poverty is more, much more than just not having enough money.

The World Bank Organization (2009) describes poverty in this way:

“Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So poverty is a call to action -- for the poor and the wealthy alike -- a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities. Extreme poor are those living on less than \$1.90 a day.”

The World Bank defines those living on under US\$2 a day as living in poverty, and those living on under US\$1.25 as living in extreme poverty internationally. The nature of poverty differs in all societies. But generally, the poor in every society are those which of the prevailing standards are found to be deficient in means of subsistence and privileges of life. Poverty is related to deprivation, want or lack, suffering and denials of even the basic things of life. It then follows that a poor man cannot be said to have peace since he has to work hard to earn a living, sustaining anxiety, frustration and despair. Salem (2015) refers to poverty as a lack of command over basic consumption needs, which means that there is an inadequate level of consumption giving rise to insufficient food, clothing and/or shelter, and moreover, the lack of certain capacities, such as being able to participate with dignity in society.

Furthermore, Olayemi (1995) refers to the poor as those having no access to the basic necessities of life such as food, clothes and economic obligation, they lack skillful employment, have few, if any economic assets and sometime lack self-esteem. In the opinion of CBN (1999), attributes of poverty may be classified into structural, economic, social and cultural deprivation. These dimensions of poverty exhibit a vicious cycle and account for the recurring decimal of poverty. Thus, poverty mean living on less than a dollar per day or the inadequacy of opportunities for access to education, health, transport and productive employment.

To Misango and Ongiti (2013), poverty is categorized as both absolute and relative. It is absolute because it is describe as lack of resources to meet the physical needs for survival, a lack of basic security, the absence of one or more factors that enable individuals and families to assume basic responsibilities and to enjoy fundamental rights. On the other hand, relative poverty can be categorized in relation to particular groups or areas in relation to the economic status of other members of the society which is interpreted as a lack of resources to achieve a standard of living that allows people to play roles, participate in relationships, and live a life that is deemed normative of the society to which they belong. Poverty results from and even consists of a lack of basic

securities, which not only include financial resources, but also education, employment, housing, health care and other related aspects leading to deprivation.

11. Empirical Literature

Adofu, I. and O. Akoji in 2013 assessed the impact of entrepreneurship skill acquisition on poverty in Kogi State of Nigeria. They used structured questioners for collecting primary data from six Local Government Area of the state and used descriptive statistics like frequencies and percentages. They found that 65% of the respondents accepted that lack of entrepreneurship skills among youth is responsible for the high rate of poverty in Nigeria. The result also revealed that at least 60% of the people that benefitted from the skill acquisition programme can afford the basic necessity of life.

Kanitkar in 1994 conducted case studies from 86 village-based entrepreneur and micro enterprise owners in different regions of rural India. He examined the process of emergence of successful entrepreneurs and owners of micro-enterprises in rural areas. He used case survey method for collected data with a semi-structured questionnaire followed by an open-ended interview from the entrepreneur. He found that based on socio economic profile of entrepreneurs, they were motivated for shifting from an agriculture-based occupation to a non-farm activity, raising resources for their enterprises and entry of the village-based entrepreneurs into a business activity.

Kodithuwakku, S. S. and P. Rosa in 2002 based on a qualitative case study of Sri Lankan villagers they tried to examine the nature and role of entrepreneurial processes in the success of the Mahaveli rural entrepreneurs. They found that after 10 years most of the commercially successful farmers had succeeded in adding new ventures to their portfolio of income-generating activities engaging in an average of 3.7 ventures each. They also found that the successful farmers were not only successful as farmers, but had also diversified into other business ventures.

Ezeanyej, Imoagwu and Ejefobihi in 2019 conducted a research on the synergy of entrepreneurship development and poverty reduction in Nigeria. Both the quantitative and qualitative measurements attest to the growing incidence and depth of poverty in the country. The paper concluded that, government and its agencies should focus on ways of encouraging entrepreneurial culture and skill in order to reduce poverty level in Nigeria and bring about more equitable distribution of income and wealth thereby leading to sustainable economic growth.

Hussain, Bhuiyan and Bakar (2014) conducted an empirical review on entrepreneurship development and poverty alleviation. The study was a general search to accumulate empirical literatures by the name of entrepreneurship development and poverty alleviation in different online database sources such as Google Scholars, Springer Link, Wiley, Science Direct, JSTOR, Emerald full text, Scopus, and EBSCO HOST etc. it was found that innovation, entrepreneurship training and education, family background, government support program, social entrepreneurship, women participation, individual entrepreneurial characteristics, participation of micro, small & medium enterprises, youth empowerment, collaboration of government-university-industry is the key tool for entrepreneurship development which is stimulating employment are eventually alleviating poverty. Training in entrepreneurship and provision of other facilities could give poor owners of micro and small enterprises opportunities to grow their businesses and get themselves and other out of poverty.

12. Appraisal of Entrepreneurship Programmes and Poverty Eradication in Akwa Ibom State

6.1 Akwa Ibom State Poverty Profile

Data published by the Global Data Lab (GDL) (2022) and the Nigeria Multidimensional Poverty Index (MPI) (2022) are used for the analysis of poverty rate in Akwa Ibom State. Global Data Lab (GDL) is an independent data and research center at the Nijmegen School of Management of Radboud University with the mission of bringing together all available household surveys for low- and middle-income countries and integrating them into one encompassing data infrastructure.

Global Data Lab conducted an assessment on wealth, poverty and assets of households in Nigeria to provide an overview of the major social and economic characteristics of the country and states. The results of the assessment on Akwa Ibom State are presented thus:

Global Data Lab Assessment on Wealth, Poverty and Assets of Households in Akwa Ibom State

INDEX INDICATOR	2015	2016	2017	2018	2019	2020	2021
% of mean international wealth index	48.6	49.2	50.4	51.0	51.6	52.3	52.9
% of poor household (with IWI value under 70)	85.8	85.3	84.2	83.7	83.2	86.6	82.1
% of poorer households (with IWI value under 50)	53.3	52.9	52.0	51.5	51.0	50.6	50.1
% of poorest households (with IWI value under 35)	24.3	22.9	20.1	18.8	17.4	16.0	14.6
Percentage on Household Items							
% of households with TV	64.2	62.8	59.9	58.5	57.1	55.6	54.2
% of households with refrigerator	27.2	27.7	28.7	29.1	29.6	30.1	30.5
% of households with cell phone	83.1	84.3	86.6	87.8	88.9	90.1	91.2
% of households with electricity	69.2	70.4	71.5	72.6	73.7	74.8	77.1

Global Data Lab (2022)

From the data in the table above, seven years assessments of people affected by poverty were done in three categories- poor poorer and poorest. Those under the poor category are those who can take care of their basic needs. The young entrepreneurs with micro business may fall here. The poorer are those who cannot satisfy their basic needs always. The poorest are those who lean on others for their survival.

Regarding the household items, very few persons are able to purchase refrigerator from the assessment made for the seven years.

Data published by the Nigeria Multidimensional Poverty Index (MPI) (2022) from the reports of the survey coordinated by the National Social Safety-Nets Coordinating Office (NASSCO), contained in the National Social Register (NSR) indicated 51.0% unemployment rate and 16.7% underemployment rate in Akwa Ibom State (MPI, 2022). The multidimensional indicator of poverty among households in the state using education, water, housing and assets are presented in the table below:

Poverty Survey in Akwa Ibom State by Nigeria Multidimensional Poverty Index (2022)

S/N	Indicator	Not Deprived	Deprived
1	Deprivation in education attainment for people aged 10 years and above who have not completed six years of school	74%	26%
2	Deprivation in school attendance for school-aged children	82%	18%
3	Distribution of households deprived in sanitary facilities	30%	70%
4	Distribution of households by deprivation in access to clean drinking water	36%	64%
5	Distribution of households by deprivation in housing materials— roofing	45%	55%
6	Distribution of households by deprivation in housing materials— flooring	32%	68%
7	Distribution of households by deprivation in cooking fuel	1%	99%
8	Distribution of households by deprivation in ownership of assets	15%	85%

Nigeria Multidimensional Poverty Index (2022)

From the table above, apart from the educational attainment in which children are not deprived of, citizens are deprived of other items for assessment- example, sanitary facilities, access to clean drinking water, housing materials (roofing and flooring), cooking fuel and ownership of assets.

6.2 Programmes for Entrepreneurship Development and Poverty Reduction in Akwa Ibom State

Efforts have been on-going in the state to fashion some programmes for entrepreneurship development and poverty reduction. A number of these programmes have been in place to improve basic services, like infrastructural facilities for all, extending access to credit facilities and creating employment. This paper will consider three major entrepreneurship programmes for poverty reduction in Akwa Ibom State such as women agro entrepreneurship development programme (WAEDEP), my entrepreneurial goal programme (MEGP) and Akwa Ibom covid-19 action recovery and economic stimulus programmes (AK-CARES).

Women Agro Entrepreneurship Development Programme (WAEDEP)

WAEDEP is a policy established in 2013 by the administration of Governor Godswill Obot Akpabio to encourage boost women entrepreneurship as a means of eradicating poverty in the state, especially among women. The aims of this programme are to empower women economically and increase their strength as well as position; contribute to increased capacity for improved entrepreneurship to reduced poverty for women in a sustainable way; improve entrepreneurship skills; build capacity in entrepreneurship and technical skills for living standard improvement.

Records by Umanah (2014) have shown that since its start, the government have committed over N2 billion to thousands of women at the rate of N250,000 each. As a confirmation, the State Ministry of Agriculture and Natural Resources through Obop (2014), who was the Head of Information, said that government had given N250, 000 to each beneficiary under Women Agro Entrepreneurship Development Programme (WAEDEP). 70 percent of the beneficiaries of the programme who were given the grants are involved in animal husbandry while others are into crop production, marketing and processing.

Despite the achievement of this programme, problems such as nepotism, lack of follow-up and change of government administration hinder its end target.

My Entrepreneurial Goal Programme (MEGP)

MEGP is an entrepreneurial development training programme whose focus is to identify, train, certify and empower entrepreneurs with a start-up capital. The government through MEGP train and empower new and existing entrepreneurs in basic business tools, information and communication technology and entertainment to define clear goals for their businesses, providing the right network for partnership and educate them on basic business tool which can guide them in making decisions for their businesses (Anwana, 2022).

From its creation, MEGP has helped Akwa Ibom start-up and growing entrepreneurs define their goals and objectives, rather than stay afloat without prerequisite knowledge and mentorship. As such, it has identified the business needs of thousands of Akwa Ibom youths and offered lasting solutions to them. It further creates innovative and scalable business by offering continuous learning, networking and providing access to funding which entrepreneurs require to succeed in global market.

Currently in Akwa Ibom, MEGP has train more than 600 entrepreneurs. After trainings, the entrepreneurs are expected to effectively communicate the ideas behind their business brands to qualify for business grants ranging from N500,000 to N150,000. In the last batch of the training in which the government introduced Business Strategy Simulation game where all participants were expected to share what and how they will invest their grants, a donation of twenty thousand naira (20, 000NGN) was given to all participants in the competition apart from the winning group who received two million naira (2,000,000 NGN) (Anwana, 2022).

At the programme, entrepreneurs have an access to MEGP training, mentorship opportunities, network and the ability to raise capital. They are able to browse through mentorship request and connect with founders to support them, as well as program partners and are also able to discover great companies, opportunities and follow up with the founders directly (Anwana, 2022).

Unfortunately, even if the programme is still progressing, it still suffers from nepotism, lack of follow-up and insufficient funding. The process of selecting participants are somehow rigid and in most cases, on recommendations.

Akwa Ibom Covid-19 Action Recovery and Economic Stimulus Programmes (AK-CARES)

The AK-CARES programmes which were officially launched in Akwa Ibom state on 29th August, 2022 has been on-going across various platforms such as social transfer, FADAMA, AKROIMA, CSDA, and SMEs. The AK-CARES is an emergency operation, designed to support budgeted programme of expenditure and interventions at the state level. The target is on the existing and emerging vulnerable and poor households, agriculture value chains, entrepreneurship and Micro and Small Enterprises (MSEs) affected by the Covid-19 pandemic.

At the start, Akwa Ibom state government disbursed 20, 000 covid-19 action recovery and economic stimulus to 1,950 beneficiaries. This is to be done bi-monthly to help many citizens to come out of poverty. In addition, government also disbursed N31 million to 401 entrepreneurs in Small and Medium Enterprises (SMEs), to support their businesses affected by the COVID-19

pandemic. The funds were to revive entrepreneurs who suffered the adverse effects of the COVID-19 scourge on their businesses (Etim, 2022).

According to Udonquak (2020), the federal government has disbursed over N993 million to 24,929 vulnerable households in 9 local governments (Eastern Obolo, Ikono, Mkpato Enin, Nsit Atai, Nsit Ubium, Onna, OrukAnam, Ukanafun and Uruan) in Akwa Ibom state under its Conditional Cash Transfer programme. Beneficiaries received between N30,000 and N40,000. The programme is still on-going but many entrepreneurs are not succeeding due to lack of follow up on the part of the government. Also, the amount disbursed to each entrepreneur is not sufficient to meet up with the present economic and market realities.

6.3 Challenges of entrepreneurship in Poverty Reduction in Akwa Ibom State

Entrepreneurship is one of the essential pillars whose roles enhance trade balance, job employment and tax revenue generation. The services of an entrepreneur play significant role in poverty eradication. For enterprises to succeed, adequate infrastructural facilities such as good road networks, reliable electricity, and adequate water supply must be provided. Unfortunately, these are lacking in most areas of the state. Most businesses are not accessible, which most times leads to spoilage of perishable goods and limits the reach of service providers (Ekong, 2017).

Businesses survive in an environment where policies are consistent and favourable. Regimes are known for overturning policies put in place by previous regimes. This tends to put business ventures in a state of confusion which adversely affect the profitability of business owners. Example is the present policy on newly design naira cash swap which has made many entrepreneurs to fold their businesses because of scarcity of naira (Odeh, 2016).

Many young entrepreneurs lack patience and commitment to the growth of their businesses even when grants are given to them. A successful enterprise calls for a lot of patience and resilience. Entrepreneurs need to be regularly reoriented and invest some commitment into their new ventures.

For any entrepreneurial venture to take off, there must be sufficient capital to cater for the wide-ranging start-up costs. Initial start-up costs most times include premise fees, licenses, opening stock, logistics, business registration, hiring, etc. making it difficult for the available resources to be effectively used (Ossai, 2008).

To become an entrepreneur is one thing, but to have the require skill to boost the enterprise is another. A successful entrepreneurial service largely depends on its founders' understanding of numerous aspects of the modern-day business environment- how to place and promote product or service, who to hire, where to market, what to charge, where to source materials, and so on (Benjamin, 2017).

13. Methodology

The paper employed the narrative – textual case study (NTCS) method. NTCS is a social science research method that employs intensively the information, data and academic materials made available and easily accessible by information and communication technology facilities such as internet, World Wide Web, online databases, e. libraries et cetera. The choice of this method is informed by the fact that NTCS combines the use of quantitative and qualitative observation, text content analysis and available official statistics in different proportions for problem-solving or

problem–identification depending on the objective of the research (Abouzeedan and Leijon, 2007).

14. Findings

Findings indicated that entrepreneurship have significant effects on poverty eradication. This is because entrepreneurship development is a key tool for poverty reduction, stimulation of employment and economic growth in the state.

Motivation and skills is the important driver of the entrepreneurial behaviour and the entrepreneur needs certain skill to sustain. This is why government of Akwa Ibom State also starts the entrepreneurial empowerment with training of the entrepreneurs. The training in entrepreneurship and provision of other facilities gives poor owners of micro and small enterprises opportunities to grow their businesses and get themselves and others out of poverty. The level of innovation and orientation given to the entrepreneurs help them develop the necessary skills needed to boost their businesses.

Government policies have no significant effect on the development of entrepreneurial activities in the country and mostly the beneficiaries do not derived maximum satisfaction from government programs and policies.

Most times funding for entrepreneurship are provide but due to government’s nonchalant attitude, some of the funds are either diverted or not released on time or even when released, the corrupt officials will demand for certain percentage.

Government capitals for entrepreneurial programmes are not enough. This places limitation on entrepreneurship development in the state. Excessive processes with high interest rate in banks for credit facilities also made most entrepreneurs to avoid loans from the bank.

Uniform problems such as nepotism, lack of follow-up in government entrepreneurial services, insufficient funding and lack of basic infrastructural facilities continue to hinder the implementation of entrepreneurial programmes in the state. These are observed in programmes such as WAEDep, MEGP and AK-CARES.

9. Conclusion and Recommendations

Poverty goes beyond lack of resources. It extends to malnutrition, poor sanitation, lack of access to safe drinking water, education, health care, social inequality, insecurity, total lack of opportunity for personal growth and self-realization. These problems can only be remedied through the development of entrepreneurship skill among the citizens. The number of those living in poverty has continued to increase despite many entrepreneurial programmes for poverty reduction implemented in the state.

Entrepreneurship development is a key tool for poverty reduction, stimulating employment and economic growth in the state. It boosts economic growth, enhances educational attainment and increases the rate of economic growth and for the state to move out of the disturbing high level of poverty, adequate attention must be given to the growth of entrepreneurship.

Poverty deprives someone the opportunity for personal growth and self-realization. This state of deprivation can only be remedied through the development of entrepreneurship skill among the citizens. Through this way, the issue of self – employment and job creation will increase, the menace of unemployment which have been the cause of poverty will reduce, economic growth ensured and poverty reduced to the barest minimum. This paper therefore recommends that:

- e. Government should assist the entrepreneurs financially through provision of quick credit facilities and through regular workshops and seminars where experts in different fields will be commissioned to train the young entrepreneurs on the latest technique in entrepreneurship.
- f. New and existing entrepreneurs should be regularly trained with provision of adequate facilities to grow their businesses and get themselves and others out of poverty. Entrepreneurship development should be inculcated into school's curriculum at all levels of education to promote human empowerment and development.
- g. Measures should be put in place to ensure that start-up capitals and grants provided by the government to entrepreneurs are released on time and freed from corrupt officials. Government should partner with banks to grant credit facilities to entrepreneurs with low interest rates.
- h. Government should set up an institution to ensure that the uniform problems such as nepotism, lack of follow-up in government entrepreneurial services, insufficient funding and lack of basic infrastructural facilities are eradicated.

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ENHANCING SUSTAINABLE ENTREPRENEURSHIP IN NIGERIA: THE GREEN OFFICE CONCEPT

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ABSTRACT

In Nigeria, where the effects of climate change are already being felt, green offices can play a crucial role in driving sustainability and enhancing green entrepreneurship. The green office concept is a model for building a sustainable environmental management system across communities, cities and campuses in Nigeria. This study identified that the green office concept which involves the use of natural resources to create eco-friendly working conditions will enable the entrepreneurs to achieve sustainability in Nigeria. The goal of a green office is to create healthy environments, conserve energy and reduce pollution which are necessary steps toward sustainable development and sustainable entrepreneurship in Nigeria. This study identified some benefits of green offices and how green finance can help enhance green entrepreneurship in Nigeria. It further identified that the green offices will play a major part in enhancing green entrepreneurship and mitigating the negative impacts of climate change in Nigeria. This study concluded by highlighting the need to enhance green leadership, green creativity and green entrepreneurship through green offices for sustainable development in Nigeria.

KEYWORDS: *Climate Change, Entrepreneurship, Green Finance, Green Offices, Sustainable Development.*

1. INTRODUCTION

A green office can be defined as a workplace that adopts environmentally responsible practices in its operations, design and materials used. According to the US Environmental Protection Agency, "green offices focus on reducing the environmental impact of office operations by promoting energy efficiency, conserving natural resources, and reducing waste" (EPA, 2022). "Green and Sustainability Offices are special settings which assist initiatives within higher education institutions to coordinate their efforts and work in the field of sustainable development" (Filho et al, 2019). The set-up of such offices is known to be an effective tool in supporting the implementation of sustainability initiatives on campuses, and in fostering awareness among students and staff on matters related to Sustainable Development (Filho et al, 2019). The Natural Resources Defense Council (NRDC) emphasizes that a green office should aim to "maximize energy efficiency, minimize resource consumption, and reduce waste" (NRDC, n.d.). This can include measures such as using renewable energy sources, reducing water usage, using environmentally-friendly cleaning products, and implementing recycling and waste reduction programs. In addition, a green office should encourage sustainable transportation options, such as public transit or biking. According to the Green Business Bureau (GBB), "a green office must be easily accessible through sustainable modes of transportation" (GBB, n.d.). Green offices have been shown to have numerous benefits for both the environment and employee well-being. As Forbes notes, "green offices can reduce energy costs, increase productivity, and improve employee health and satisfaction" (Forbes, 2013). The goal of a green office is to create healthy environments, conserve energy and reduce pollution which are necessary steps toward sustainable development and sustainable entrepreneurship in Nigeria. This study identified that the green

office concept which involves the use of natural resources to create eco-friendly working conditions will enable the entrepreneurs to achieve sustainability in Nigeria. It also highlighted some benefits of green offices and how green finance can help enhance green entrepreneurship in Nigeria. It further identified that the green offices will play a major part in enhancing green entrepreneurship and mitigating the negative impacts of climate change in Nigeria.

2. METHODOLOGY

Data used for this study is derived from published works including academic articles, journals, conference papers, textbooks, and internet materials. This paper examined current progress with “Enhancing Sustainable Entrepreneurship in Nigeria via the Green Office Concept” through existing literature review and data collection from relevant agencies. The main purpose of this research work was to survey theoretical backgrounds and previous studies on the subject matter.

3. UNDERSTANDING SUSTAINABLE ENTREPRENEURSHIP AND GREEN ENTREPRENEURSHIP

The word ‘entrepreneurship’ became popular in business since 1980s (Majid and Koe, 2012). Deriving from the French word “entreprendre” meaning “to undertake or to do something”, the term “entrepreneurship” itself has been redefined a dozen times in the last decades (Greco & Jong, 2017). Majid and Koe (2012) define entrepreneurship as “A process of identifying, evaluating and pursuing opportunities through creativity, innovativeness and transformations to produce new products, processes and values that are beneficial” (p. 295). Venkataraman (2002) defines entrepreneurship as “the process of addressing uncertainty, innovation and resource allocation for the creation of personal wealth and social benefit.” Weidinger (2014) also refers to “entrepreneurship as an open research process that comes up with unique solutions”. There is tangible evidence that we are currently moving from a managed economy towards an entrepreneurial economy (Audretsch and Thurik, 2004; Uhlaner et al, 2010; Schaltegger and Wagner, 2011). Entrepreneurs’ primary objective is to satisfy an unfulfilled need or to improve the way this need is currently being satisfied. This promising and fundamental goal does not necessarily imply that positive environmental values are being created as a result (Greco & Jong, 2017). This fundamental goal of achieving sustainable entrepreneurship has put entrepreneurship research in the spotlight, incentivizing several scholars to explore patterns for entrepreneurial success (Greco & Jong, 2017). It has further highlighted the need for sustainable entrepreneurship across communities, cities and campuses in Nigeria. “Sustainable entrepreneurship is in essence the realization of sustainability innovations aimed at the mass market and providing benefit to the larger part of society. Actors or companies contributing substantially to sustainable development with their core businesses can be called sustainable entrepreneurs” (Schaltegger and Wagner, 2011). Sustainable entrepreneurship is opportunity oriented and aims at generating new products, services, production processes, techniques, and organizational modes which substantially reduce social and environmental impacts and which increase the quality of life (Greco & Jong, 2017). Green entrepreneurship refers to a special subset of sustainable entrepreneurship that aims at creating and implementing solutions to environmental problems and to promote social change so that the environment is not harmed. It has also been

suggested that green entrepreneurship could be a new business paradigm instead of a subset of entrepreneurship because green entrepreneurs have wider motivations than just launching eco-friendly products and services for a niche market (Kirkwood and Walton, 2010). Green entrepreneurship can be explained on the basis of theories on entrepreneurship, and environmental and welfare economics as a subset of sustainable entrepreneurship (Dean and McMullen, 2007). A green entrepreneur is someone who starts and runs an entrepreneurial venture that is designed to be green in its products and processes from the very moment it is set up (Anabaraonye, Okafor & Eriobu, 2019). The green business environment in Nigeria is moving at a very rapid rate. This can be seen in the number of green entrepreneurship business coming up. Recently, the National Power Training Institute of Nigeria (NAPTIN) partnered with a tech-based firm for the proposed development of a green innovation hub with the single goal of driving green business development within the Nigerian energy sector, while also improving relationship between public and private organizations (UN Habitat, 2017). Anabaraonye et al (2022) defined green entrepreneurship as that “entrepreneurship that seeks to solve environmental problems while generating income for sustainable economic growth”. Green entrepreneurship education involves the strategic training and enlightening of individuals, communities and campuses on the role of green entrepreneurship in achieving sustainable development (Anabaraonye et al, 2022). Green entrepreneurship education across communities cities and campuses is vital to enhance the effectiveness and efficiency of entrepreneurs and systems for sustainable economic growth and development in Nigeria. As Ogbonna and Anosike (2018) explain, "green entrepreneurship is not just about creating sustainable businesses, but also about fostering a culture of sustainability that can have a positive impact on the wider community" (p. 103). Green entrepreneurship education is therefore very important for establishing business support and laying a structure for entrepreneurs who desire to manage sound businesses with a special focus on environmental and social impact (Anabaraonye et al, 2022).

4.1. THE ROLE OF GREEN FINANCE IN ENHANCING GREEN OFFICES IN NIGERIA

Green finance is a relatively new field that has emerged in response to the growing global awareness of the urgent need to mitigate climate change and other environmental challenges. According to the United Nations Environment Programme (UNEP), green finance is "the financing of investments that provide environmental benefits in the broader context of environmentally sustainable development" (UNEP, 2016). This includes both financing for green projects and the development of financial products and instruments that support environmentally sustainable economic development. Green financing obviously will help to enhance the green offices projects in Nigeria. This is because the green office projects in Nigeria are usually financially demanding. One of the main drivers of green finance is the need to shift global financial flows away from environmentally harmful activities and towards sustainable and green investments. As the European Investment Bank (EIB) explains, "Green finance aims to support the transition to a low-carbon, resource-efficient and sustainable economy by shifting the flow of capital towards investments that are aligned with environmental, social and governance (ESG) criteria" (EIB, 2019). Green finance is also seen as a means of unlocking new sources of capital for sustainable development. As the Organization for Economic Co-operation and Development (OECD) notes, "Green finance has the potential to mobilize significant amounts of private capital towards environmentally sustainable investments, which are crucial for meeting global sustainability goals and achieving the objectives of the Paris Agreement on climate change" (OECD, 2016). Academic

research has also highlighted the importance of green finance in addressing environmental challenges. For example, a study published in the Journal of Environmental Management notes that "green finance provides an innovative approach to mobilizing resources to mitigate environmental problems" (Chen et al., 2018). Another study published in the Journal of Cleaner Production emphasizes that "green finance offers an opportunity to decouple economic growth from environmental degradation, and to achieve sustainable development goals" (Shen et al., 2020). Green finance plays a vital role in enhancing green offices and green entrepreneurship in Nigeria. Green finance is a vital tool in the fight against climate change and environmental degradation. By mobilizing private capital towards environmentally sustainable investments and promoting the development of green financial products and instruments, green finance has the potential to unlock new sources of capital for sustainable development and support the transition to a low-carbon, resource-efficient, and sustainable economy.

3.2.THE ROLE OF GREEN OFFICES IN ENHANCING GREEN ENTREPRENEURSHIP AND MITIGATING THE NEGATIVE IMPACTS OF CLIMATE CHANGE IN NIGERIA

Green offices have the potential to play a significant role in enhancing green entrepreneurship and mitigating the negative impacts of climate change in Nigeria. According to Ogbonna and Anosike (2018), "green entrepreneurship is a critical component of sustainable development that can drive economic growth while simultaneously promoting environmental protection" (p. 103). By adopting sustainable practices and policies, green offices can provide a platform for promoting and encouraging green entrepreneurship (Filho et al, 2019). Filho et al (2019) further identified that green offices and similar governance structures may assist efforts within higher education institutions to work in the field of sustainable development. This can be achieved as the set-up of such offices can be an effective tool in supporting the implementation of sustainability initiatives on campuses, and in fostering awareness among students and staff on matters related to climate change and sustainable development. As Ogbu and Okonkwo (2017) explain, "green offices can serve as models for other businesses to follow, encouraging the adoption of sustainable practices and driving innovation in the green economy" (p. 30). This can involve adopting renewable energy sources, promoting the use of green products, and implementing efficient waste management systems. Green offices can also contribute to mitigating the negative impacts of climate change by reducing their carbon footprint and promoting sustainable practices among employees. As Oyebisi and Adeoti (2015) note, "green entrepreneurship is a strategic response to the impacts of climate change on society and a tool for promoting environmental sustainability in developing countries such as Nigeria" (p. 259). By reducing energy consumption, encouraging sustainable transportation options, and promoting waste reduction and recycling programs, green offices can help to reduce greenhouse gas emissions and contribute to climate change mitigation efforts. In addition, green offices can serve as a means of raising awareness about the importance of sustainable practices and promoting environmental stewardship. Through green initiatives and sustainable practices, green offices can encourage employees to adopt more eco-friendly habits in their personal lives. In Nigeria, where the effects of climate change are already being felt, green offices can play a crucial role in driving sustainability and green entrepreneurship. By promoting sustainable practices, green offices can help to reduce environmental degradation and improve the quality of life for Nigerians. Furthermore, green offices can create job opportunities and contribute to economic development while mitigating the negative impacts of climate change. According to Corporate Suites Staff (2019), "There are a wide range of benefits to following green office tips

that businesses will enjoy after instituting green practices.” “In an increasingly environmentally-conscious society, companies that make the effort to go green are likely to receive public acknowledgement from clients about the steps they’ve taken to protect the earth. This positive public attention can have a direct impact on your business, driving new customers to seek out your services” (Corporate Suites Staff , 2019).

CONCLUSION

“Despite the clear usefulness and proven effectiveness of governance structures such as Green or Sustainability Offices, their use is not as wide as it could -or should-be. Also, there is a limited amount of empirical international work performed to date, which have investigated the various barriers related to their works”(Filho et al, 2019). There is therefore great need for more intensive research on the green office concept and its role in enhancing sustainable entrepreneurship in Nigeria. Through this study, it is clearly seen that the green office is a veritable tool which can help to enhance green entrepreneurship for sustainable development in Nigeria.

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THE ROLE OF THE WORLD BANK GROUP IN GREEN FINANCING TO ENHANCE GREEN ENTREPRENEURSHIP IN NIGERIA

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ABSTRACT

The World Bank Group is one of the World's largest sources of funding for developing countries especially in the fight against poverty. Each institution of the World Bank Group plays a distinct role in the mission to fight poverty and improve living standards for people in the developing world. This study identified the negative impacts of climate change as among the major disasters including flooding, erosion, desertification, etc. leading to poverty in Nigeria today. It identified green entrepreneurship as one of the major strategies to adapt and mitigate climate change in Nigeria thereby ensuring sustainable economic growth. It also explored the critical role the World Bank Group can play in eradicating poverty by green financing to enhance green entrepreneurship in Nigeria. This study concluded by highlighting the need to enhance green creativity and green entrepreneurship through green finance for sustainable development in Nigeria.

KEYWORDS: *Climate Change, Green Finance, Green Entrepreneurship, Sustainable Development, World Bank Group.*

INTRODUCTION

Poverty can be defined as the scarcity or the lack of a certain (variant) amount of material possessions or money. Poverty is a multi-faceted concept, which may include social, economic, and political elements. Absolute poverty, extreme poverty, or destitution refers to the complete lack of the means necessary to meet basic personal needs such as food, clothing and shelter (UNESCO, 2015). According to the United Nations (1998), "Fundamentally, Poverty is the inability of having choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it

often implies living in marginal or fragile environments, without access to clean water or sanitation” (Un Statement, June 1998 –signed by the heads of all UN agencies). According to the World Bank, “Poverty is pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life”(World Bank,2011).Poverty is one of the greatest problems facing developing countries in Africa including Nigeria in the 21st century. Poverty has always been the enemy of progress in any community or country and the fight against poverty is the no. 1 of the United Nations Sustainable Development Goals. Some researchers in Nigeria identified climate change as one of the leading causes of poverty which negatively affects sustainable economic growth in Nigeria (Anabaraonye, Okafor & Eriobu, 2019; Eludoyin et al., 2022). A holistic approach must be adopted through proper climate change adaptation and mitigation strategies to address poverty and ensure sustainable economic growth in Nigeria. “The World Bank Group is committed to fighting poverty in all its dimensions. This goal is being achieved by the use of latest evidence and analysis to help governments develop sound policies that can help the poorest in every country and focus investments in areas that are critical to improving lives”(World Bank,2011). This study highlighted the role of the World Bank Group in green financing to enhance green entrepreneurship in Nigeria.

2. MATERIALS AND METHODOLOGY

Data used for this study is derived from literature review of published works including academic articles, journals, conference papers, textbooks and internet materials. The researchers gathered much materials for the research but summarized the characteristics that centered more on “The Role of the World Bank Group in green financing to enhance green entrepreneurship in Nigeria”. This enabled the researchers to generate the synthesis of various researchers’ views on the subject matter.

3. RESULTS AND DISCUSSION

Countries are now moving with increasing urgency to develop more sustainable energy and transport systems, strengthen the resilience of their cities, and prepare people, public services and infrastructure for climate shocks to come”(World Bank,2016).Climate change is now recognized as a true global emergency that requires concerted efforts by all countries, businesses, and even individuals to achieve the Paris Agreement goals aimed at addressing the crisis(Anabaraonye, Okafor & Eriobu, 2019). More than 180 countries submitted pledges on climate action – the Nationally Determined Contributions (NDCs) in the run-up to the historic Paris Agreement at COP21 in December 2015(World Bank,2016). Multi-stakeholder partnerships represent an important strategy in building climate resilience, especially in severely impacted geographies that might also be experiencing structural constraints(Christopher,2020). To help countries meet this challenge, the World Bank Group adopted a new Climate Change Action Plan, which lays out

concrete actions to help countries deliver on their NDCs and sets ambitious targets for 2020 in high-impact areas, including clean energy, green transport, climate-smart agriculture, and urban resilience, as well as in mobilizing the private sector to expand climate investments in developing countries”(World Bank,2016).

3. 1. UNDERSTANDING CLIMATE CHANGE

The Intergovernmental Panel on Climate Change (IPCC) defines climate change as statistical variations that persist for an extended period, typically decades or longer(IPCC, 2001). Similarly, they define adaptation as the "adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to natural or human systems adjusting to actual stimuli or their effects that reduce harm or exploit beneficial opportunities. Various types of adaptation can be fomed, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation (IPCC, 2001; GGW, 2018). Climate mitigation is any action adopted to reduce the long-term risk and hazards of climate variations to human life, property and society. The Intergovernmental Panel on Climate Change(IPCC) described mitigation as: "An anthropogenic intervention to suppress the causes or enhance the sinks of greenhouse gases "(IPCC 2001). Climate resilience is the capacity of a socio-ecological system to absorb pressures and maintain function in the face of external stresses resulting from climate change (Folke et al., 2010; Moench, 2014; Shamsuddin, 2020). It also includes the ability and capacity of an ecosystem to adapt, reorganize, and evolve into more desirable configurations that improve the sustainability of the system, leaving it better prepared for future climate impacts (Carpenter et al., 2001).

3.2. UNDERSTANDING GREEN FINANCE

According to the United Nations Environment Programme (UNEP), green finance is "the financing of investments that provide environmental benefits in the broader context of environmentally sustainable development" (UNEP, 2016). Climate finance or green finance refers to local, national or transnational financing, which may be drawn from public, private and alternative sources of financing aimed at enhancing climate action. Climate finance is critical to addressing climate change because large-scale investments are required to significantly reduce emissions, notably in sectors that emit large quantities of greenhouse gas (Anabaraonye, Okafor & Hope, 2018). Green finance is equally important for adaptation, for which significant financial resources will be similarly required to allow countries to adapt to the adverse effects and reduce the impacts of climate change. As the European Investment Bank (EIB) explains, "Green finance aims to support the transition to a low-carbon, resource-efficient and sustainable economy by shifting the flow of capital towards investments that are aligned with environmental, social and governance (ESG) criteria" (EIB, 2019).Green financing involves the deployment from developed (wealthy) countries including direct public finance, co-finance of public and private finance, risk mitigation by the public for private investment, incentives to low carbon investment, emission trading, tax incentives, removal of negative incentives (subsidies) and regulation for efficient investment to developing countries as bilateral or multi-lateral investment (UNFCCC, 2020). Though investment in developing countries by advanced countries through technological transfer and financing are important, these measures support climate change mitigation and adaptation in developing countries expressed in 2020 agreement (Climate Finance Report, 2021). The World Bank Group

is one of those multilateral organizations actively involved in deploying green financing to developing countries like Nigeria towards adapting and mitigating climate change. The objective of deploying green finance in Nigeria is to enhance climate resilience and one of the ways is by enhancing green entrepreneurship for sustainable development.

3.3. THE PROJECT GREEN INITIATIVE IN NIGERIA

From all indications, Nigeria needs to embrace various methods through which the unemployment rates among the youths can be reduced. One way to do this is to embrace green entrepreneurship, especially as the nation has a population that continues to generate huge amount of waste. “As such, investment should be directed towards cleaner production and waste-to-wealth efforts”(Richard et al.,2021). With this recognition was the emergence of Project Green Initiative in 2017 in Nigeria which seeks to partner with multilateral organizations such as the World Bank Group and serves to educate stakeholders in various sectors of the economy toward sustaining green environment for green entrepreneurial activities and opportunities (Anabaraonye et al., 2019). Green entrepreneurial opportunities abound in the waste management and plastic recycling industry in Nigeria today(Anabaraonye et al., 2022) thereby helping to eradicate unemployment among the youths in Nigeria. The reduction and recycling of plastic waste can help address global warming and climate change as they are potent strategies for reducing greenhouse gas emissions. The Project Green Initiative which is an arm of the Benjy Poetry And Music Global Concepts, a company registered in 2017 with the corporate affairs commission, is a good example of a social enterprise which is very passionate about educating the communities in Nigeria about the green entrepreneurial opportunities in climate change mitigation and adaptation which includes plastic recycling for sustainable development in Nigeria(Anabaraonye et al., 2019)..It is very important for the World Bank Group to seek out some of these social enterprises in developing countries like Nigeria who are passionate about enhancing green entrepreneurship thereby investing in them through green financing.

4. INNOVATIVE WAYS OF ENHANCING GREEN ENTREPRENEURSHIP THROUGH GREEN FINANCE IN NIGERIA

Though, there abounds adverse effects inherent in climate change, the following approach could be deployed with the support of the World Bank Group towards maximizing the green entrepreneurship for sustainable development in Nigeria:

- i) Radical awareness approach of information disseminations. The emergence of information communication and technology (ICT) around the world to a large extent has proven as very effective and efficient vehicle of letting people becoming aware of opportunities and benefits in green entrepreneurship. These information dissemination platforms besides the internet(educational blogs, facebook, twitter, Instagram, etc) include radio, television and telephone.
- ii) The government at all levels in Nigeria should provide enabling environment and sustainable fund in form of grants and loans to the teeming unemployed and underemployed Nigerian youths who may want to be involved in the green

- entrepreneurship businesses in their different capacities. This approach when incorporated into long term policy planning in climate change mitigation in Nigeria will go a long way in reducing unemployment among the youths in the country.
- iii) The use and involvement of non-governmental organizations that are environmental driven and climate change sensitive can go a long way in providing green entrepreneurial opportunities for a lot of individuals in Nigeria. Awareness of the economic opportunities in green entrepreneurship can be communicated to communities, cities and campuses through the various outreaches, seminars and workshops initiated by these environmental sustainability driven NGOs in Nigeria.
- vi) Educational blogs can be used to inform, enlighten and educate researchers, green entrepreneurs and interested individuals in Nigeria especially the internet literate ones about green entrepreneurship (Anabaraonye et al., 2022). These blogs which are meant to be highly interactive allows individuals to contribute their ideas, suggestions and feedback to the environmental sustainability driven educators and green bloggers. A good example is the project green initiative blog (www.projectgreeninitiative.wordpress.com) which features articles and poems on climate change adaptation and mitigation for global sustainability.
- vii) Poetry has also been discovered as a great tool which can be used to educate individuals in Nigeria about the socio-economic benefits of green entrepreneurship thereby enhancing disaster risk reduction in Nigeria (Anabaraonye, Ewa & Hope, 2021).

5. CONCLUSION

This study has clearly identified green entrepreneurship as one of the major strategies to adapt and mitigate climate change in Nigeria thereby ensuring sustainable economic growth. It also explored the critical role the World Bank Group can play in eradicating poverty by green financing to enhance green entrepreneurship in Nigeria. There is therefore great need for more grants and funding from the World Bank Group to further support green entrepreneurs and researchers in the field of green entrepreneurship for sustainable development in Nigeria

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A SYSTEMATIC REVIEW ON CREDIT MANAGEMENT

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ABSTRACT

SMEs play a vital role in the growth of an economy by providing employment, contributing to GDP, and promoting entrepreneurship and innovation. Trade credit, in the form of extended payment terms offered by suppliers, can help SMEs access necessary goods and services to run their operations, improve cash flow, and increase profitability. However, there is currently a dearth of empirical research on the connection between trade credit and SMEs' profitability, highlighting the need for more research in this field. The purpose of the study is to analyze the approach taken by SME businesses to managing their customer receivables and to look into the connection between trade credit and business profitability. Secondary data from Scopus was reviewed and findings show that trade credit can positively impact the organization's profitability, but poor management can result in decreased profitability. An effective credit management technique that balances liquidity and profitability is needed for high-level account receivables management.

Keywords: credit management, trade credit, SMEs, performance, profitability, credit management strategies.

1.0 INTRODUCTION

There has been a growing interest in small and medium enterprises (SMEs) globally, as they play a significant role in the economic growth of both developed and developing economies. One way SMEs can increase their profits is through trade credit. Credit management is a crucial component of business planning, control, decision-making, and performance evaluation. The credit management policies of organizations vary, and their impact can either positively contribute to growth and earnings, or negatively result in losses. This is because each manager aims to efficiently collect payments and improve cash flow, while avoiding losses. (Seyoum, 2021 and Otuya & Eginwin, 2017).

Trade credit is a financing arrangement in which a seller allows a buyer to make purchases on credit terms, meaning the buyer can pay the seller later without incurring interest charges. This zero-interest financing enables buyers to sell the products they purchase and generate enough

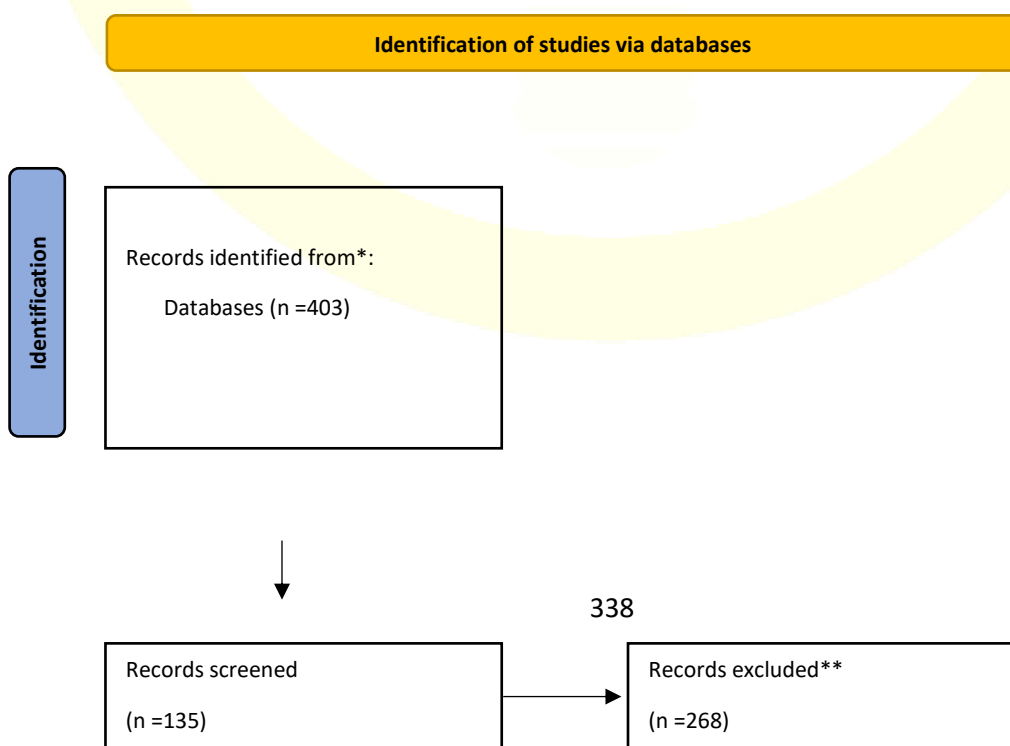
revenue to pay back the seller. Trade credit management is a crucial component of corporate financial policy since it impacts the risk and performance of the business, according to studies. The importance of trade credit management in determining a company's profitability is supported by empirical data. Research has found a linear relationship between trade credit and profitability, although this relationship has been debated, with some studies finding that increased trade credit investment leads to improved profitability, while others argue that increased trade credit results in decreased profitability due to the higher risk of income loss or higher financial costs. The non-linear relationship between trade credit and firm profitability suggests that there must be an optimal level of business credit that leads to increased profitability. Lui, (2020).

The use of trade credit can help increase a business's profitability. However, if there is too much investment in trade credit, it can lead to a higher risk of loss of revenue or increased costs, which can then result in decreased profitability (Hoang et al., 2019). The relationship between profitability and trade credit is not straightforward. Research by various authors (Martinez-Sola et al., 2013; Hoang et al., 2019; Pham and Huynh, 2020) has shown that there is a non-linear connection between the two. Most studies on trade credit have focused on the financing aspect of business by offering loans for trade, while some have focused on account payables, but not much study has been done on account receivable and trade credit, which involves the supply of goods on credit for later payment.

This research aims to investigate the nonlinear relationship between trade credit and small- and medium-sized businesses' profitability. If there is an ideal level of trade credit at which SMEs can maximize profitability, it will be determined by the research. The study also aims to assess the methods used by SMEs participating in group purchasing organizations to handle their client receivables. Consequently, a credit management policy will need to be set up. What effect does trade credit have on SMEs' profitability? is the main research topic of this study.

2.0 METHODOLOGY

The impact of credit management on the profitability of small and medium-sized businesses was examined through a systematic review utilizing the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria. The following is a comprehensive methodology for conducting a PRISMA systematic review in credit management.



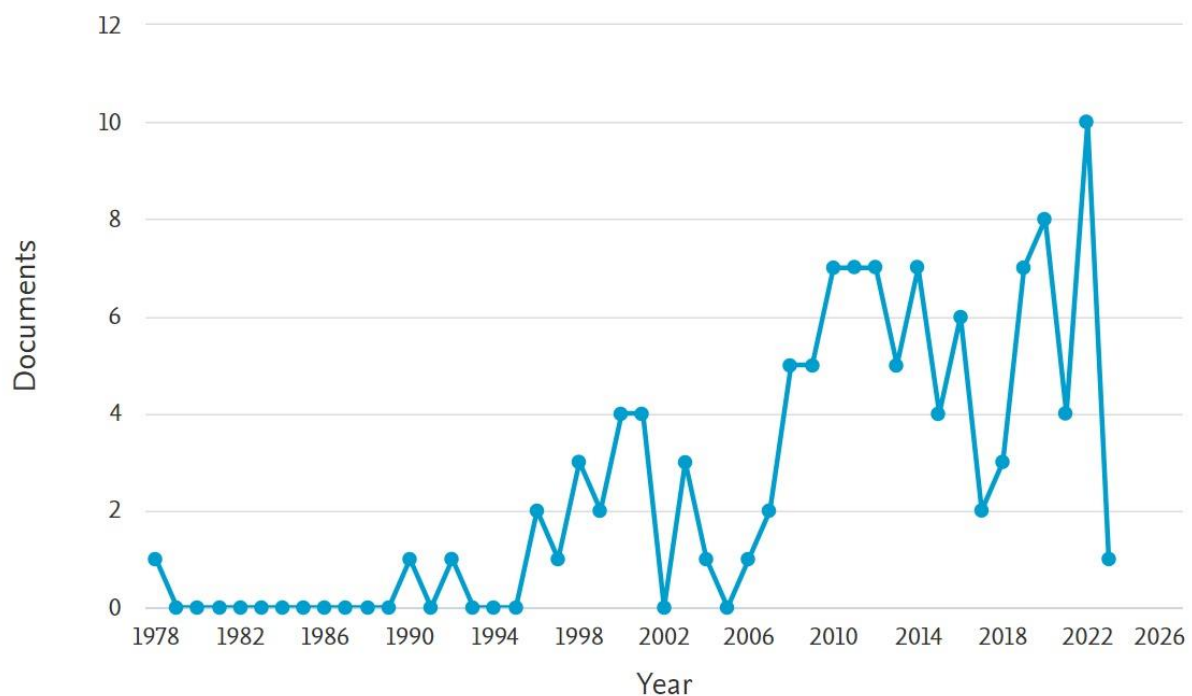
2.1 QUALITY ASSESSMENT

The literature searches for this study involved searching for academic and peer-reviewed article in SCOPUS database, which was chosen due to its comprehensive collection of peer reviewed articles and access to leading management journals. This database was created in accordance with reviews from Covid19 and Lui (2020) Understanding the Shift in Trade Credit in Covid 19 Pandemic and Grzegorz Zimon and Robert Dankiewicz (2020) on Trade Credit Management and Strategies in SMEs. Credit management and Trade credit management were entered into the search engine. Search results returned 403 articles.

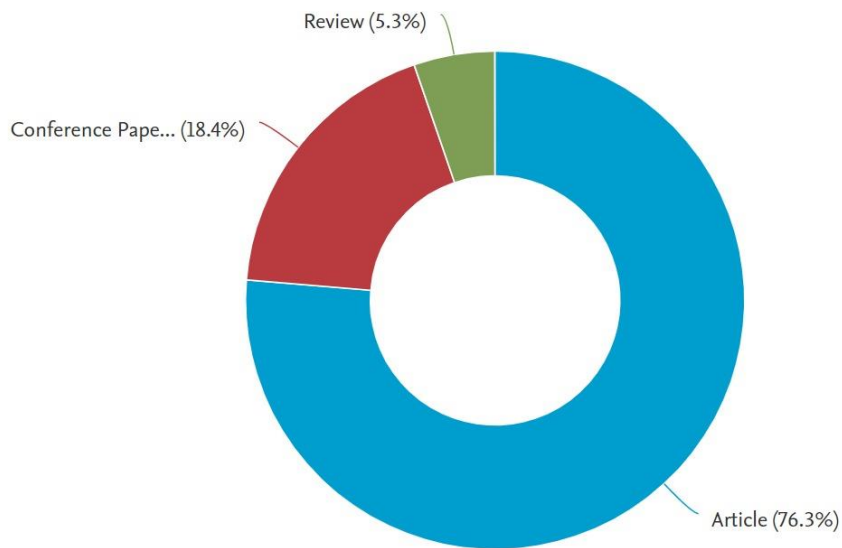
2.2 PROCESS OF SELECTION

The study is limited from year 2018 to 2023. Year 2020 to year 2022 had most of the publication This flow chart describes the process of selecting relevant literature for a research study using the PRISMA methodology. The search was conducted on the SCOPUS database using specified keywords and resulted in 403 articles. The articles were filtered based on year, area, and language to arrive at 135 documents. Only articles, conference papers, and review papers were included, reducing the number of documents to 114. After downloading and screening the documents, duplicates were removed, and unnecessary articles were discarded, resulting in 57 relevant documents.

Documents by year

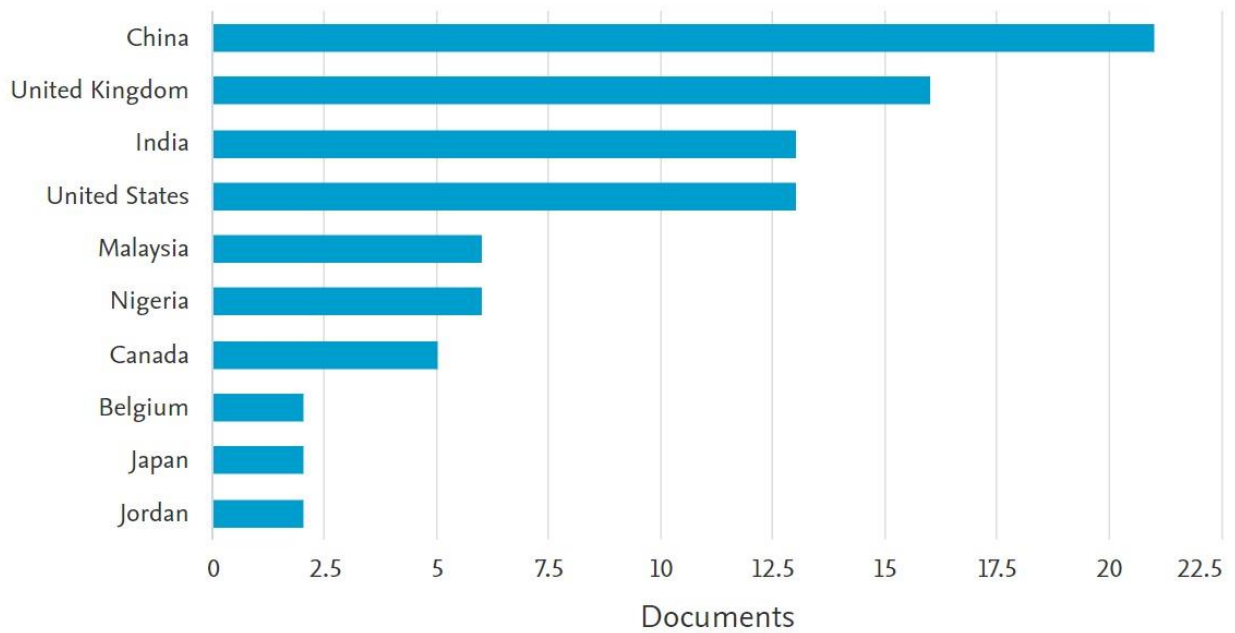


Documents by type

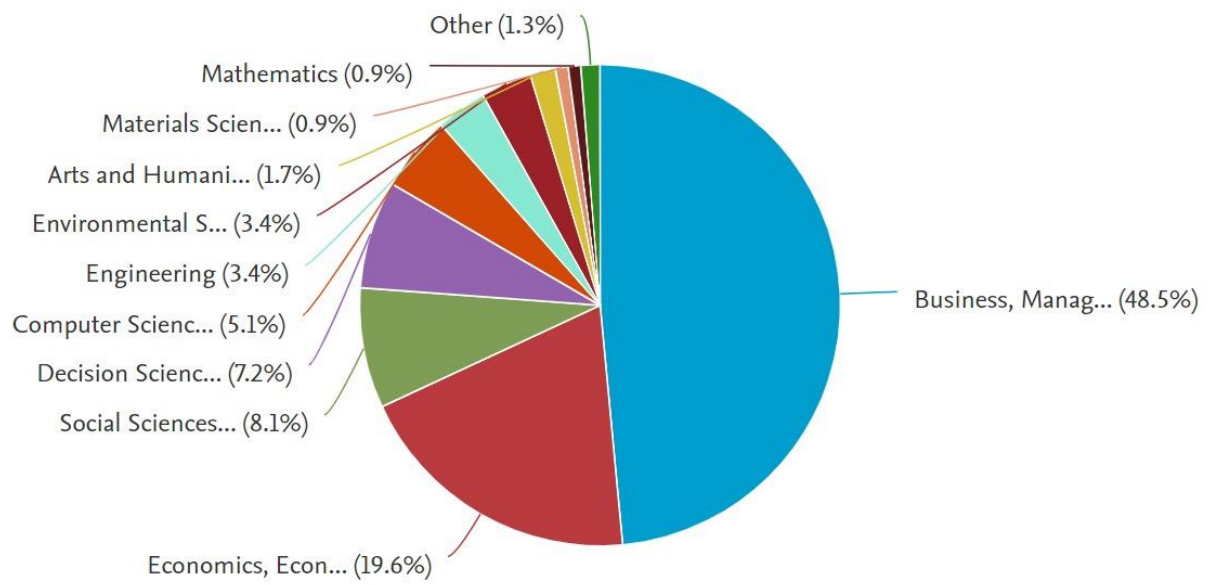


Documents by country or territory

Compare the document counts for up to 15 countries/territories.

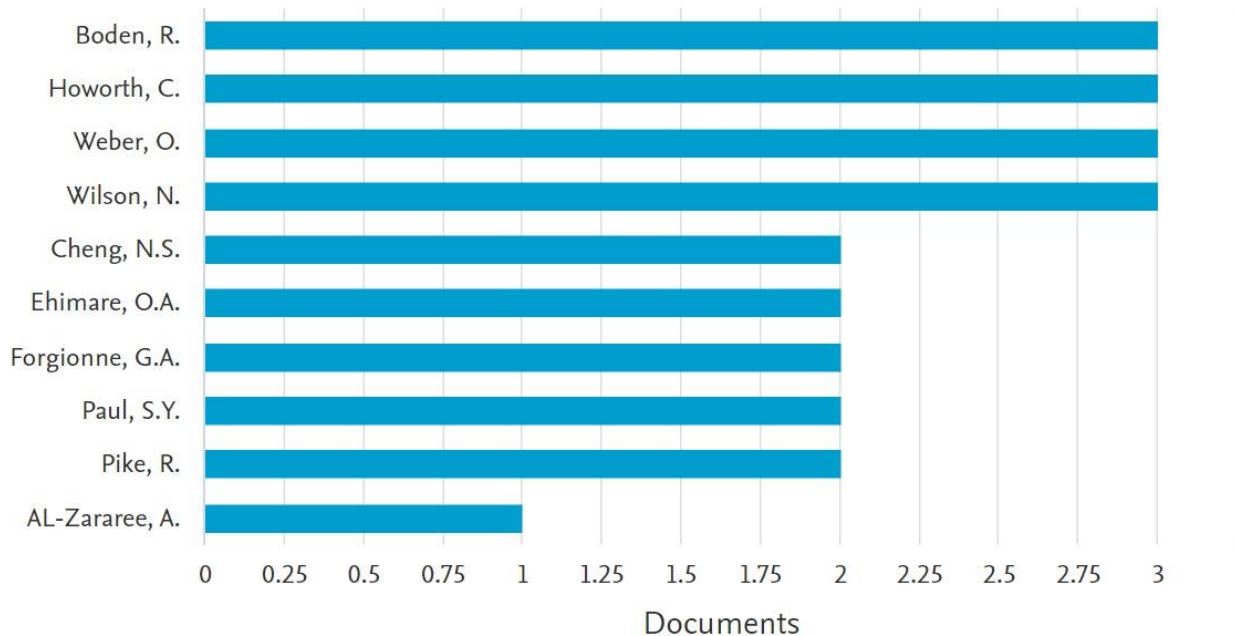


Documents by subject area



Documents by author

Compare the document counts for up to 15 authors.



2.3 RESULT AND INTERPRETATION

After excluding year, area and English, there were 135 documents left from 2018 to 2023. Then only articles, conference paper and review paper were included which is 114 documents. The 114 documents were downloaded and screened. After all duplicates were removed, and articles which were not needed were discarded, we were left with 57 documents. More documents were reviewed in the area of Business management, followed by economics. China had the highest publication. Next to it was United Kingdom, followed by India and USA.

3.0 CLASSIFICATION OF LITERATURE

3.1 CREDIT MANAGEMENT

Modern commercial strategy must include good credit management, which involves maximizing cash flow to assure stability and maximize growth potential. It involves some risk and ought to be a proactive effort that starts prior to the commencement of sales. Grzegorz (2020) contends that companies can practice good credit management by getting to know their clients, establishing payment terms, sending out invoices on time, and not being hesitant to request payment when it is due. Cheaper risk for suppliers, lower storage costs for suppliers, increased income through the stimulation of implicit interest rates, and improved financial performance of buyers are only a few benefits of good credit management. According to the study, rising trade credit receivables will

lead to manufacturing companies being more profitable. Additionally, essential to firm cash flow and operations is good credit management. ACP members Otto (2022), Botha (2022), and Els (2022) concurred that maximizing profits and ensuring client happiness are key components of good credit management. If income is the fuel that keeps a business going, credit management serves as the vehicle that propels it, growing more effective and productive over time. A credit policy is a set of guidelines that outline the terms and conditions for extending credit to customers, the criteria for evaluating a customer's creditworthiness, and the procedures for collecting payments and dealing with delinquent accounts. The objective of managing accounts receivable is to collect payments while avoiding loss of sales due to aggressive collection techniques. This involves evaluating the customer's creditworthiness, setting credit standards, and monitoring the firm's accounts receivable to ensure customers are paying according to the agreed credit terms. Effective credit management helps a firm avoid the costs associated with slow payments. According to Jibrin et al. (2013), the trade-off model posits that companies must strike a balance between liquidity and profitability in their account receivable management. Effective credit management is considered essential in achieving this balance, as it can have a major impact on a company's financial performance, growth, and sustainability. Almasria et al. (2021) highlight that trade credit is becoming a popular technique in the field of financial management as the landscape of corporate organizations evolves. To ensure accurate financial reporting, companies are implementing control measures.

3.2 IMPACT OF TRADE CREDIT ON PROFITABILITY

Trade credit is a sort of business credit in which a vendor offers to sell goods on credit as opposed to demanding payment up front. For a number of reasons, giving clients trade credit can boost a business's sales and profitability. First off, it lessens information asymmetry between suppliers and customers by enabling purchasers to assess product quality prior to payment. Second, trade credit lowers storage costs and provides businesses a flexible approach to pricing. Third, expanding trade credit can be considered a short-term investment that boosts revenue. However, having a big amount of accounts receivable exposes a business to the financial risk of client non-payment or late payment, which can result in expensive administrative costs and even fund lock up. Studies show that an increase in trade credit boosts a company's profitability, but high accounts receivable can also reduce profitability because of the risks and expenses involved.

This implies that choosing a trade credit option is not simple and requires weighing the costs and benefits in order to maximize profitability. Stretching out payments has the potential to improve the company's cash flow and liquidity, but it can also have a negative impact on long-term relationships with suppliers and raise the cost of locating other sources. Depending on a firm's unique conditions and a trade-off between short- and long-term costs, the ideal trade credit level would be determined. Businesses must carefully analyze how their trade credit decisions may affect their creditworthiness and ongoing relationships with customers.

Research on the link between trade credit and a company's financial performance has produced a variety of results. While some research (Li et al., 2016; Hoang et al., 2019) have suggested that trade credit may increase a firm's worth, others have found no association (Jory et al., 2020). However, some studies have found the opposite, indicating a bad correlation between a company's profitability and how long it takes to pay its obligations (Orazalin, 2019). To completely comprehend the connection between trade credit and a company's financial success, more

investigation is required. The trade-off approach advises businesses to manage their accounts receivable in a way that strikes a balance between maintaining liquidity and optimizing profitability. Effective credit management is crucial for the financial performance, stability, expansion, and longevity of industrial enterprises, claim Jibrin et al (2013). The knowledge asymmetry between selling businesses and their purchasing clients is also covered in this theoretical vein. It examines the ambiguities surrounding product quality and customer payment, and by using price discrimination, it seeks to shed light on trade credit policies. Understanding the negotiating process between businesses and their customers is the main goal of the research. Small and medium-sized businesses (SMEs) frequently bargain prices with their clients to arrive at the final cost of their goods or services. By establishing loan terms, this enables them to boost sales while lowering the chance of default.

3.3 TRADE CREDIT MANAGEMENT STRATEGIES

In Europe, there is a wide range in the proportion of overall sales that are done using deferred payments, with Western Europe typically having lower percentages than Eastern Europe. In Western Europe in 2018, the ratio varied from 25.4% in Switzerland to 56.2% in Denmark (Atradius, 2018), whereas the average in Eastern Europe was 67.2%. It was 48.5% in Poland. Atradius (2019). (2019). In other words, an increase in credit purchases has resulted from the expansion of invoice payment terms, but this also means that a sizable amount of a company's assets is in the form of receivables. To minimize risk and protect the company's interests, a proper strategy for managing trade credit is necessary. Managing trade credit involves various strategies, such as negotiating payment terms with customers, implementing credit control procedures, and monitoring the creditworthiness of customers. Trade credit insurance can also provide a safety net against the risk of default by customers, helping to reduce the financial impact on the business. Other methods include setting credit limits, offering early payment discounts, and using factoring or invoice financing to manage cash flow. Trade credit, which is the extension of credit by a supplier to a buyer for goods or services, can bring benefits to both parties in terms of increased sales and improved cash flow. However, it also carries a certain degree of risk as the buyer may default on payment, which can result in financial losses for the supplier. Despite this, trade credit remains an important tool for businesses to manage their operations and maintain relationships with their customers. Trade credit is the extension of credit by one business to another for the purchase of goods or services, and it can bring advantages such as improved cash flow, increased sales, and stronger relationships with suppliers. However, it also has disadvantages like opportunity cost (the cost of forgoing the next best alternative) and the need to consider factors like creditworthiness of the recipient, terms of payment, and economic conditions. (Grzegorz, 2020). Business success and stability depend on the efficient handling of trade credit. Ineffective management can cause diminished profitability and financial insecurity. Therefore, putting trade credit management techniques into practice is crucial to ensuring the enterprise's liquidity, profitability, and sustained growth. Small and medium-sized businesses (SMEs) that run their own independent operations in the market typically benefit from conventional trade credit management techniques. Three primary traditional trade credit management solutions are noted by Grzegorz (2020) and Robert (2020).

- Conservative receivables management strategy focuses on minimizing the risk of customer insolvency by limiting credit sales and opting for cash transactions or short-term loans with

new clients. This strategy results in a shorter turnover period and greater prudence when hiring new contractors.

- The aggressive strategy in trade credit involves granting loans to high-risk recipients without proper checks and control. This strategy may raise the likelihood of attracting new clients and boosting sales, but it may also make it more challenging to get clients to pay.
- The moderate strategy in trade credit management is a balanced approach, where there is a lack of clear cut-off limits for indicators. Depending on the sector and size of the firm, threshold values for indicators should be determined. You can make comparisons using the industry average as a benchmark. The performance of distinct businesses is contrasted with the sector average in the literature.

4.0 MANAGERIAL IMPLICATION

Trade credit management and the effect it has on financial performance: A study by Jibrin, Nuhu, and Muhammad (2013) found that credit management significantly affects a company's financial performance. Strategies for managing trade credit well can boost a company's financial performance. Trade credit's function in liquidity management According to Almasria, Alhussain, and Alharthi (2021), trade credit is crucial for a firm's liquidity management. Businesses can increase their liquidity and lessen the requirement for external finance by giving trade credit to consumers. The effect of the business environment on the efficiency of trade credit management: Otto, Botha, and Els (2022) discovered that a key factor influencing how well SMEs use trade credit management procedures is the business environment. As a result, managers must be conscious of the unique difficulties presented by the business environment and modify their trade credit management tactics as necessary. The importance of trade credit in supplier-buyer relationships was discovered by Cunat (2006). Trade credit is crucial in suppliers' evaluations of a buyer's trustworthiness. Effective trade credit management practices can help improve the relationship between suppliers and buyers, which can result in benefits such as reduced costs and improved access to financing.

5.0 CONCLUSION

Credit management refers to the process of managing the credit granted to customers and clients by an organization. Effective credit management helps organizations balance the trade-off between liquidity and profitability by efficiently collecting payments and improving cash flow, while avoiding losses. The credit management policies of organizations can have a significant impact on their growth and earnings. Studies have shown that credit management practices can positively contribute to the financial performance of organizations. For example, Seyoum (2021) found that effective credit management policies can lead to improved cash flow, reduced financial risk, and increased profitability. In a study they conducted in Nigeria, Otuya and Eginwin (2017) found that parameters including loan amount, loan purpose, loan period, and collateral security are extremely important in predicting how well small and medium-sized businesses manage their credit. In conclusion, credit management is an essential aspect of financial management for organizations, and its impact on financial performance cannot be overstated. The implementation of effective credit management policies and practices can result in improved cash flow, reduced financial risk, and increased profitability. (Seyoum, 2021 and Otuya & Eginwin, 2017).

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PERCEPTION ON GREEN ENTREPRENEURIAL OPPORTUNITIES IN WASTEWATER MANAGEMENT: IMPLICATIONS FOR SUSTAINABLE ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

The world's wastewater – 80 percent of which is released into the environment without adequate treatment – is a valuable resource from which clean water, energy, nutrients, and other resources can be recovered. As population grows and urbanization increases, more wastewater is generated and there is need to create more awareness on the health, economic and environmental implications of poorly disposed wastewater. Climate change, global warming and other related environmental challenges such as water pollution presently pose as a threat to biodiversity and sustainable economic growth in Nigeria. However, within these environmental challenges are self-reliant opportunities, one of which is green entrepreneurship in wastewater management. Perceivably, this has implications for sustainable economic growth in Nigeria. This paper calls for smarter wastewater management, including reuse and resource recovery. It also examined wastewater management projects in Nigeria which have paid dividends for people, the environment, and economies in the short and long-term. This paper concludes by highlighting the economic, environmental and health benefits of wastewater management for sustainable development in Nigeria.

KEYWORDS: *Economic Growth, Green Entrepreneurship, Waste Water Management, Sustainable Development, Nigeria.*

INTRODUCTION

Approximately 70% of the Earth's surface is covered with water thus it is the most abundant substance on the earth surface. Water is essential to human existence not only because of its biological roles but also its importance in our day to day socio-economic activities. The various application of water includes domestic activities(such as laundry, cooking, bathing), irrigation, industrial activities, health care services, food processing, etc. However, as a result of these processes, water is contaminated thereby generating wastewater. Hence, wastewater is a form of polluted water generated from human activities and rainwater runoff. Any water that has been adversely affected in quality due to human activities can be categorized as wastewater (Burton and Stense, 2003). According to Tchobanoglous et al. (2004), wastewater is water generated after the use of raw water in a variety of deliberate processes. Wastewater refers to any liquid waste or sewage that comes from households, hospitals, factories, and any other structure that uses water in its facilities. Wastewater contains wide range of pollutants such as microorganisms, pesticides, micro-plastics, fertilizers, oils, radioactive chemicals which are potentially toxic. These contaminated may be in liquid or solid state.

As reported by UN Waters (2022), the amount of wastewater produced and its overall pollutant load are rising globally as a result of population increase, rapid urbanization, and economic development. Poor management of wastewater is a major environmental issue in developing countries, including Nigeria. The greatest increases in exposure to pollutants are expected to occur in low- and lower-middle income countries, primarily because of higher population and economic

growth in these countries, especially those in Africa and the lack of wastewater management systems.(United Nations Environment Programme(UNEP), 2016; UN Waters, 2017).

In many cities of Asia, Africa and Latin America, engineered sewage collection systems and waste water treatment facilities are often non-existent. Wastewater from industries are frequently dumped into open drainages or directly into natural water bodies. Groundwater and surface water are contaminated by increased use of chemical fertilizers and pesticides as well as untreated wastewater from irrigation. A significant amount of wastewater in urban areas with higher levels of poverty is dumped untreated into the nearest drainage channel or body of water (UN Waters, 2022). In typically highly populated residential zones with poor sewage system, wastewater generated from domestic activities and medical wastes are exposed to air resulting in air pollution. This study therefore discusses the concept of wastewater management, green entrepreneurship, negative impacts of poor wastewater management in Nigeria, and benefits of properly managed wastewater for sustainable economic growth in Nigeria.

MATERIALS AND METHODS

Data used for this study is derived from published works including academic articles, journals, conference papers, textbooks, and internet materials. This paper examined current progress with “Green entrepreneurial opportunities in wastewater management in Nigeria and its impact on sustainable economic growth in Nigeria” through existing literature review and data collection from relevant agencies. The main purpose of this research work was to survey theoretical backgrounds and previous studies on the subject matter.

RESULTS AND DISCUSSION

In most African countries, there is a significant lack of proper wastewater treatment. Untreated wastewater effluent is one of the most common types of pollution found around urban rivers and in groundwater sources in many African cities (Omosa et al.,2012). This is the reality in many Nigerian cities where collected wastewater are discharged into water bodies untreated. According to Odurukwe (2012), there is no central wastewater system and septic tanks for the collection domestic wastewater in Aba city. Odurukwe (2012) further revealed that wastewater from the large, medium and small scale industries in the commercial city of Aba in Nigeria are directly emptied into the Aba river. These untreated wastewater released into this river can potentially result in environmental and health hazards in the community.

Nigeria is ranked the poverty capital of the world with rising unemployment rate where many live in abject poverty (Ogunwale, Oladele, Adedeji, Nwokolo & Afolabi, 2020). Some poverty alleviation programmes in Nigeria has not changed people's living standards (Orji, Attah & Adie,2022). This is evident in the World Bank's report that Nigeria has again missed 2022 poverty reduction target as a result of rising inflation (Ikpoto,2022). In Nigeria, improper management of wastewater is one the major environmental challenges due to its potential of causing groundwater and surface water pollution leading to poverty in Nigeria. Domestic sewage and industrial wastewater are the major contributor of wastewater and are capable of introducing wide range of contaminants into natural water bodies(Eikelboom and Draaizer, 1999). Waste is wealth yet much of the waste products are disposed in dumpster. For example more than 55 % of cassava waste are disposed as refuse (Olukanni & Olatunji, 2018), about 80% of the world's wastewater are released into the environment without adequate treatment. These untreated wastewater overtime has

environmental implications which affect human beings negatively. In particular health and livelihoods are impacted. Opportunities in the agricultural value chain are not maximized. Waste management particularly that of wastewater is a potential area for sustainable economic growth yet it is not recognized as self-reliant initiatives or opportunities to be adopted (Orji, Attah & Adie, 2022). This paper's perception is that, for example, if wastewater is properly managed, valuable resources can be recovered. Such resources as clean water, energy and manure, provides sources of livelihoods for economic growth, which have implications for sustainable development.

WHAT IS WASTEWATER MANAGEMENT?

Waste are unwanted materials that are generally perceived as no longer useful or needed hence are discarded away from where they are generated. Most times improperly discarded waste constitutes nuisance and hazards to people and the environment. However, knowledge and technological breakthrough has made it possible to recover valuable materials from waste for sustainable livelihoods and sustainable economic growth and development (Anabaraonye, Okafor & Hope, 2019). Example of such waste is waste water. Its proper management should provide the much craved solution to environmental issues such as pollution of water habitats and biodiversity loss. Wastewater management refers to the collection of wastewater for treatment and for reuse. It is an important approach for the protection of water resources (Roozbahani, 2021).

WHAT IS GREEN ENTREPRENEURSHIP?

Traditionally, Entrepreneurship refers to the totality of self-asserting attributes that enable a person to identify latent business opportunities together with capacity to organize needed resources with which to profitably take advantage of such opportunities in the face of calculated risks and uncertainty (Essien, 2006). An entrepreneur is that person that recognizes and pursues opportunities without regard to the resources he or she is currently controlling with confidence that he or she can succeed with the flexibility to change course as necessary and with the will to recover from setbacks (Envic & Langford, 2000). Green Entrepreneurship is the process of developing new products and technology to address environmental issues (York and Venkataraman, 2010). According to Anabaraonye et. al (2022), Green entrepreneurship is that entrepreneurship that seeks to solve environmental problems while generating income for sustainable economic growth. Green entrepreneurship refers to a special subset of entrepreneurship that aims at creating and implementing solutions to environmental problems and to promote social change so that the environment is not harmed (Saari and Joensuu-Salo, 2019). Green entrepreneurs are seizing business opportunities that can result in the improvement of ecological sustainability (Dean and McMullen, 2007). Green Entrepreneurs use their creative and business ability to solve environmental related issue (including wastewater management) for profitability or sustainability.

IMPACTS OF WASTEWATER MANAGEMENT ON NIGERIA'S SOCIO-ECONOMIC DEVELOPMENT

Reiteratingly, in June 2022, environmental leaders globally met to take stock of where we have been and where we are heading with the goal of galvanizing momentum for the United Nations Decade of Action for achieving the Sustainable Development Goals (SDGs). For instance, the sustainable development goal 6 (SDG 6) aimed at ensuring the availability and sustainable management of water and sanitation is one of the pressing needs of campuses, communities and cities in Nigeria. This is pertinent as climate change and industrialization, among other human activities is causing water shortage globally. In some areas in Nigeria, there is no proper drainage

or sewage system for collection of wastewater but rather are released into open field resulting in severe air pollution (Idris-Nda et al, 2013). Giwa (2014) opined that the indiscriminate release of wastewater into the environment in many Nigerian cities has adversely affected sanitation and claimed the lives of many people through diseases such as Cholera, Hepatitis B, and Typhoid. Idris-Nda et al, 2013 reported that domestic wastewater management consists of the use of septic tanks, unplanned and partially planned open drainage systems in Minna of Niger State. In their report, about 35% of domestic wastewater generated goes into the septic tank while the remaining 65% flows freely on ground surface and sometimes forming stagnant pools. According to Adesogan (2013), there is no adequate wastewater treatment plant in some states like Anambra, Ondo, Ebonyi, Kwara and hence wastewater are disposed into ground water. Many residents in some areas in Minna, Niger State resort to the use of improper channels to convey wastewater away from their residential areas leading to formation of stagnant pool with bad odour. In other areas where there is scarcity of water, untreated wastewater are reused. This is a detrimental wastewater management practice found usually in Northern Nigeria. This can result in outbreak of water borne disease (Idris-Nda et al, 2013). According to Mustapha (2013), most of the industries in Kano do not have wastewater treatment facilities and thus discharge their untreated effluents into the adjoining receiving water bodies; the receiving water courses are now grossly polluted.

THE NEGATIVE IMPACTS OF POOR WASTEWATER MANAGEMENT IN NIGERIA

Wastewater management is seen as a critical approach to protect water resources from pollution from pollutants components of untreated wastewater generated from all the sources. However, not all wastewater are properly managed or treated before discharge into nearby rivers, streams and lakes as the case may be. On the other hand, poorly treated or poorly managed wastewater poses a lot of risks to life and livelihoods. The challenge to wastewater management in Nigeria, is that of poor investment in waste management, waste composition and generation analysis, and the unnecessary importation of waste equipment increased improper waste disposal schemes (Anabaraonye, Okafor & Hope, 2019).

The following are the negative impacts that maybe associated with poor wastewater management:

1. **DANGER TO AQUATIC LIFE:** Toxic chemicals in effluents and thermal (heat) discharges cause mortality of aquatic organisms. For example, inorganic arsenic can produce acute and chronic effects in the respiratory organs, gastrointestinal tract, skin, cardiovascular system and the nervous system. Skin and lung cancer due to arsenic exposure have been reported.
2. **DISRUPTION OF FOOD CHAIN:** Aquatic ecosystems may experience disruption that impact negatively on food chains.
3. **BIO-ACCUMULATION OF TOXICANTS:** Some aquatic organisms bio-accumulate toxic chemicals which become bio-concentrated or bio-magnified in food chains.
4. **REDUCED DISSOLVED OXYGEN LEVELS.** The dissolved oxygen content of the receiving water may become reduced. Biodegradable organic substances impact biological oxygen demand (BOD), while oxidizable organic and inorganic substances in the water impact a chemical oxygen demand (COD).
5. **EUTROPHICATION:** This is known as nutrient enrichment of aquatic ecosystems which results in chemical and environmental changes in the system and causes major shifts in plants growth whereby, phytoplankton become concentrated in the upper layer of the water, giving it a murky green cast (Smith & Smith, 2001).

6. COLOURATION AND OBNOXIOUS ODOUR OF WATER BODIES. Some effluents cause streams and water bodies to become coloured and exude obnoxious odours. Shell fish and fin fish may be tainted with the colours, thus reducing market quality.

7. SHORTAGE OF PORTABLE WATER: Water is an essential resource for all life on earth, however only three(3) per cent of it is fresh, while the other ninety- seven (97) is salt water. Of this three per cent less than one-third is available as ground water, a small portion as moisture and the remaining, over two-third is frozen in glaciers and Polaris. Poorly managed wastewater in Nigeria inevitably affects the availability of good drinking water.

9.SHORTAGE OF WATER FOR AGRICULTURAL PRODUCTION: Many people rely on subsistence farming. Water shortage for irrigation and other agricultural use as a result of poor wastewater management can lead to negative consequences. These consequences may include; widespread crop failure, loss of aqua culture (fish and sea life farming), mass starvation, displacement, induce social unrest and conflict, all may result to hardship and mental distress.

10. DISEASE OUTBREAK AND POSSIBLE EPIDEMIC: Pathogens constitute health hazards. Wastewater contain a substantial amount of these pathogens. For instance, sewage wastewater has a large amount of intestinal bacteria like *Escherichia coli* and *Clostridium perfringes*. These organisms are implicated in disease epidemic. For example cholera infections are spread by drinking water contaminated with *Vibrio cholera*. This disease is said to be widespread in areas with inadequate treatment of sewage and drinking water sources exposed to these pathogens from sewage and fecal materials. Other diseases caused by pathogens found in untreated wastewater include, dysentery, hepatitis, and typhoid fever.

THE POSITIVE IMPACTS OF PROPER WASTEWATER MANAGEMENT IN NIGERIA

Properly managed wastewater is one that have undergone treatment for the removal of either organic, inorganic compounds and heavy metal. Such treatments should ensure a pollutant and toxicant free effluents. The effluent should also be of improved quality free of solid materials, including pathogens. The treatment should make it available to be reusable for other purposes such as domestic, agricultural and industrial use. These are some of the immediate and direct benefits from proper wastewater management. Short and long term impacts are felt in the upward speed in self cleansing capacity of water bodies receiving these effluents. Mortality risk to water lives are reduced and spread of communicable diseases and unsafe drinking water less probable.

Akpan and Basse (2020) maintain that wastewater reuse has become an integral part of Integrated Water Resources Management, thus plays a role in securing the water needs for future generations. According to the observation of Kayode, Luethi & Rene (2018), adequately managed wastewater would achieve the following environmental benefits:

- i) Prevent contamination of water bodies (water supplies) by chemical and biological agents.
 - ii) Prevent destruction of fish and other aquatic life.
 - iii) Reduction of excessive addition of nutrients that would enhance eutrophication.
 - iv) It would enhance community growth and development in the places where the regulated facilities are situated.
 - iv) Externalities such as lost of livelihoods may be averted and psychological wellbeing enhanced.
- Green entrepreneurial opportunities for sustainable development that could stem from proper wastewater management in Nigeria are listed as follows;

1. Agricultural production requiring heavy irrigation system.
2. Business in sewer services for recycling and reuse of treated water.

3. Water treatment entrepreneurship e.g. water startups.
4. Manufacture of wastewater treatment solution and technology.
5. Energy generation through hydropower and gasification.
6. Software and Analytics to connect and design apps that facilitate the reuse, recycling and distribution of treated water even in areas of affected by drought.

CONCLUSION

Green entrepreneurship in wastewater management offers numerous opportunities for sustainable economic growth. By leveraging innovative technologies and promoting sustainable practices, entrepreneurs can not only improve the environment but also drive economic development. With the continued growth of the global population and the increasing demand for clean water, the need for sustainable wastewater management solutions will only continue to grow, providing entrepreneurs with new and exciting opportunities to create impactful and profitable businesses. In addition to technological advancements, sustainable practices are also essential for sustainable economic growth in wastewater management. Entrepreneurs can promote sustainable practices, such as reducing water usage and increasing the use of recycled water, by offering educational and outreach programs to communities. This can help raise awareness about the importance of water conservation and encourage more people to adopt sustainable practices.

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Effect of Economic Shock on Farm Household Food Security in Northeast Geo-Political Zone of Nigeria

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Abstract

Food security, a key global challenge, is exacerbated by the manifolds of economic shocks experienced by farm households, particularly in developing countries. Economic shock is an emerging topic in development economics and only a few studies have reported the impact of economic shocks on the food security of agricultural households. This research, therefore, assesses the effect of economic shock on farm households in Nigeria's northeastern geo-political zone. The study analyses data from 3150 farm households across the northeastern geo-political zone of Nigeria collected by the World Bank and the Nigeria Bureau of Statistics in 2018 and 2019. The food insecurity experience scale (FIES) was used to estimate the household's food security. An ordered probit was employed to assess the effect of economic shock on farm household food security. The food insecurity experience scale (FIES) shows that only 22 percent of the households are food secure while the rest (35 percent) are mildly food insecure. In addition, 29 percent are moderately food insecure, while 14 percent are severely food insecure. The econometric result suggests that sex, years of education, household size, and total expenditure are negatively related to food insecurity and are, thus, likely to reduce food insecurity. On the other hand, pest infestation/animal diseases shock, input and output price shock, nonfarm business failure, food price hikes, and family health shock tend to increase food insecurity in farm households. Additionally, Taraba, Yobe, Borno, Bauchi, and Gombe states have a higher probability of being more food insecure than Adamawa State which is the base state in the analysis. Therefore, this research concludes that food insecurity in northeastern Nigeria is high and economic shocks negatively affect the food security of farm households in the northeastern geo-political zone of Nigeria. The study recommends that education and training should be provided by the government to farm households to improve their level of food security. Furthermore, efforts should be geared

towards building the coping and resilience capacity of farm households so that they will be able to adapt and be food secure even when faced with shocks.

Keywords; *economic shock, food security, farm households, northeast, Nigeria*

Introduction

Food is a core human requirement, essential for both survival and well-being, according to Patel et al. (2015), food security is a universally significant component of household and individual well-being and a prerequisite for nutrition, health, and development (Atara et al., 2021). Also, in order to achieve food security, people must have access to sufficient amounts of food on a regular basis and sufficient income or other resources to buy food (FAO 2018). Food security is a global issue that has garnered prominence for many years, and improvements were shown in earlier years. However, in recent years, rates of food security have dropped, with two billion people today experiencing moderate to severe food insecurity worldwide (FAO, IFAD, UNICEF, WFP, & WHO, 2018).

About two-thirds of the people experiencing food insecurity globally live in Sub-Saharan Africa and South Asia, and about half of them are smallholder farmers (Bacon et al., 2014, FAO, 2017). It was discovered in 2019 that 9 percent of people worldwide are undernourished and data suggested that hunger has been rising significantly globally since 2014, with Africa expected to have the greatest global undernourishment rate by 2030 at roughly 433 million people (FAO 2018).

Additionally, acute food insecurity affects 135 million people in 55 countries and territories, with 73 million of these individuals living in 36 African countries, according to the 2020 Global Report on Food Crisis (GRFC 2020; FSIN, 2020; Otegunrin et al., 2020). Food insecurity has a negative influence on outcomes in the areas of education and employment as well as physical and mental health (FAO, IFAD, UNICEF, WFP, & WHO, 2018). and as a result, achieving Sustainable Development Goals depends on food security (zero hunger, responsible consumption, education, health, and democracy).

Nigeria, the most populous nation in Africa, depends heavily on agriculture, which employs more than 70 percent of the labor force nationwide, particularly in the rural areas where the majority of farmers reside, and accounts for nearly two-fifths of the nation's GDP. (Ojo 2014). Due to the volatile nature of the agricultural sector dominated by smallholder farmers, Nigeria's agriculture is exposed to a variety of economic shocks (Shehu and Sidique, 2015). According Amare et al., 2018, Nigeria experienced a sizable number of shocks that have an impact on food security. Since 2013, Nigeria's standing on the Global Food Security Index (GFSI) has risen, climbing to a disturbing number of 94 out of 113 nations in the 2019 GFSI overall ranking table, behind Ethiopia, Niger, and Cameroon (EIU,2019).

Nigeria ranks high in the 2019 Global Hunger Index (GHI), which placed her in the severe hunger category. This statistic showed that Nigeria is not yet on track to meet the 2030 SDG goal of ending hunger. Nigeria, an agrarian nation that ranks as the world's top producer of various crops, has repeatedly experienced food insecurity. Nonetheless, despite several attempts aimed at reducing general food insecurity in Nigeria, it remains a severe problem that has existed for a long time, despite successive Nigerian administrations implementing many intervention programs to combat

it. Every region of Nigeria still experiences food insecurity (Balana et al., 2023). Economic shocks, particularly in the Northeast, are likely to exacerbate Nigeria's fragile situation of acute food shortages. The three regions of Nigeria's six geopolitical zones that are most impacted by violence are the northeast, north-central, and south-south regions.

Economic shocks are unanticipated, unfavorable occurrences that prevent an individual or a family from leading a productive life. Shocks might be covariate or idiosyncratic. The former is associated across households within a community, e.g. floods, droughts, epidemics, etc., while the latter is household-specific and affects individual members of the household, such as family health, non-farm business failure loss of assets, pest infestation, or animal disease, food price hike shock, etc. (Nguyen et al., 2020). Due to the seasonal nature and rainfed agricultural production which dominates the sector, Nigerian suffers shocks related to food prices, climate, and other factors. Economic shocks are quite likely to impact Nigerian households' access to food through a variety of channels. (Baldwin and Weder di Mauro, 2020; B'en'e, 2020; Obi et al., 2020).

The conceptual basis for the understanding of household food insecurity and dietary diversity can be connected to the widely accepted four dimensions of food security – availability (physical availability of food), accessibility (economic and physical access to food), utilization (dietary quality which ensures suitable selection and preparation of food), and stability (stability of food availability, food access, and food utilization over time) (FAO, 2008). Economic shock likely affected one or more of these dimensions of food security. Access to food can be adversely affected by food price hikes or reduced household income.

The widely accepted four dimensions of food security of availability, accessibility utilization, and stability can be connected to the conceptual basis for the understanding of household food insecurity and dietary diversity (FAO, 2008). One or more of these aspects of food security were probably impacted by the economic shock. Increases in food prices or declining household income might have a negative impact on access to food. Many Nigerian households experience poor food security, which has resulted in severe socioeconomic problems like acute malnutrition, high rates of poverty, unemployment, and social vices like armed robbery, terrorism, kidnapping, and banditry, especially among vulnerable groups (Okeke-Ihejirika et al., 2020). Economic shocks have exacerbated the vulnerability and food insecurity of Nigerian households (Amare et al., 2020; Balana et al., 2020). According to Balana et al., 2020 and Asare et al., 2020 Households typically utilize a variety of mechanisms to buffer and deal with economic shocks, they often use informal support systems such as depletion of savings, borrowing, selling household assets, and limiting consumption of both food and non-food goods. However, many of these coping mechanisms fall short of mitigating the impact of economic shocks on households.

The objective of this study is to unravel the economic shocks like (climate, pest and disease, output or input price shock, price hikes, and health shocks) which are potentially serious effects on the incomes and food security of farm households (Amare et al., 2018).

Northern Nigeria is home to more than 75% of Nigeria's poor people, and shock is expected to escalate food insecurity in the zone, which is already a fragile and conflict-affected territory

(World Bank and NBS,2020). Poorer households are more likely to be impacted by the shocks in both rural and urban settings. (Ravallion, 2020).

The Sustainable Development Goals (SDGs) emphasize that yearly economic losses from shocks amount to more than 250 billion dollars. The rural poor and vulnerable in developing nations are typically affected by these numerous shocks in both their farming and non-farming pursuits, which poses serious dangers to their ability to obtain adequate food. Yet, there is currently little to no literature on the impact of economic shock on food security in Nigeria, particularly in the north. Our study aims to fill this gap. This study will shed light on how economic shock affects farm households' food security in Nigeria, and estimates suggest that shocks and socioeconomic changes would likely intensify and happen at the same time in the future (FAO, 2016, 2017; Rosenzweig et al., 2014; Wheeler and von Braun, 2013). The nature and efficacy of coping and adapting responses to shocks will change as a result of this change. (Intergovernmental Panel on Climate Change, 2019). This research provides new evidence on the effect of economic shock on food security among rural and urban farm households in northeastern Nigeria using nationally representative household survey data from Nigeria. These results will guide short- and long-term policy responses, for example, this study can help governments to develop social investment programmes that are intended to help farm families withstand the effects of economic shocks.

Methodology

Study Area and Type of Data

This research was carried out in Northeast Nigeria, which comprises Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe, and Zamfara states. This study banked on secondary data, the latest Nigeria Living Standards Survey (NLSS) data collected by the World Bank and the National Bureau of Statistics in 2018 and 2019. Stata software was deployed to extract the northeast farm household's information from the national representative data which was equivalent to 3150 farm households. The NLSS data was collected using tablet computer-assisted personal interviewing software. This significantly improved the quality of the data.

Food Security Measurement

Food security status will be measured using the food insecurity experience scale (FIES). FIES will also be employed to assess the food security of farm households. Over a 12-month recall period, FIES retrieves self-reported experiences and behaviors linked to food access owing to a lack of money or other resources, regardless of the frequency of occurrence. FIES is made up of eight questions about the depth of food insecurity. Participants answered yes/no to the questions, which are then summed to generate scores ranging from 0 to 8. Yes, will be rated as 1 while No will be rated 0 and responses summed up over 8. Food security is classified as food secure with a raw score of 0-3, moderate food insecure (MFI) with a score of 4-6, and severely food insecure (SFI) with a score of 7-8.

Table 1. Food insecurity Experience Scale Questions

FIES questions	Responses
You were worried you would not have enough food to eat	Yes =1, otherwise 0
You were unable to eat healthy and nutritious food	Yes =1, otherwise 0

You ate only a few kinds of foods	Yes =1, otherwise 0
You had to skip a meal	Yes =1, otherwise 0
You ate less than you thought you should	Yes =1, otherwise 0
You ran out of food	Yes =1, otherwise 0
You were hungry but did not eat	Yes =1, otherwise 0
You went without eating for a whole day	Yes =1, otherwise 0
<hr/>	
Total	

Source: FAO 2014

Econometric Modeling

The effect of economic shock on food security was analyzed using ordered probit regression, the functional form of the regression is given as

$$FIES_i^* = X\beta + U_i$$

$$U_i \sim N(0, 1)$$

$$FIES_i^* = \left. \begin{array}{l} 0 \text{ if } FIES_i^* \leq \mu_1 \text{ (food secure)} \\ 1 \text{ if } \mu_1 < FIES_i^* \leq \mu_2 \text{ (mildly food insecure)} \\ 2 \text{ if } \mu_2 < FIES_i^* \leq \mu_3 \text{ (moderately food insecure)} \\ 3 \text{ if } \mu_3 < FIES_i^* \text{ (severely food insecure)} \end{array} \right\}$$

$FIES_i^*$ is ordered as 0, 1, 2, 3 which represent the levels of food security that is explained by U_i , together with a normally distributed disturbance term U_i .

Result and Discussion

Farm Households Descriptive Statistics

The socioeconomics profile of farm households is presented in table 2, the results showed that more than 90 percent of the households are headed by males, the dominance of males over their female counterparts may be due to the customs and traditions of the study area where male take preeminence over their female folks which is an evidence of male dominance in households. (Ibukun and Adebayo 2021), moreover, farming activities require strength which most females may not be able to cope with. The mean age of the household heads is about 45 years this indicates that farm households in the northeast region are still within the active age bracket which suggests that youths are relatively involved in farming in the zone.

Additionally, most of the farm households head are married (90%), with an average family size of about 7 members, this indicates that farm family labor is readily available to the households. Furthermore, the average years of education sampled household heads is 5 which means they are literate, thus implying that most farm household heads could understand and use a new agricultural

invention. According to Bahiru et al., 2023 education is important in gaining access to agricultural information for the farm community. It has a significant impact on the adoption of new technologies and has a direct relationship with the level of food security in households. The households have an average annual total expenditure of ₦134046, a function of household income. Income that is accrued to households aids their food security (Bahiru et al., 2023). More than 90 percent of the farm households reside in rural areas, this confirms that most farming activities take place in rural areas. The highest sampled states were Yobe and Bauchi (18 percent) while Borno had the least sample (13 percent).

Table 2; Characteristics of Farm Households

Variable	Description	Mean	Std. Dev.
Sex	1 if the household head is male, 0 otherwise	.94	.23
Age	Age of the household head in years	44.9	15.3
Marital status	1 if the household head is married, 0 otherwise	0.90	0.30
Household size	Number of persons in the household	6.57	3.76
Education (years)	Number of years of education	5.26	5.94
Total expenditure	Total consumption expenditure of the household	134046.1	98236.23
Sector	1 if rural, 0 otherwise	.91	.29
Taraba	1 if the household is from Taraba state, 0 otherwise	.17	.37
Yobe	1 if the household is from Yobe state, 0 otherwise	.18	.38
Adamawa	1 if the household is from Adamawa state, 0 otherwise	.17	.38
Borno	1 if the household is from Borno state 0 otherwise	.13	.34
Bauchi	1 if the household is from Bauchi state, 0 otherwise	.18	.38
Gombe	1 if the household is from Gombe state, 0 otherwise	0.17	.38

Source: Author's analysis (2023)

Economic Shocks Experienced by Farm Households in North East, Nigeria.

About 66 percent of the households had experienced at least one of the shocks as shown in Table 3. This confirms that economic shock is a reality that is cannot be avoided entirely and that it is impossible to prevent these shocks absolutely from happening. It is therefore expedient for

policymakers to make policy that will create an environment that would be able to mitigate the effect of shock events on the food sector by building resilient systems that can adapt to the shocks.

The most experienced shock was the food price hike (30 percent), this would have a far-reaching effect on the farm households, which suggests that these households will likely spend a significant part of their income on food. This will have a serious impact on their welfare which might lead to malnutrition and food insecurity and further worsen inequalities in the country. The least experienced shock is the loss of assets (2.54 percent).

Table 3; Economic Shocks Experienced by Farm Households in North East, Nigeria.

Shock	Frequency	Percentage
Climate Shock		
Yes	924	29.33
No	2,226	70.67
Pest infestation/diseases		
Yes	1,006	31.94
No	2,144	68.06
Human disruptive action		
Yes	746	23.68
No	2,404	76.32
Shocks in input/output price		
Yes	517	16.41
No	2,633	83.59
Non-farm business failure		
Yes	412	13.08
No	2,738	86.92
Loss of asset		
Yes	80	2.54
No	3,070	97.46
Food price hike		
Yes	954	30.29
No	2,196	69.71
Family health Shock		
Yes	460	14.60
No	2,690	85.40
Had experienced at least one shock		
Yes	2078	65.97

No

1072

34.03

Source: Authors Analysis (2023)

Food Insecurity Experience Scale (FIES) of Farm Households

The food security level was categorised into four food security levels, namely: food secure, mild food secure, moderate food secure, and severe food secure. The results as shown in table 4 about one-third of the household were mildly food secure while around 14 percent were severely food insecure. The result further revealed that more than 75 percent of the households are experiencing one form of food insecurity or the other which is worrisome, the result supports the findings of Ayoade and Adetunbi (2013); Ibukun and Adebayo (2021) who reported that more 60 percent of farm households in Nigeria are food insecure. This result suggests that most of the farm households are either experiencing worry or anxiety about how to get food, compromising food quality or variety, reduction in food quantity, skipping meals, and full-blown hunger due to a lack of resources to meet the food needs of the household. This result highlights the importance of strengthening the resilience of food systems, particularly among vulnerable groups in order to plummet the number of food-insecure households.

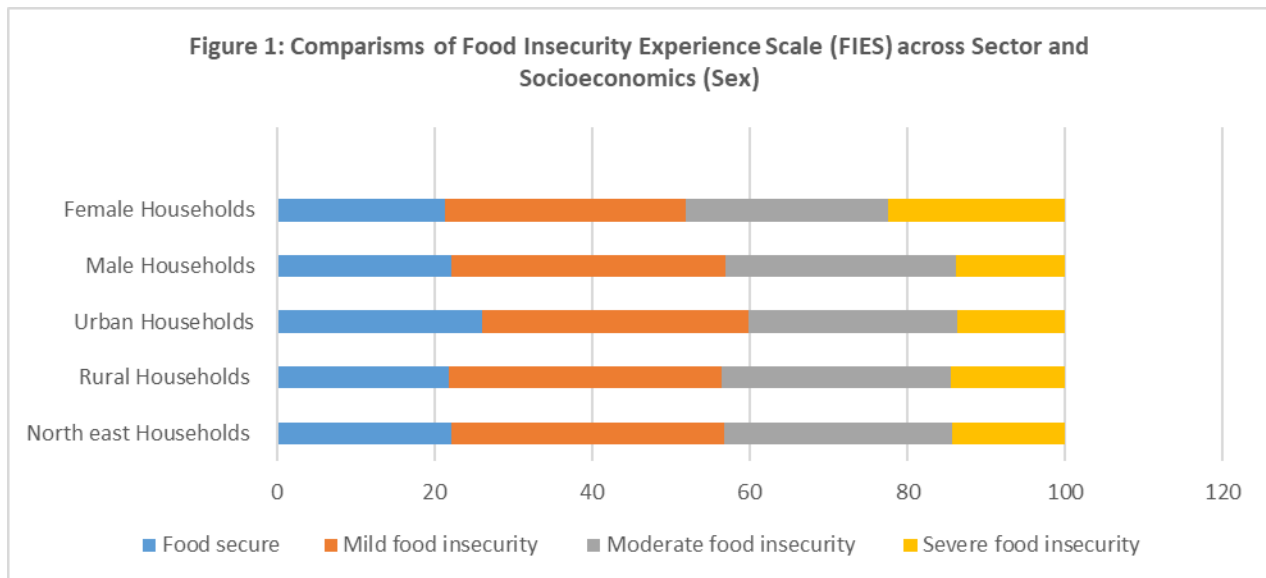
Table 4; Food Insecurity Experience Scale (FIES) of Farm Households

Food Insecurity Experience Scale (FIES)	Frequency	Percentage
Food secure	698	22.16
Mild food insecurity	1088	34.54
Moderate food insecurity	912	28.95
Severe food insecurity	452	14.35
Total	3,150	100.00

Source: Author's analysis (2023)

Comparisons of Food Insecurity Experience Scale (FIES) across Sectors and Socioeconomics (Sex)

Comparing the FIES across sectors and socioeconomics as presented in figure 1 shows that female-headed households have the highest percentage of severely food-insecure households. Powell et al. 2017; Owoo, 2021 claim that female-headed households typically experience worse food security results as a result of inheritance statutes that restrict access to cultivable land and land tenure regulations that limit crop diversity, among other factors. and urban homes appear to have the highest percentage of households that are food secure, this may be a result of households in urban areas having access to infrastructures to engage in other income-generating activities that would bring more resources and improve their food security, moreover rural households in the Northeast are remote and conflict-affected areas which is likely to deteriorate their food security (Amare et al., 2021). Furthermore, mild food insecurity seems to be almost the same across the sample except for female households where it is the lowest. This suggests that food insecurity may be increasing more rapidly if urgent steps are not taken particularly in the rural sector where farming is prevalent and among female-headed households. urgent policy action to address food insecurity must be put in place to curb the food insecurity.



Effect of Economic Shocks on Farm Households' Food security

The result of the effect of shock events on farm households' food security is presented in table 5, the explanatory variables are jointly statistically significant having $\text{Prob} > \chi^2 = 0.0000$. The Wald $\chi^2(20)$ of 764.16 with Log pseudolikelihood of -3739.0458 confirm the overall fit of the model is good.

Socioeconomic Variables

The result of table 5 revealed the sex of the household head, education levels, household size, and total expenditure are statistically significant in influencing the food insecurity of households. These variables, negatively influence food insecurity. This suggests that male headed households have better food security status than female headed households this result is consistent with (Powell et al., 2017, Balana et al., 2023) who reported in their study that male headed and households have better dietary diversity scores than female headed households. This is likely a result of the availability of greater access to economic and political gain which often lead to the higher income potential of male household heads, furthermore, female-headed households tend to be associated with worse food security because customs and tradition in the study area limit access to agricultural land for cultivation for women compared to their male folks. This result however contradicts (Sekhampu 2013) who discovered that female households had greater food security than male households, Sekhampu ascribed this to the women's folks' superior usage of resources. Household size has a negative relationship with food insecurity, this follows that farm households with larger family size have a higher probability of more food security. It might be a result of larger households having larger family labour who can invest more in farming activities, resulting in increased production, or increased income by paid labour thereby increasing food consumption. This agrees with (Powell et al., 2017; Workicho et al., 2016), who explain that large household size has better dietary diversity scores in their study. However, it negates the findings of Farzana et al. 2017 and Owoo 2021; Bahiru et al 2023), they opined that larger households have worse food security outcomes and are more likely to report being food insecure.

Households that are educated are likely to have more food security than the uneducated ones, education also has a significant effect to reduce of food insecurity (Niles and Salerno 2018; Balana

et al., 2023). The role of education is critical and there is a positive relationship between education, agricultural growth, development, and food security. Education plays an important role in gaining access to agricultural information and it has a significant impact on the adoption of new technologies and improved farming practices. For example, there is a high probability that educated households will be well-informed and have easy access to media, new skills, and improved methods of farming. (wood et al 2014 Workicho et al. 2016; Bahiru et al 2023), thereby leading to better production outcomes and better food security. Education could also facilitate household members getting off-farm occupation and other sources of money, which might enhance food security (Barrett et al., 2001).

The total household expenditure which was included in the analysis as a proxy for income reveals that households with higher expenditure have the likelihood of being more food secure. Food security is assumed to be directly impacted by household income through enhanced food affordability as well as indirectly through adjustments in agrobiodiversity, meaning that wealthier households can buy more varieties of seeds and other agricultural inputs and also hire labourers to help with agricultural production thereby increasing their income and food security. This result supports the findings of (Powell et al., 2017; Owoo 2021, Bahiru et al., 2023) who reported in their study that income of the household and food security are positively related which suggests that households with a higher income are more likely to be food secure.

Economic Shocks

Economic shocks are positively related to food insecurity. The presence of economic shocks is associated with poor food security outcomes. That is climate, pest/animal disease, human disruptive action, non-farm business failure, loss of assets, food price hikes, and family health shocks have a significant positive relationship with food insecurity. The presence of these shocks worsens food security. For example, households that experienced flooding or drought which are climate-induced shocks reduced their harvest and output which lead to reduced income and further worsen food security. Food insecurity is linked to high production losses or even farm abandonment as a result of these shocks, which affects the availability of household food (Owoo 2018; Owoo 2021, Bahiru et al 2023). This result agrees with (Niles and Salerno 2018 Owoo 2018; Owoo 2021, and Bahiru et al 2023), who opined that the experience of shocks increases the odds of experiencing food insecurity.

The implication of this result is that economic shocks are significantly associated with food insecurity. This indicates if economic shocks persist into the future even though are already part of our realities and there is no adequate preparation or resilient system in place to adapt and recover from these shocks, it is likely that food security will be compromised among farm households. For example, there are projections for a growing number of climate shocks, which will definitely affect agricultural and food systems, this will further impact food prices and lead to food price hikes which will likely exacerbate (Porter et al., 2014) food insecurity if urgent steps are not taken to arrest the situation. According to Wossen et al., (2017), self-coping mechanisms are found to be important but insufficient to mitigate the adverse effects of shock, implying the need for policy interventions.

Table 5; Effect of Economic Shock on Farm Households' Food security

Food insecure	Coefficient	Standard error	P-value
Sector	-.0040229	.0742904	0.957
Sex of household head	-.2833392	.104175	0.007***
Age of household head	-.0015272	.001348	0.257
Marital status	.0023707	.0494467	0.962
Household size	-.0190784	.0069931	0.006***
Education (years)	-.008674	.0037434	0.020**
Total expenditure	-2.40e-06	3.16e-07	0.000***
Climate shock	.2327369	.0455442	0.000***
Pest/animal diseases shock	.1963181	.0441055	0.000***
Human disruptive action	.1828607	.0470542	0.000***
Shocks in input/output prices	.0111662	.0532902	0.834
Non-farm business failure	.3602721	.0558587	0.000***
Loss of asset	.1063559	.1187876	0.371
Food price hike shock	.4078632	.0477469	0.000***
Family health Shocks	.2790579	.0567233	0.000***
Taraba	1.354008	.0840737	0.000***
Yobe	.8920195	.0795544	0.000***
Bauchi	.7815794	.0769317	0.000***
Borno	.5331359	.0834316	0.000***
Gombe	.6868551	.0866543	0.000***

Number of obs = 3,150 Wald chi2(20) = 764.16 Prob > chi2 = 0.0000
Log pseudolikelihood = -3739.0458 Pseudo R2 = 0.1132

Source: Author's analysis (2023)

Conclusion

Ending hunger of any form is goal number two of the Sustainable Development Goals, therefore eradicating food insecurity is very key to attaining this laudable goal. However, if economic shocks which have become a reality in this century are not taken care of, achieving food security will be a mirage. Understanding how future economic shocks will affect food security is crucially important and can be informed by this work examining how such shocks impacted food security. This study examined the effect of economic shock on farm household food security in northeast, Nigeria. The research established that food insecurity is high in the zone and the socioeconomic factors that significantly improve food security are sex, household size, education, and income whereas economic shock negatively affects the food security of the households. This study, therefore, recommends that efforts to foster food security resilience to shocks is important and results also suggest this may be achieved through supporting the attainment of productive capacities to enhance the income of the households and education which can serve as safety for the households in the event of economic shock. Our findings suggest that governmental and non-governmental organizations should support farm households in managing the effects of shocks through strategies that build resilience and capacity for potential future shocks and impacts. This involves increasing education, building adaptive capacity, providing basic services, and social safety net all of this will help farm households to withstand, recover and be better off from economic shocks.

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People Analytics: A Systematic Review

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Abstract

Purpose: The purpose of this paper was to review the various topics related to People Analytics, including its definition, applications, benefits, challenges, and future trends.

Methodology: The selection criteria for relevant peer-reviewed journal articles were clearly defined to identify the crucial elements within the realm of people analytics, following the PRISMA guidelines. After conducting a systematic literature review that involved content and descriptive analysis, 32 papers were deemed suitable for inclusion and all irrelevant papers were excluded from the analysis.

Findings: People Analytics is the use of data, statistical analysis, and technology to support decision-making in HR management. It can provide organizations with a better understanding of their workforce and enable them to make more informed decisions about talent management, recruitment, performance management, and other HR-related processes. Some of the benefits of People Analytics include improved HR processes, better talent retention, and enhanced productivity. However, there are also challenges associated with People Analytics, such as data privacy and ethical considerations, data quality, and a lack of skills and knowledge in the field.

Implications: The increasing use of People Analytics in organizations suggests its importance in the HR field, and its impact on HR practices is likely to grow in the future. Therefore, it is important for organizations to be aware of the benefits and challenges associated with People Analytics and take steps to address them. Additionally, HR professionals need to stay up-to-date on the latest trends and developments in People Analytics to ensure they are making the most of its potential.

Keywords: people analytics, human resource analytics, artificial intelligence, machine learning.

Introduction

People analytics (PA), also known as human resource analytics (HRA), refers to the use of data and analytics to make informed and strategic HR decisions in an organization. The focus of people analytics is to collect and analyze data about employees in order to gain insights into their behaviors, attitudes, and outcomes in order to improve overall business outcomes and optimize talent management.

People analytics can be utilized for a variety of HR activities, including hiring, employee career advancement, employee commitment, evaluation and assessment. By analyzing data on employee engagement, productivity, and outcomes, organizations can identify what drives employee performance and make improvements to their HR practices.

Despite the growing popularity of people analytics, there is still a lack of standard definitions, scope, and understanding of its effectiveness. A systematic review of the field is needed in order to provide a comprehensive overview of the current state of the field, including definitions and key trends. This review will also examine the challenges faced by organizations in implementing people analytics initiatives and provide recommendations for best practices to ensure successful implementation.

Data from SCOPUS, which is the main data used for this research, indicates a rapid increase in publications on people analytics over the last 12 years. However, despite this increase, there is still much to be done to establish consensus and understanding of people analytics in the HR industry.

2.0. Methodology

This study delves into the realm of people analytics and aims to achieve a comprehensive understanding of the concept. Through conducting a systematic review using the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) process, this study seeks to gather and assess existing knowledge on people analytics from both researchers and practitioners in the field. The PRISMA methodology ensures that the information is collected and analyzed in a systematic and reproducible manner (Sun, Gao, Lu, & Li, 2020).

2.1. Literature search

The process of finding suitable literature for this study involved scouring through academic and peer-reviewed sources in the SCOPUS database. This database was selected for its comprehensive collection of peer-reviewed articles and access to top-rated management journals. This approach aligns with the systematic literature reviews by Marler and Boudreau (2017) on evidence-based management and McCartney and Fu (2022) on the realities of people analytics. The search was conducted using the following relevant terms: "People analytics," "Human Resource Analytics,". These terms are frequently used interchangeably in academic and practical literature to refer to the field of people analytics. The preliminary investigation produced 126 articles and studies.

2.2. Process of Selection

The flowchart in Figure 1 shows the selection process of the relevant literature using the PRISMA methodology. On January 10, 2023, a search was conducted on the Scopus database with the keywords above.

After filtering the search results for language, type of document, and years, the number of papers was reduced to 95 out of 126. The criteria for filtering included English language, type of document (article, review paper, and conference paper), and years included from 2018 until early 2023. Next, the duplicates were removed. The final step was to read the title, keywords, and abstracts to check if a publication was pertinent to the study. At the end of the entire process, 58 studies were

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available for further reading. For the papers published, only those with at least one citation were considered. This resulted in a total of 32 published studies being included in the synthesis.



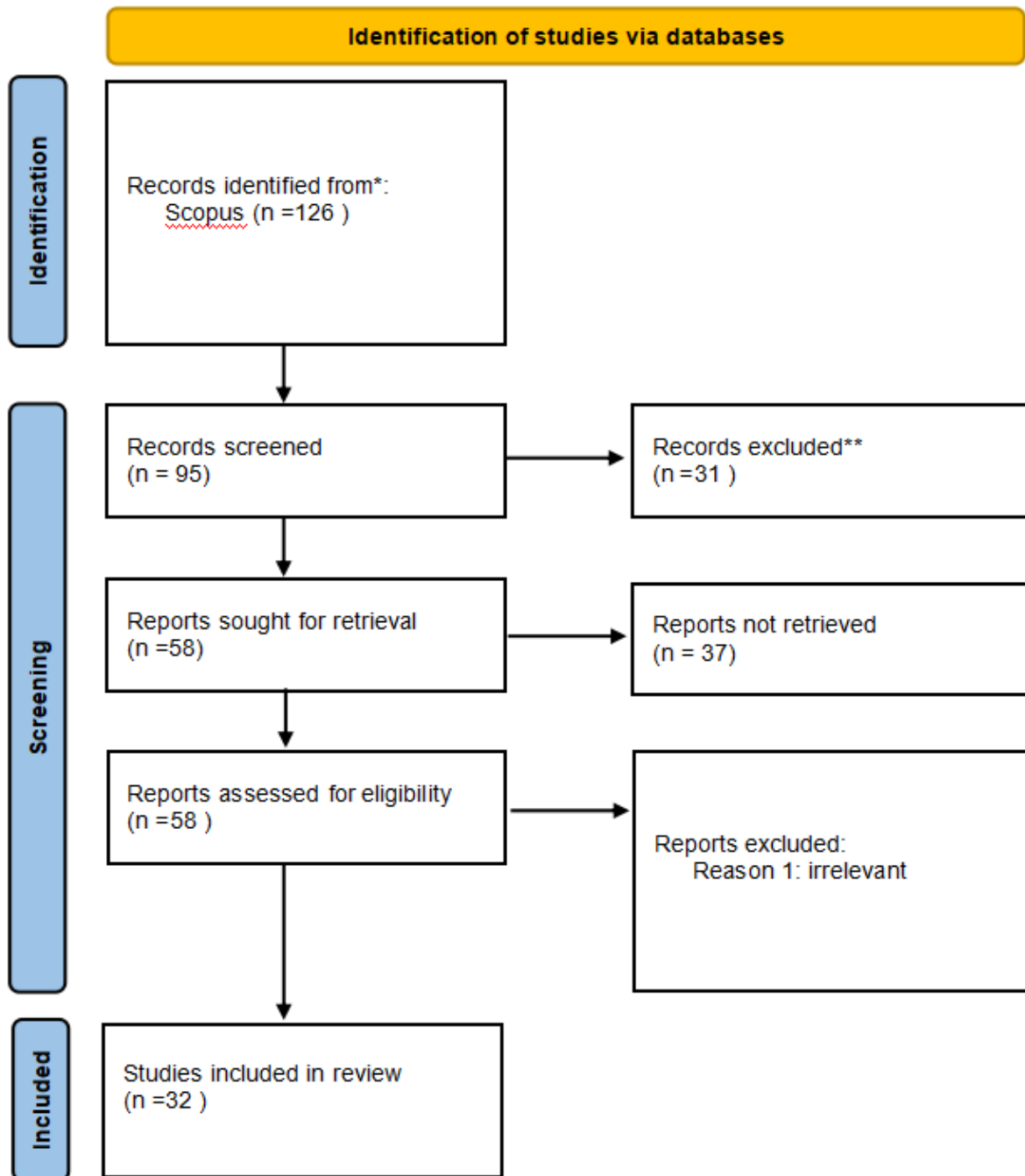


Figure 1: PRISMA Framework

2.3. Bibliometric Analysis

The diagram in Figure 2 represents the papers published each year between 2018 and 2022. while the diagram in Figure 3 represents the distribution of papers by country, with India and the UK being the highest, even higher than the US. Finally, figure 4 shows the distribution by authors.

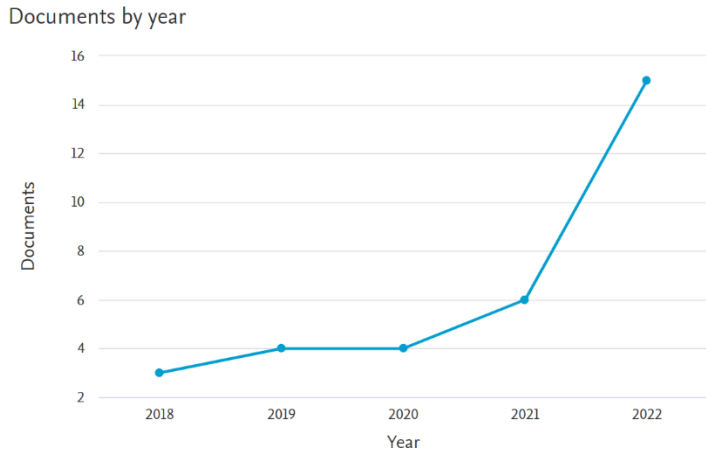


Figure 2: Publications by year

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

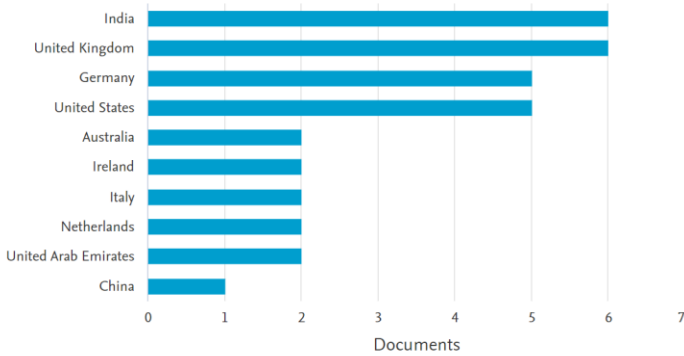


Figure 3: Publications by country

Documents by author

Compare the document counts for up to 15 authors.

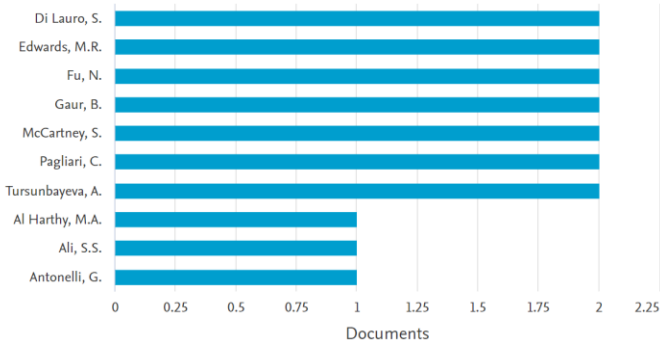


Figure 4: Publications by authors

3.0 Discussion of Objectives

3.1. Overview of the current state of the field

With the growth of digitization, HR departments' usage of people analytics has expanded. In HR processes such as hiring, performance evaluation, inclusiveness and variety, and job analysis, data-driven decision-making has become the standard (Hamilton & Sodeman, 2020; Tursunbayeva et al., 2021).

According to McCartney et al. (2021), PA is defined as "software used in HR practice that uses illustrative, graphic, and quantitative analysis of data related to HR processes, talent development, organization effectiveness, and foreign economic standards to measure corporate effect and enhance data-driven outcomes." HR analytics involves using HR technology to create reports and dashboards to address questions about past events. The "predictive" stage utilizes statistical techniques, advanced algorithms, and machine learning to predict what might occur in the future and why. The final "prescriptive" stage focuses on determining the optimal course of action in response to the analysis.

The increased focus on using data and analytics in management has generated interest among researchers and professionals as they aim to turn data into valuable insights to enhance organizational performance (Chierici, Ferrari, & Santoro, 2019; Ferraris, Chierici, & Santoro, 2019; Santoro, Chierici, & Ferrari, 2019; Singh & Del Giudice, 2019). HR analytics, despite being a widely adopted practice, is not a novel concept but has evolved from past studies on the effects of HR strategies such as recruitment, training, and performance evaluation (Huselid, 2018). These earlier studies have roots in the fields of industrial and organizational psychology, HRM, and organizational behavior.

The advancement of HR technology, such as HRISs, cloud systems, and applications, has equipped HR departments with the capability to gather and assess substantial amounts of workforce data, a feat that was previously not possible with traditional IT systems (Kim et al., 2021). The use of HR analytics enables organizations to tackle various HR-related issues, such as employee satisfaction, diversity and inclusiveness, and staff retention (Buttner and Tullar, 2018; Levenson, 2018; Simon and Ferreiro, 2018; Tursunbayeva et al., 2018).

One of the key benefits of PA is that it makes it easier for organizations to access, interpret, and act on employee data. By combining data from multiple sources, PA provides a holistic view of the workforce, helping organizations identify trends and patterns that may not have been apparent before.

PA has the capability to transform the manner in which organizations handle their employees, encompassing recognition, advancement, administration, and regulation (Huselid, 2018). PA represents a novel, data-oriented, numerical, and fact-based method for managing the workforce, not just a technological tool (Gala, Jensen, & Stein, 2020). The objective of this methodology is to enhance the efficiency of key HR functions like workforce planning, hiring, growth, and training, as well as to maximize both employee and organizational performance.

PA is also supported by employee profiling and performance data, which provide a more detailed understanding of each employee and their strengths and weaknesses (Tursunbayeva et al., 2018). This information can be used to guide development and training programs, as well as to support effective talent management and retention strategies.

The rise of PA in organizations has made gathering, interpreting, and measuring HR data much easier (Giermindl, Strich, Christ, Leicht-Deobald & Redzepi, 2022). PA serves as a tool that integrates statistical techniques to collect, interpret, measure, and predict HR data. It provides insights to help organizations solve problems and make informed decisions. PA aligns HR strategy with overall business strategy to gain a competitive edge. Over time, PA has evolved from measuring sub-HR functions to offering a more comprehensive understanding of HR data.

We view HR analytics as a unique and irreplaceable asset for organizations because of the data, information, and insights it produces. This viewpoint is backed up by scholars who have drawn parallels between HR analytics and organizational resource. People analytics has the potential to revolutionize the way organizations understand and manage their workforces, making it easier to identify areas for improvement and drive positive outcomes.

3.1.1. Definitions of People Analytics

People analytics is a crucial area of study and practice in human resources management. It involves the utilization of modern information technologies, such as descriptive and predictive data analytics, as well as visualization tools, to gain a comprehensive understanding of various aspects of the workforce. These aspects include workforce dynamics, human capital, and individual and team performance (Tursunbayevaa et al., 2018). By generating actionable insights into these aspects, People Analytics aims to support organizations in making data-driven decisions that can help optimize their effectiveness, efficiency, and outcomes.

Additionally, Tursunbayevaa et al. (2018) pointed out that PA seeks to improve the employee experience by providing organizations with a deeper understanding of their workforce and how they can support their needs and goals. In this way, PA plays a crucial role in supporting organizations in making strategic decisions that lead to positive results and improved employee satisfaction.

The field of PA involves a combination of knowledge and expertise from various disciplines, including information science, information technology, computer science, mathematics, and statistical science, in order to process data in real-time and make data-driven decisions in order to predict and overcome complex HR challenges (Varma & Chavan, 2019).

To McCartney et al. (2021), PA is a field that seeks to enhance human behavior and character through data-driven analysis. This approach stems from the principles developed within the human relations movement, with the goal of improving the work experience and well-being of employees. PA uses computational techniques to analyze digital data from multiple aspects of an organization, providing more detailed insights into resources, processes, people, and performance. By utilizing algorithmic technologies, PA can help decision-makers make more informed and objective choices based on a more in-depth understanding of the business. The goal of PA is to increase job satisfaction, reduce stress, and provide employees with opportunities for personal and professional growth (Batistic & van der Laken).

Human resource analytics (HRA) is a branch of analytics that focuses on improving employee performance and maximizing return on investment (ROI) in human capital within an organization (Jabir, Falih, & Rahmani, 2019). It involves the use of data and analytic processes to gain insight into HR processes and make informed decisions for improvement.

People Analytics (PA) involves the collection and analysis of data in order to identify trends and issues, and to take proactive measures to maintain a productive and successful organization. According to Giermindl, et al. (2022), HR Analytics (HRA) serves as a communication tool that brings together data from various sources to present the current scenario and forecast the future.

HRA is a data-driven and evidence-based method for making informed decisions and requires expertise in statistical methods, research design, and the ability to ask meaningful questions. To effectively implement PA, the organization must uphold high standards of accuracy and relevance and cultivate analytical skills within the HR department.

PA is a cutting-edge field in HR management, utilizing statistical tools, methods, and procedures to make informed decisions regarding HR strategies and practices (Mohammed, 2019). HR analytics provides valuable, statistically sound data and evidence, essential in creating and improving HR strategies. Employers and organizations have begun to realize the potential benefits of HR analytics, but there is still much room for growth and exploration within this area of HR management.

3.1.2. Key Trends

The use of PA has gained significant traction among organizations as a way to better manage their workforce (Gala et al., 2020). PA has undergone a transformation in modern organizations from simply evaluating workforce characteristics (e.g., cost per hire) to comprehending the impact of the workforce on the successful execution of a company's strategy (e.g., how better project managers can shorten the product development cycle).

According to McCartney et al. (2021), PA now focuses not only on examining and enhancing aspects of human capital but also on utilizing data analysis and people data to shape organizational strategy and enhance results.

Numerous studies have established that data analytics plays a significant role in impacting organizational performance, with data-driven organizations being demonstrated to be more productive and profitable in comparison to competitors (Batistic et al., 2019).

The advancement of data technology has made it possible for organizations to have access to a vast amount of data with diverse characteristics in large amounts and at a high speed (Ghasemaghahi, 2019). This has prompted many companies to invest in data analytics tools to extract valuable insights and make informed decisions. The capacity to effectively utilize these tools has become a crucial aspect of a firm's success.

People Analytics (PA) entails gathering and examining data to detect trends and challenges, and taking action to maintain an efficient and thriving organization. Giermindl et al. (2022) view HR Analytics (HRA) as a means of communication that integrates data from various sources to illustrate the present situation and predict the future. HRA is a data-focused, evidence-based approach to decision-making, requiring proficiency in statistical techniques, research methodology, and the ability to ask relevant questions. For successful implementation of PA, organizations must adhere to stringent standards of precision and relevance, and enhance analytical capacities within HR.

3.2. Challenges of People Analytics

Despite the potential benefits of people analytics, only a small percentage (16%) of organizations have fully adopted this practice, according to Sierra-Cedar (2018). This limited implementation has sparked an ongoing academic debate about the challenges that people analytics face in real-world applications (Peeters et al., 2018).

The use of algorithmic technologies in PA presents several ethical challenges, particularly three that hinder individuals from reaching their full potential: algorithmic opacity (Gala et al., 2020), which may cause imbalances in information and limit accountability. Second, the datafication of the workplace, which has been widely expressed in the literature (Gala et al., 2020), and the use

of nudging to influence behavior (Mateescu & Nguyen, 2019), are both widely expressed. These issues have been widely debated in the literature.

Tomar and Gaur (2020) pointed out that data quality, data governance, skills gaps among employees, and a lack of top-level management support are the main challenges in people analytics.

- **Data Quality Issues:** The quality of HR Analytics is frequently compromised by data quality issues. The sheer volume of data that organizations must manage can make it challenging to collect, produce, and store accurate information. Incorrect or missing employee data attributes can also affect data quality. Additionally, duplicated data or data loss during transfer may further impact the accuracy of the data. Given that the results produced by HR Analytics tools rely heavily on the quality of data, any problems with data quality can lead to unpredictable and unreliable outcomes.
- **Data Governance:** HR Analytics can pose a challenge to data governance as it requires modern methods and techniques to collect and interpret large amounts of data. Data governance ensures the legality and ethics of data usage, and the use of HR Analytics tools may violate this by using data in unethical or illegal ways. Mohammed (2021) warned that relying solely on computer systems to make ethically sensitive decisions in PA can be problematic. Instead, predictive models can be used to alert decision-makers, but actual decisions should be made by humans to avoid violating labor laws such as those relating to discrimination and disabilities. Additionally, there is a risk of compromising employee confidentiality, trust, and privacy with the use of HR data analytics. To avoid these potential issues, clean data should be used for decision-making.
- **Lack of Top Management Support:** HR Analytics faces a lack of support from top management in organizations, as they are often set in their traditional processes and may be resistant to investing in such tools. The top management may demand a higher return on investment before committing to the development of a strong HR Analytics program.
- **Skill Gaps:** HR Analytics requires specialized skills such as analytical ability, understanding of business and the business environment, quantitative analysis, psychometrics, relevant laws, and others to be effectively utilized. The use of HR Analytics tools is limited to those who possess these skills and can generate relevant results, as the lack of these skills may result in damaging consequences for the business.

3.3. Best practices

Google uses HR predictive analytics to estimate the probability of employees leaving the company. The company has discovered that employees who do not receive promotions within their first four years are likely to resign. On the other hand, research conducted by Kluemper, Rosen, and Mossholder suggests, as pointed out in Mohammed (2021) that it is possible to predict employee job performance and behavior based on IQ tests, personality tests, structured interviews, and even the correlation between these tests and the candidate's Facebook profile. However, it's important to consider the legal and ethical implications of using such information as part of the employee selection process.

Best Buy applies HR analytics to predict store performance, which is based on employee engagement practices. The company found that a 0.1% increase in employee engagement resulted in an increase of \$100,000 in-store income. In 2011, Hewlett-Packard (HP) used HR data analytics to predict employee turnover, which they referred to as the "Flight Risk Score." The company found that higher pay, promotions, and better performance ratings were negatively correlated,

meaning that employees who received promotions but no pay raise were more likely to leave their jobs. As a result, HP created a dashboard for all its HR managers with important metrics for all employee information.

The application of predictive HR analysis can save companies millions of dollars by predicting not only how employees are likely to behave but also their contribution to organizational performance. However, it's important to weigh the potential benefits against the potential risks to employee confidentiality, trust, and privacy.

3.3.1. Recommendations for the successful implementation of people analytics initiatives in organizations.

- **Transparency and Fairness:** Predictive Analytics (PA) projects require transparency and fairness for success. Scholars stress the significance of organizations being open about the reasons for using PA and the benefits for employees. If transparency is lacking, employees may view the project as unfair, leading to resistance or rejection. However, there is still a need to clarify and measure fairness in PA projects (Manyika, 2019).
- **Ethical Guidelines and Conduct:** The importance of having a clear ethical code of conduct for People Analytics (PA) has been emphasized. A survey revealed that a significant number of organizations have yet to establish such a code, despite its significance. This code should align with the social norms of the country in which the organization operates, considering the cultural differences in the attitude towards personal data collection and analysis. The code of conduct provided by Insight222 and the standards set by the Chartered Institute of Personnel and Development (CIPD) can serve as useful resources for organizations.
- **Employee Choice and Consent:** It is essential for organizations to inform their employees about their option to decline data collection and supply them with the necessary means to exercise that choice. The principle of informed consent is included in privacy regulations from the Organization for Economic Cooperation and Development. The organizations must evaluate whether the employees are providing their consent voluntarily or if they feel compelled due to potential consequences. Regular renewal of consent, such as every three months, is recommended.
- **Evaluation and Monitoring:** Monitoring and evaluating PA projects is crucial for success and sharing the initial success can help gain support. The benefits for employers should include not only organizational goals and initiatives but also the impact on employees (people outcomes). Decisions about future analytics investments should be made collaboratively by HR professionals and company management, not just by suppliers. The potential risks and negative consequences of PA on employees must be considered, and strategies should be in place to manage and mitigate these risks (Pease, 2018).

4.0. Managerial Implications

The study underscores the importance of high-quality data, the utilization of big data, cutting-edge tools, and employee analytics capability for improving decision-making quality. As such, firms must invest in these resources to achieve optimal results. The study also highlights the crucial role of advanced tools in enhancing decision accuracy.

In recent years, the trend of big data has gained traction, and its utilization has become increasingly popular among firms. In particular, firms are now leveraging big data to make informed decisions by analyzing massive amounts of data from multiple sources and utilizing sophisticated data

analytics tools to gain deeper insights (Klaff, 2019). For example, data from social media, customer feedback, market trends, and financial information can be analyzed to make strategic decisions (Kohavi, Longbotham, & Peña-Mora, 2019).

In terms of data analytics tools, there has been an exponential growth in the number of available tools, with advancements in artificial intelligence (AI) and machine learning (ML) (Chiang, Lo, & Li, 2018). The use of prescriptive analytics, predictive analytics, and text mining has become more widespread, and these tools are helping firms make more informed decisions (DeFanti, Ripeanu, & Iamnitchi, 2019). For example, predictive analytics can be used to predict future trends, customer behavior, and market movements (Towill & Towill, 2018), and prescriptive analytics can help firms optimize their operations and processes (Chang, Lu, & Yin, 2019).

Furthermore, the importance of having employees with strong analytics capabilities cannot be overstated (Chen, 2019). Companies should focus on hiring employees with strong data analytics skills and providing ongoing training and development opportunities (Pritchard, 2018). This investment in employee skills will help companies make better use of data analytics tools and derive maximum value from their data (Chiang, Lo, & Li, 2018).

The importance of having high-quality data, utilizing big data, having access to advanced tools, and having the ability to perform employee analytics is emphasized in this study as crucial in enhancing decision-making. To achieve success, companies should focus on investing in these resources and exploring new and innovative methods for utilizing them. (Klaff, 2019).

5.0. Conclusion

Firms with limited data analytics capacities face challenges in improving their decision quality by use of analytics. This study highlights the significance of investing in proper data analytics resources to fully utilize data analytics and knowledge sharing within the organization. The data's accuracy is a crucial aspect in enhancing decision-making and firms can improve it by implementing processes such as filtering, cleansing, matching, and pruning.

Firms can establish clear policies for data collection and processing to guarantee data quality and hire employees with data analytics expertise and analytical skills. Providing training in effective data analysis can assist employees lacking the necessary skills to carry out their responsibilities. However, without the ability to perform their tasks, employees may neglect or delay conducting essential analyses, affecting the firm's decision-making quality. Thus, it is essential for firms to employ individuals with sufficient knowledge in data analytics and to offer training programs to improve data analysis proficiency, leading to overall better decision-making within the firm (Ghasemaghaei, 2018).

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A SYSTEMATIC REVIEW OF ORGANIZATIONAL JUSTICE IN THE PUBLIC SECTOR

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Abstract

The purpose of the study is to examine organizational justice in the public sector. The article examines organizational justice in the public sector over years, especially from 2003 to 2023. To make the process more open and less ambiguous, the Scopus database and other database sources are used in the literature search; every step is documented on excel sheets and all research were subjected to stringent inclusion and exclusion criteria. The final 33 articles for the systematic literature review are chosen, and all irrelevant studies are omitted from the study. PRISMA 2009 is utilized for the selection and exclusion procedure. To find the outcomes, literature is also separated into numerous classifications.

Keywords: *Organizational justice, Public sector*

1. Introduction

Organizations are currently experiencing difficulties as a result of internationalization and fundamental changes in sectors globally (Faheem & Mahmud, 2015). Meeting these transformational challenges is difficult, and maintaining the position and quality in this competitive market is even more difficult. To deal with global competition and environmental unpredictability, businesses must discover strategies to improve their efficiency and competitiveness. According to Acquah and Tukamushaba (2015), employees are widely regarded as an organization's most valuable asset, and success of organizations are dependent on their strengths, abilities, and innovations. The responsibilities of public service professionals have a significant impact on the well-being of the people, the success of the government, and the survival of the society in every country (Nwanzu, 2022). The public sector includes government and all publicly controlled or sponsored organizations, corporations, and enterprises that provide welfare services, products, or services.

The degree to which individuals are handled equitably at workplace is referred to as organizational justice. Workplace fairness promotes not only a positive employee relationship, but also an environment of improved involvement, contentment, and productivity (Kumasey, Delle & Hossain 2021). Employers understandably devote moments and labour in developing a workplace that is fair in order to gain from it. Justice at workplace has a favourable impact on employee satisfaction,

involvement, and dedication. According to Pracha, Malik, Azeem and Yasmin (2020), the notion of justice at workplace emphasizes management actions, observed impartiality, the influence of fairness, and relationship between persons and the environment they are in with some objectivity. Individuals' opinions of fairness within an organization are referred to as perceived organizational justice.

According to Nwanzu (2022), distributive, procedural, and interactional are the three components or types of justice at workplace. The degree to which the allocation of results or rewards to organizational members is viewed as fair is referred to as distributive justice. The degree to which the process or procedure by which ratings are awarded or prizes are dispersed is considered as fair is referred to as procedural justice. The procedural element shows how decision-making techniques include parties involved, are continuous, reduce bias, and are reliable, controllable, and acceptable. Interactional justice refers to how much an employee feels appreciated by his or her employer. The interactional component relates to supervisors' courteous and thoughtful handling of individuals when procedures are executed.

In this study, the directions and topics of research will be reviewed over the years, especially from 2003 to 2023. The public sectors are changing rapidly over the world, with advances not only in services but also in practices. This study will provide an overview of organizational justice in the public sector, highlighting the key areas for further research to ensure organizational justice. Overall, the current study intends to make recommendations to improve organizational justice in public sectors through the use of systematic review.

2. Methodology

This research used Systematic Literature in analysing previous literature. The PRISMA model is used to illustrate the entire procedure in selection and rejection of articles in the public sector for the examination of organizational justice. The PRISMA model assists in analysing the reviewed paper.

3. Literature Research

Scopus database is utilized to find publications using the keyword “Organizational justice” and “Public sector” from the search button. Also, other database sources are utilized using same keyword from the search button. 97 document result is shown on Scopus database and 8954 document result is shown on other source database. The process is further refined by selecting English as the single language for review quality. After this, all the years were included because the study aims to review organizational justice in the public sector over years, all author names are included, and all subject areas are included. All document types, which include articles and conference papers are included, all source titles are included, and all articles are in the final publication stage. After this, the results automatically limit to 25 papers on Scopus database and 10 papers on other Sources database. For the PRISMA flow of diagram, open access articles only from the Scopus database are utilized for review, and the record is reduced to 25 document papers. The result is transferred into Excel spreadsheets for more evaluation of literature. More than 20 citation papers are employed for the study, and excel sheets are extended into more sheets to figure out the best citations and for more batter and purified analysis. Following that, the results are confined to 25 papers on the Scopus database and 10 papers on other source database. 2 papers are also removed following detailed examinations of the article's lack of relevance to the issue. The final 33 papers for the review are chosen to assess the literature in order to improve organizational justice in public sectors.

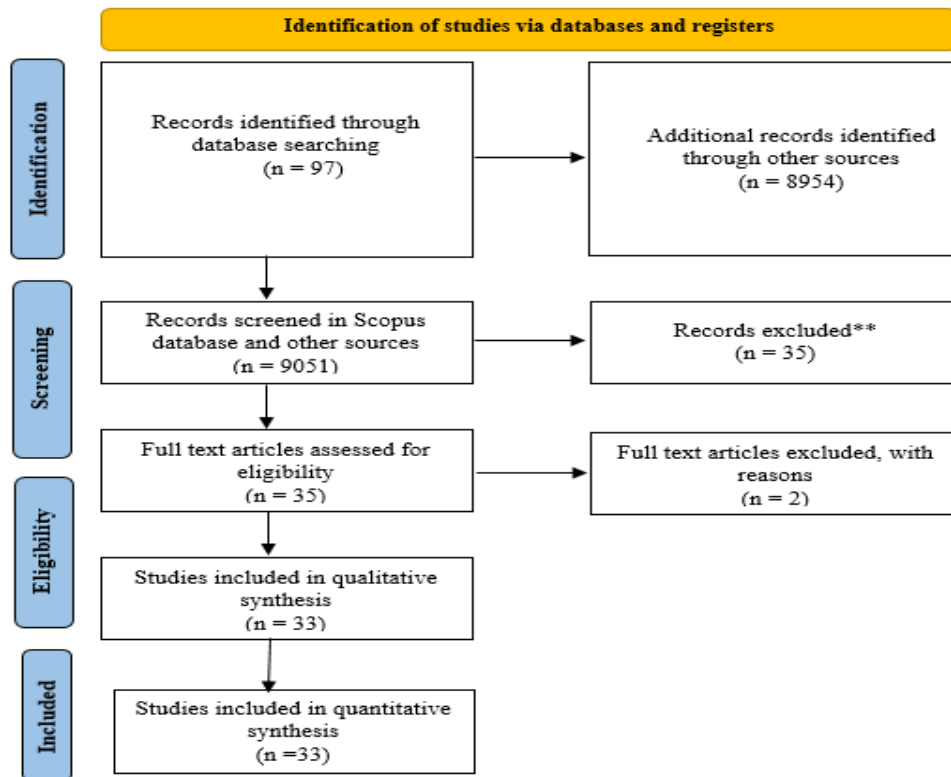


Fig. 1. PRISMA flow diagram

3.1 Criteria for Qualifying and inclusion

Article qualifying and inclusion is a key and absolute observation method for including potential articles for the research. In general, English is the language or vocabulary chosen for the articles because English is universally accepted and the majority of literature is published in English. Also, all subject areas are chosen and open access papers are used for analysis.

3.2 Quality Assessment

The review papers are based on articles and conference papers. To ensure the quality of the review, every sort of duplicate is thoroughly examined on the excel sheet. To ensure the greatest level of quality, paper abstracts and conclusions are rigorously vetted for analysis and purification.

3.3 Qualitative Synthesis Studies Included

The remaining 33 papers are utilized to determine trend and research over the years, especially from 2003 to 2023. The graph also explains the subject-wise research to demonstrate how many publications are included and excluded for the review.

3.4 Year base publications

The diagram depicts the year-by-year publishing based on the most referenced papers. The year 2003 was chosen as the starting point for the review, and the highest figure was chosen from the year 2017. Figure 2 depicts the year-by-year publication record, with 1 paper chosen from the year 2003, 1 paper from the year 2005, 3 papers from the year 2007, 1 paper each in the year 2008, 2009, 2011 and 2012, 3 papers from the year 2015, 1 paper from the year 2016, 5 papers from the

year 2017, which has the highest paper selection, 2 papers from the year 2019, 1 paper from the year 2020, and 2 papers each in the year 2021 and 2022.

Documents by year

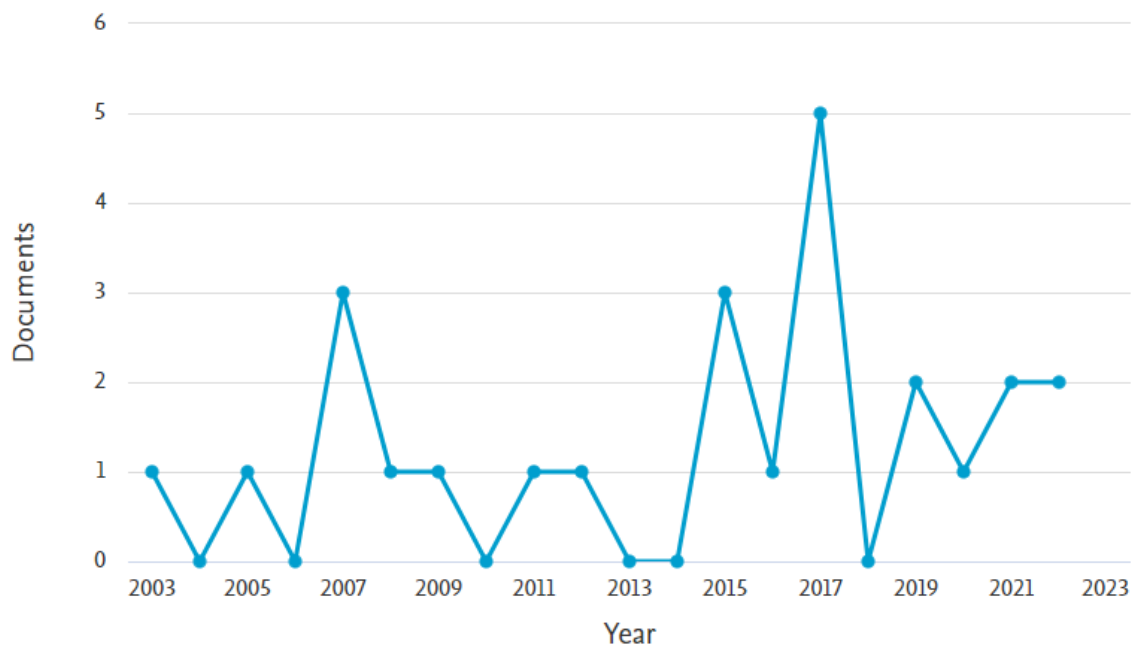


Fig. 2. Year wise publications

3.5 Journal base publications

Occupational and Environmental Medicine and Scandinavian Journal of Work Environment and Health is the top-ranked journal in terms of selection criteria, with 2 papers chosen from each journal. 1 papers each from European Journal of Public Health, Griffith Law Review, Economies, Human Resource Development International, International Business Management, the International Journal of Business Innovation and Research, the International Journal of Epidemiology, the International Journal of Innovative Technology and Exploring Engineering, International Journal of Manpower, the International Journal of Recent Technology and Engineering, the International Review of Administrative Sciences, the Journal of Epidemiology and Community Health, the Journal of Managerial Psychology, the Journal of Organizational Behavior, Management Croatia, the Mediterranean Journal of Social Sciences, Personnel Review, Policing and Society, Public Management Review, Quality Access to Success, and Social Science and Medicine. Figure 3. Below shows the journal base publication.

Documents per year by source

Compare the document counts for up to 10 sources.

Compare sources and view CiteScore, SJR, and SNIP data

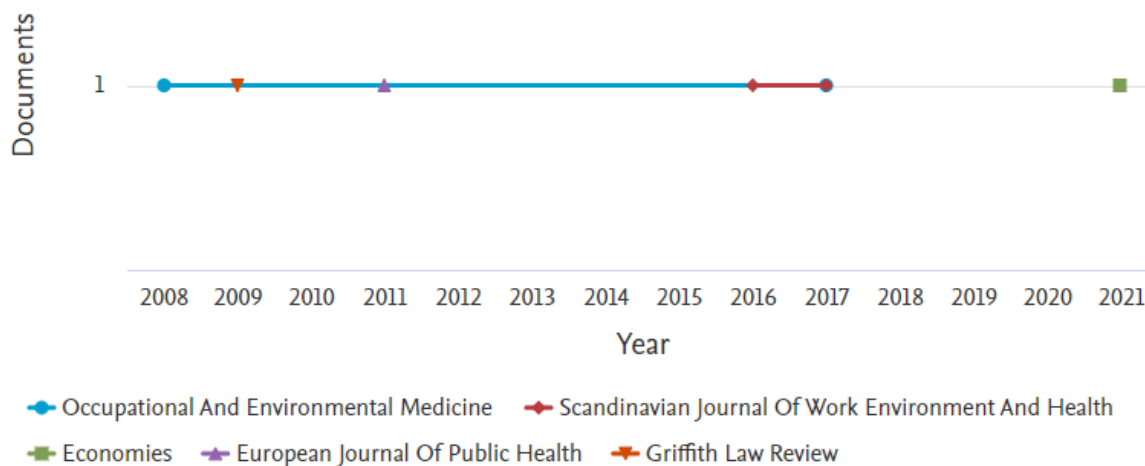


Fig. 3. Journal Base Publications

4. Classification of Literature

4.1 Organizational Justice

Literatures over the years explore the effect or influence of organizational justice in the public sector. Most researchers were able to explore the influence of workplace justice in the public sector on work satisfaction, good health of employees, organizational citizenship behaviour, organizational effectiveness, the work engagement, organizational commitment, ethical behaviour, and among others.

One of the research suggests that there is a relationship among the three types of justice at workplace, which includes; Procedural, distributive and interactional justice with Work satisfaction, intention to quit, and organizational citizenship behaviour (Ahmadi, Daraei, Rabiei, Salamzadeh & Takallo, 2012). Another study suggests that involvement of the employees has a direct beneficial impact on the organization's justice. According to Suharto, Sigalingging, Ngaliman and Nasikah (2022), the study findings may imply that if each individual in the organization can establish a meaningful relationship with the organization and is involved in the organization's goals, then the mind-set that will arise in every employee is to be fair when treating other employees. Depending on employee perceptions of fairness obtained in the organization, if an employee believes that there is fairness in the organization, it will foster an attitude of employee readiness to assist other employees in achieving organizational goals, resulting in effective cooperation.

In addition, a study also reported that an absence of workplace justice is a health concern for workers and due to uncertainties, unpredictable situations might amplify the poor health of workers resulting from low organizational justice (Elovainio, Bos, Linna, Kivimaki, Ala-Mursula, Pentti

& Vahtera, 2005). According to the findings of a study, employees' conceptions of justice at work have the capacity to impact their decisions to exhibit their commitment to the organization (Zhilla, Mucaj & Hoti, 2020). A research also found that organizational justice has an effect on turnover intention, implying that enhancing organizational justice will reduce the intention to leave the work (Aldarmaki & Kasim, 2019).

Variables	Findings
Organizational Justice	There is a positive relationship among the three components of justice at workplace, which includes; Procedural, distributive and interactional justice with turnover intentions, work satisfaction and organizational citizenship behaviour.
Distributive Justice	The distributive justice element is focused with the impartiality of work performance such as remuneration, task, and work requirements, all of which are aspects of the relational psychological agreement or contract.
Procedural Justice	Procedural fairness has a significant impact on work satisfaction among public sector employees.
Interactional Justice	Interactional justice is primarily focused with the employee's connection with his or her superior.

Table 1. Table of Classification

4.2 Distributive Justice

Distributive justice in the organization simply means the fair distribution of all resources to all employees in a firm, so that each employee has a fair resource share to bring about favourable results; this fosters a positive perception of competition among employees. If there is an absence of distributive justice in the workplace, employees will perceive that they are being treated poorly and will begin to challenge the system that is not treating them fairly. Employees perceive distributive justice when they believe the results are equitable. These outcomes could be financial or non-financial, such as positive feedback. Distributive justice occurs when employees sense they are being compensated or fairly treated.

Furthermore, from the literature reviewed, a study shows that the transactional psychological agreement or contract is believed to be favourably connected to distributive justice. The distributive justice element is focused with the impartiality of work performance such as remuneration, task, and work requirements, all of which are aspects of the relational psychological agreement or contract (O'Donohue, Donohue & Grimmer, 2007). Previous research has shown that distributive fairness has a beneficial effect on work satisfaction among public sector workers (Alneyadi, Nusari, Ameen & Bhaumik, 2019). It is indicated by the notion that the more resources workers receive in terms of obligations, occupational standing, abilities, job-related stress and tension, and accomplished responsibilities, the better such workers are contended with their occupations and the work they do.

Another study suggested that in order to become more efficient, organizational fairness and work involvement are extremely important in the public sector because they contribute to varied workers attitudes in regards to quality of service, relationship with people, and even quitting the organization (Stankevičiūtė & Savanevičienė, 2021). Workers, for example, are likely to behave differently depending on their sense of fairness. When "workers recognize distributive unfairness,

they respond to the outcomes of the organization's action; when they recognize procedural unfairness, they may respond against the entire workplace; and when they perceive interactional unfairness, they may respond against their supervisors". Such conducts are detrimental to the public sector and should be addressed.

4.3 Procedural Justice

The procedural justice is defined as the belief that justice is required for mechanisms that settle disputes or distribute resources. The concept of procedural fairness has been utilized in various domains, including business, education, and legislation. Procedural fairness is related to supervisor-employee relationships in the workplace and examines the fairness with which employers handle their employees. Procedural justice is the method through which judgments are made and regulations are implemented to ensure fairness in the workplace. Workers who have the perception that they are being treated fairly benefit from the effective and efficient development of procedural fairness in the organization.

In addition, a study demonstrated that procedural fairness has a significant impact on work satisfaction among the public sector employees, which is corroborated by prior research (Elovainio et al., 2005). This explains the notion that the more leaders and managers are objective about making decisions, paying attention to other individuals before making choices, gathering the appropriate data regarding the subject of making decisions, providing further details when required, having their choices executed consistently to all individuals, and having the privilege to refuse or embrace the decision, the more satisfied the employee is with his or her employment and the work he or she performs.

Furthermore, from the existing studies reviewed, a study shows that the transactional psychological contract is believed to be favourably connected to procedural justice (O'Donohue et al., 2007). Procedural justice is concerned with views of equity, objectivity, and regularity, of which transactional psychological contracts are more suggestive. According to Zoghbi Manrique de Lara and Verano-Tacoronte (2007), from the studies reviewed, suggests that views of procedural injustice may influence the degree to which employees perceive a social and political contradictory climate, in which employees are more prone to respond with deviant actions aimed against the company.

4.4 Interactional Justice

Interactional justice is the principle that governs how employees interact with one another at work. This includes not only how managers handle their team employees, but also how employees and coworkers relate to one another. Establishing behavior standards is crucial to ensuring that workers are treated respectfully and that the environment is perceived as a safe and fair workplace. Interactional justice has two components. The first is referred to as interpersonal justice and the second is known as informational justice. Interpersonal justice refers to how a person is treated by his superiors, subordinates, and so on. A supervisor's treatment is defined as respect, integrity, motivation, support, and so forth. Informational justice is described as explanations given to people that explain why processes were employed in a particular way or why outcomes were allocated in a particular way.

According to the review of existing studies, one of the study shows that interactional justice is considered to be related to the relational psychological agreement or contract in a favorable way (O'Donohue et al., 2007). Interactional justice is primarily concerned with the employee's connection with his or her superior. The relationship element of the psychological agreement or

contract should grow if employees believe their superior has addressed them appropriately in their interactions.

In addition, previous research has also indicated that interactional justice impacts work satisfaction significantly among public sector workers (Alneyadi et al., 2019). This explains the notion that the more superiors are respectful and involved in the actions of the employee's performance, polite and cautious on the choices of the employee's performance, perceptive to individual requirements, value individual liberty, communicate with the employee about the outcomes of decisions, and have a reasonable explanation for policy choices, the higher the employee's job satisfaction and the more satisfied the person is with his or her employment and the work he or she performs.

5. Conclusion

After reviewing 33 papers on the Scopus database and other database sources, it is evident that organizational justice is very much needed and important in the public sector. Reviewed studies discussed the importance of organizational justice in the public sector across different fields for enhancing organizational commitment, job satisfaction, organizational effectiveness and efficiency, reducing workplace deviance, reducing turnover rate, good health of the employees and work engagement, among others.

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Enterprise Resource Planning on Business Productivity: A Systematic Review

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Abstract

There would have been less economic growth without the contributions of business enterprises. Enterprise resource planning (ERP) systems, it is said, may boost company output. Thus, this study examines the factors that make ERP successful and effective in enterprises. For the sake of transparency and clarity, we conducted our literature search using Scopus and applied rigorous intergration and removal criteria to the research that we found. In this study, we only considered the top 20 publications published between 2013 and 2022 in Scopus. The procedure of inclusion and exclusion is performed using PRISMA 2009. Using actual data from chosen studies, a conceptual ERP implementation model is provided. Findings show a good correlation between ERP adoption and business productivity, as well as the importance of the aforementioned elements in determining ERP performance. This research concludes that companies implementing ERP in their processes should have adequate technical facilities for the necessary technology resources.

1.0 Introduction

In today's dynamically changing business world, organizations—especially SMEs—face several challenges. These hurdles include intense rivalry, predominant business control, constant improvements in digital technologies, and the pertinent creative utilisation of that new tech in in order to maintain an edge. According to Liem, Khuong, and Khanh (2019), SMEs may face several obstacles that make growth difficult. These constraints include a lack of advantageous information from specialists, personnel management, and digital, notably in emerging economies..

In response to this situation, organisations have implemented a great deal of various tactics and transformational programmes. Several of these projects are aimed at improving the company's inner processes and operations in certain way. For instance, information technology has supplied enterprises with a great deal of tools that can assist them in the administration of their operations. Moreover, there is a demand for supporting information, including studies that demonstrate that a capital expenditure in information technology would then give businesses with a favourable return on their money. According to AlMuhayfith and Shaiti (2020), a number of researches have looked into the possibility of a beneficial connection existing between IT investments and the overall performance of a company. For example, AlMuhayfith and Shaiti (2020) stated that information technology is useful and delivers efficiency, agility, cost savings, and quality improvements. The field of information technology has seen significant progress over the past three decades.

ERP systems were first utilised by organisations in the mid-1990s to establish and organise company operations, based on Costa, Ferreira, Bento, and Aparicio (2016). These systems were utilised by firms to determine and organise company activities across the organisation.

ERP is "an interconnected data framework that may be used to oversee all of a firm's activities, records, and functions via cloud storage locations" (AlMuhayfith & Shaiti, 2020). ERP systems are bundled computer programmes.

ERP stands for enterprise resource planning. It's a business knowledge system. Product manufacturing planning spawned ERP (MRP). Since ERP employs information technology components to connect commercial activities inside each business organization's functional boundaries, most businesses are interested in it.

It has been proposed that such a system could facilitate unprecedented levels of organisational integration by making it possible to integrate into a single system the various components of a company. Managing your company's workforce, sales shipments, and invoices are just some of the tasks that can be controlled and automated with the help of an integrated software package like the one being discussed here. ERP is a framework implementation that can be thought of as an element that has been designed with the goal of tracing all procedures and data into an inclusive process that provides assistance for enterprises using a single input and IT framework (Petrasch & Petrasch, 2022). This package is frequently modified so that it caters to the particular needs of the company. Despite the fact that many people may view this personalisation in an adverse view, the one-of-a-kind layout and setup that ERP obtains are exactly what set it aside from other development tools available on the market (Tavana, Hajipour & Oveisi, 2020).

After achieving widespread success across the world, ERP attracted the attention of researchers who specialise not only in information technology and information systems but also in management and accounting (Amado & Belfo, 2021).

The majority of research focuses on analysing how ERP systems affect the efficiency of large businesses. Thus, ERP system effects on SMEs must be highlighted. ERP vendors are targeting developing SMEs markets. Due to high initial costs and economic and technological constraints, only large firms could afford ERP systems (Awan, Ullah, Ali, Abbasi, Hassan, Khattak & Huang, 2021). ERP software for SMEs makes ERP deployment possible.

Small enterprises have been struggling to survive in developing country like Nigeria as a result of the harsh business environment and economic downturn.

This raises worries for Nigeria's struggling enterprises (Adejare, Arfan & Shahizan, 2019). Increasing the efficiency of micro enterprises (SMEs) could be beneficial to the Nigerian economy, which would then be less dependent on the production of crude oil and more able to focus on businesses run by SMEs. According to a report that was published in the Punch newspaper on January 9th, the Ministry of Labor and Employment in Nigeria stated that the country has an alarmingly high rate of unemployment, which stands at 47%. (Onuba, 2016). Thus, boosting SMEs would enhance job prospects., as well as an improvement in the performance of an organisation and the generation of revenue.

In a closely related manner, in for businesses to achieve an edge in a business context, they began implementing information systems such as ERP in order to boost the efficiency of their operations, cut down on the amount of time needed for cycle times, lower the cost of production, and improve customer service. Due to the foregoing difficulties, Nigeria's firms (SMEs) need to focus more on technical innovation and progress, notably in ERP, IT, and ICT (ICT). IT, ICT, and ERP improvements may boost timely production, goods and services, employment opportunities, economic growth, inclusive growth, and market edge in both national and international markets. Previous study states this (Eniola & Entebang, 2015).

As a direct consequence of this, there is a dearth of research that is solely focused on the implementation of ERP systems in small and medium-sized businesses. As a result, the main focus of this research is on the implementation of ERP systems within small and medium-sized enterprises (SMEs).

In light of the arguments presented above, the objective of this research is to examine the factors that affect ERP adoption and also to explore the relationship between the use of ERP systems and the performance of businesses.

2.0 Methodology

This study analysed the literature by conducting a thorough systematic review and comparing its findings to those of other studies (SLR). The PRISMA statement template is used to explain the full process of item inclusion and exclusion for the aim of ERP in the evaluation of company productivity. The PRISMA statement can help the researcher strengthen the review paper's results. Only previously published works will be considered for this review. Figure 1 shows the full procedure and is taken from the PRISMA 2009 report.



2009 Flow Diagram



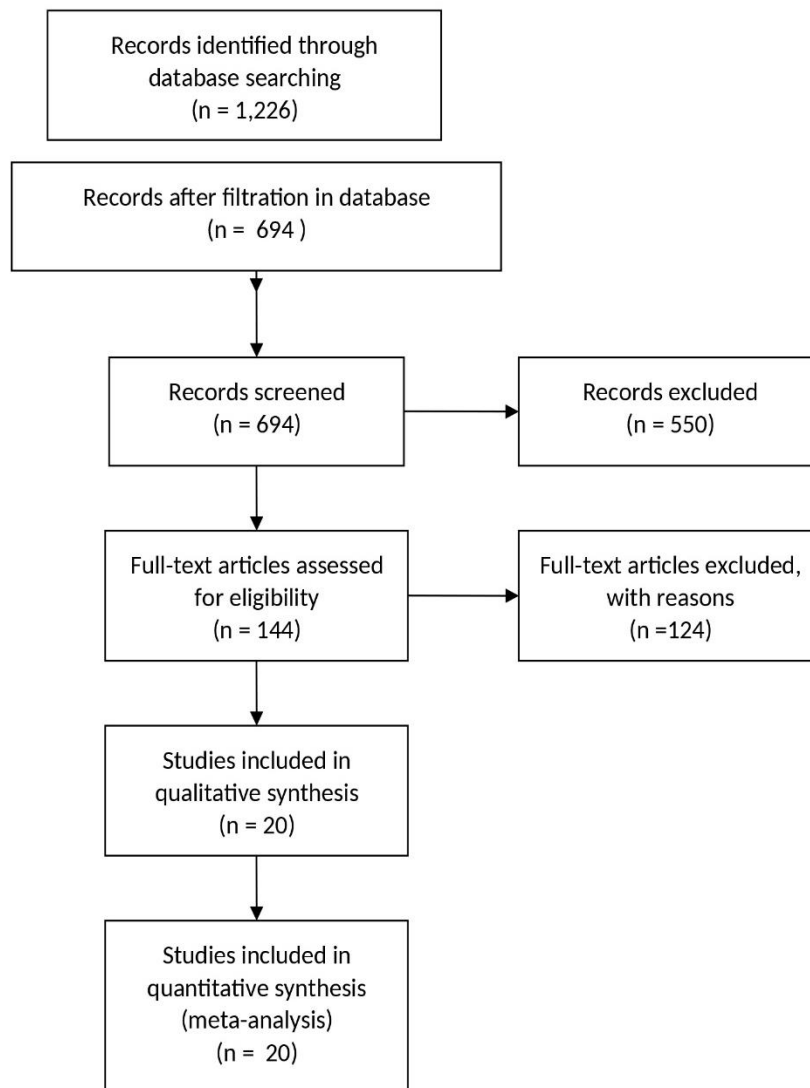


Figure 1: PRISMA FLOWCHART

2.1 Quality assessment

The research articles only rely on previously conducted empirical research and scholarly reviews; the study does not take into account any conference papers. In order to ensure that the quality of the review is maintained, each and every type of repetition is carefully examined. Abstracts and

conclusions drawn from publications are subjected to intensive scrutiny, evaluation, and filtering in order to guarantee the highest possible level of quality.

2.2 Selected articles in the systematic review

The last step in determining the focus of the study and the research that will be conducted from 2013 to 2022 involves using the remaining 20 studies. The research that is specific to the topic is explained in further detail in the graph, which depicts how many publications are included in the review and how many are not included in the review.

2.3 Yearly Publication

Publications are subdivided into years, and the most frequently cited papers are brought to the forefront. Analysis began in 2013, and the year 2022 was selected as the most recent year. The history of publications is presented by year in Figure 2; the year 2022 produced most selected articles, 8, while the year 2013 produced the lowest number, with a total of 5 papers. The year 2021 was given a total of five different papers to choose from, making it the second most popular option.



Figure 2: Number of related papers published in Scopus

3.0 Literature Review

3.1 Enterprise Resource planning usage

ERP was based on 1960s stock monitoring (Hairech & Lyhyaoui, 2022). The conventional methods of managing inventory, such as the re - order point based system, served as the foundation for the development of specialised development tools that were tailored to meet the needs of producers. In the 1970s, a transition in emphasis was made toward the well-known material requirement planning (MRP) systems for the purpose of organizing and overseeing production. These structures were essential for turning deliverables for finished items towards total required duration for elements, raw budgeting, and purchase.

ERP software has evolved into a very helpful tool for executive leadership, as well as a basic requirement for companies that wish to remain competitive and up to date (Costa, Aparicio &

Raposo, 2020). According to AlMuhayfith and Shaiti (2020), during the initial phases of ERP systems, the manufacturing industry was the only one to embrace these systems. On the other hand, situations have shifted, and ERP systems are now widely used in a variety of various industries, such as public entities, non-governmental organisations, and organisations that focus on charitable work. According to Qureshi and Abdulkhalaq (2015), SMEs are required to adopt ERP systems in order to manage the outcomes of international expansion.

ERP systems have been proved to significantly impact business organisations (Hwang & Min, 2015). According to the literature, ERP system adoption has internal and external effects that might prevent business organisations from adopting ERP. These effects may hinder ERP system adoption. It's crucial to highlight that a corporation's ERP system adoption must be reviewed in several areas, including customers' engagement, perceptions of ease of use, the system's benefits, expertise in preparation, clients' proximity to it, and ties to other areas, such as profitability.

3.2 Top management Support

ERP project success requires senior management support, as shown (Elbanna & Newman, 2022). When ERP systems are given top priority by the top managers or leaders of an organisation, this demonstrates that they have the backing of senior management. While instituting an enterprise resource planning system, the two most critical facets of top management support to take into consideration are, first, the degree to which top executives give appropriate leadership to complete a project and ERP resource availability. Top management support affects ERP adoption, deployment, and integration, which impacts corporate productivity.

3.3 Clear vision and Team work

Having the vision to adopt ERP initiatives is crucial to the successful adoption and integration of ERP systems in organisation operations.

For usage of ERP to be successful throughout its life cycle, its necessary to have a well-defined business plan and vision for the future. This serves as a guide that points the system in the right path. The company also requires a defined business plan that informs employees about the ERP system's future use (Siw, 2022). It is essential for the organisation to keep their concentrate on the company's advantages, so the strategic planning should include a blueprint for both corporate strategy and quantifiable perks, as well as strategies related to resources, expense, and threats, and a schedule (Siw, 2022). A company using ERP should have a defined business model that describes how it will operate afterward. The ERP system should be kept because of a problem the company has. Additionally, the transition must be in alignment with the path that the company is planning to take (Chavez & Duberg, 2021). Additionally, the objective of the ERP project should be articulated in detail, and it should be linked to the requirements of the company. In addition to this, businesses have to identify their objectives and advantages, both of which need to be monitored regularly. Because having a detailed business model makes operations simpler, having one has an effect on the manner in which individuals and groups carry out their responsibilities.

3.4 IT Infrastructure

When introducing a new enterprise resource planning (ERP) system into an organisation, it's crucial to ensure that it's compatible with existing systems and meets all regulatory requirements (Lutfi, et., 2022).

Both are fundamental to the idea of integrating ERP systems. The catch is that the Enterprise Resource Planning solution needs to work with the company's existing IT systems. No one wants

a fix that necessitates expensive new features. Indeed, the ERP implementation is intended to benefit the business rather than the other way around.

Even the company's internal e-mail system would fall under this category if it were essential to the company's basic production and communication processes. Basic IT infrastructure includes tools for tracking stock and monitoring manufacturing, among other functions. In order to implement an ERP system, a company has to have at least a rudimentary IT infrastructure in place (Alsharari, 2022).

In order to get the full benefits of ERP, businesses must integrate their disparate information and operational systems into a single database. Since this usually results in significant changes, the firm's ERP software must work with the required hardware.. ERP software provider verifies the necessary hardware's compatibility. Kenge and Khan (2020) found that an organization's IT architecture, connectivity, and devices affect ERP system performance.

3.5 Organisational Structure

ERPs reduce hierarchy and team size (Mills, 2019). Ramping up processes, lowering costs, increasing influence over the company, and achieving quicker decisions are all outcomes of this. Erp system facilitates efficient interaction and collaboration amongst employees working in different departments. Organization size affects ERP deployment. The allocation of the firm's materials and activities, as well as the level of engagement and connection between personnel, can be affected by the structure of the organisation itself, which in turn influences the usefulness and productivity with which they are used.

structure is an evolving and pivotal component that can be adapted to suit the needs of the organisation as it evolves, allowing it to better accommodate its staff in the face of challenges brought on by, for example, changes in the external environment or the adoption of novel methods of doing things like the installation of cutting- (Hanelt, Bohnsack, Marz & Antunes Marante, 2021). ERP adoption, in terms of resource utilisation, structure efficacy, and accuracy of information, is directly impacted by an organization's structure.

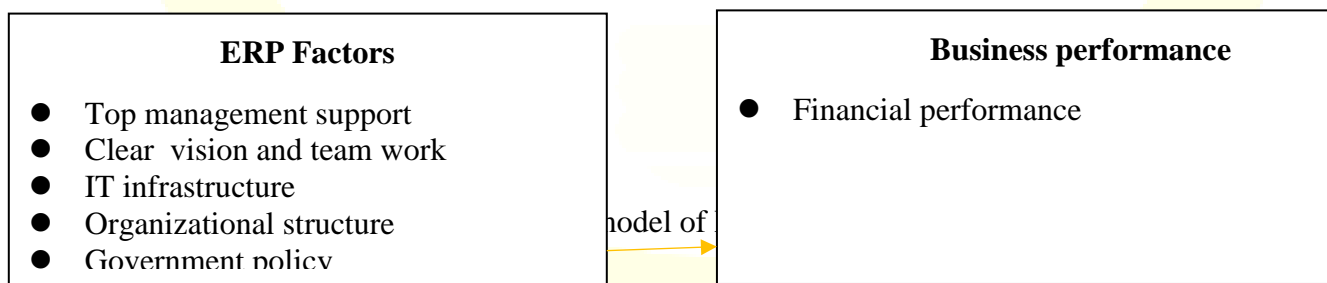
3.6 Government Policy

Therefore, GP refers to the extent to which governments in different countries make a significant contribution to or support enterprise organisations by establishing a policy structure to act as a stance and governing institution, but also a structure to protect them and to sustain them in their numerous future ventures (Akanbi,2016).

SMEDAN was founded in 2003 by the Nigerian government to oversee the nation's SMEs and facilitate them in consolidation in light of new policy initiatives, guidelines, and laws designed to promote and grow the industry. As a bonus, it promotes economic growth and employment creation. Unstable government laws, a dearth of interaction channels, an acute shortage of hardware, a dearth of technological development, a dearth of facilities, a paucity of significant exposure to monetary loan, and greater taxes all hinder the outcomes of SMEs in Nigeria, according to reports from the 2016 National MSME Collaborative Survey (Akanbi, 2016). Similarly, Akanbi (2016) contended that GP and organisational productivity are intertwined, and that public policy influences the degree to which SMEs use enterprise resource planning systems. In addition, several research have shown that government policies have an impact on enterprise companies' use of software, as well as a connection among structural reforms and SMEs' technology use to boost productivity.

3.7 ERP and Business Performance

There has been much research into the connection between ERP systems and corporate success, with varying findings published. Evidence from research shows that ERPs may have both beneficial and detrimental effects on business operations. Despite this, a large body of research indicates that ERP systems have a net beneficial effect on company productivity, resulting in measurable shifts in key areas of the business. While there have been many research on ERP installation, according to Coşkun, Gezici, Aydos, Tarhan, and Garousi (2022), the fundamental issue with ERPs studies is the dearth of research into ERP failing, probably since companies are reluctant to talk about their failures. Consider Dell Technologies, which decided to abandon its ERP system rollout. They said it lacked the adaptability necessary to accommodate their rapidly expanding international activities (Chopra, Sawant, Kodi, D & Terkar, 2022). It's normal practise for businesses to implement IT setups in order to boost their productivity. There has been an increase in the number of businesses spending money on IS to boost productivity as a result. Coşkun, Gezici, Aydos, Tarhan, and Garousi (2022) cite the benefits of ERP systems for improving entity decision-making and business performance as reasons why many businesses have adopted them. According to Hailu (2014), an IS is influential when it affects enterprise functions, performance, and productivity. According to Nkasu (2020), businesses who have implemented an ERP system have seen considerable improvements in performance across the board. This includes, for example, the capacity to deliver real-time information to customers and a shorter manufacturing cycle. ERPs can boost valuation and company productivity, according to Hietala and Päivärinta (2021). ERPs are seen as a long-term, strategic investment that has an effect on the entire company, according to research by AlMuhayfith and Shaiti (2020), although the effects of this sort of system do not become apparent for several years. Furthermore, A 'gao 'glu et al. (2015) discovered that ERP investment significantly affects the results of business processes in a good way. Equally convincing is the claim made by Jenab, Staub, Moslehpour, and Wu (2019) that ERP systems ultimately improve business performance. But Pandya, Sukumar, Jafari Sadeghi, and Tomlins (2021) found that ERP investment did not necessarily improve company output. According to Rodrigues, Ruivo, and Oliveira (2021), there is a lack of credible evidence showing that IT investment returns are positive for businesses.



4.0 Discussion of Findings

From the findings, the majority of companies whose ERP implementations have been successful in terms of both system structure and productivity have done so thanks primarily to the support of upper management and executives and this align with findings of AboAbdo, Aldhoiena & Al-Amrib (2019) which concludes that successful implementation of ERP is largely depending of top managers of organisation who are the major decision makers.

This study also finds out that organisations who have vivid vision and including ERP system in their business model utilise ERP effectively and efficiently across their business operations and processes more organisations who don't. Systematic review of literature and exploring existing body of knowledge on usage of ERP reveals that one of the major reasons why global firms in developing countries outperform local businesses especially in Nigeria is owed to having a clear vision and integrating of ERP in their daily operations and this support the findings of AlMuhayfith and Shaiti (2020) which conclude that having a vision to implement ERP is very crucial to its effective adoption and usage within an organisation.

This study findings reveals that management control and capability in terms of expertise and skills on usage of ERP have a strong impact of effectiveness of ERP and its impact on business productivity and this findings align with research findings of Putra, Rahayu and Putri (2021) which concluded that the links between ERP system deployment and business success were mediated by internal organisational skills. Consistent with the findings of Sukanthan Rajendra, Hon, Manley, Lamari, and Skitmore (2022), this research reveals that information technology preparedness also influences the efficacy of ERP on corporate productivity.

Consistent with the findings of AlMuhayfith and Shaiti (2020), this study demonstrates that there is no universally applicable structure for implementing an ERP system, making it critical for businesses to organise their operations and activities in a manner that is compatible with the ERP system they intend to implement. This provides more evidence that the nature of company matters when deciding to deploy ERP.

The results of this study show that many businesses in developing nations like Nigeria have difficulty adopting and implementing ERP in their operations due to a lack of supporting system, facilities, infrastructure, and consistent government rules and legislation.

This findings reveals that there is positive link between ERP implementation and business productivity, this rederch findings agrees with findings of Fauzi (2021); Putra, Rahayu and Putri (2021); Jayeola, Sidek, Abdul-Samad, Hasbullah, Anwar, An, Nga, Al-Kasasbeh and Ray (2022).

Finally, this research agrees with the findings of Aremu, Shahzad, and Hassan (2022) and Kakhki, Gargeya, and Mousavi (2022) in saying that there is a dearth of research into the adoption of ERP systems in the countries of Western Africa and that there has been even less focus on the topic among Nigeria's small businesses (2022).

5.0 Managerial Implication

This paper's findings concerning ERP's effect on productivity in company. The results lend credence to the idea that firms would benefit from closely examining ERP systems in order to make the most of the tools at their disposal. Both conceptual and practical contributions of ERP are advanced by our research. Researchers in the field will find the study's findings legitimate, as they shed light on the elements that have a bearing on ERP system adoption and outcomes in businesses.

Government involvement and investment in infrastructure and technology, as well as the dedication of effort to drive constant progress in ERP usage inside organisations, are also crucial for the stimulation of sustainable corporate operations.

Consequently, the results of this study have relevance to the operation of small businesses in Nigeria. The results of this research can help managers of small businesses (SMEs) better oversee the implementation and utilisation of ERP systems.

6.0 Conclusion

The primary goal of this research was to identify the factors that influence ERP adoption by small and medium-sized enterprises (SMEs) and examine their association with financial outcomes. According to the study's findings, elements including "Top management support," "Clear vision and team work," "IT infrastructure," "Organizational structure," and "Government policy" all have an impact on a company's output. In order to ensure the success of SMEs in Nigeria, this research suggests that organisations have sufficient technological systems (including hardware, software, and internet facilities) to reinforce positive data management system, sensible tier of interaction, effective corporate structures, and strong top management support.

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GREEN HUMAN RESOURCE MANAGEMENT: A SYSTEMATIC REVIEW

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ABSTRACT

The business world has grown more aware of the need for environmental consciousness and has adopted various eco-friendly practices. The shift towards a capacity-based, environmentally-focused economy has replaced the traditional focus on finance. Green Human Resource Management (GHRM) has become a crucial strategy for major companies, where HR departments play a vital role in promoting sustainability in the workplace. This paper examines global green HR practices and defines GHRM, adding to existing literature by examining future developments in GHRM and suggesting promising HR initiatives for environmentally conscious organizations.

Keywords: *Green, Environment, Green Human Resource Management; Environment management; paperless office; Conservation; Recycling; Green Initiatives.*

INTRODUCTION

The increasing degradation of the natural environment due to human activities has led to the adoption of the Green concept globally. This has emphasized the need for environmental protection and preservation of resources for future generations. The significance of this can be seen in the growing attention paid to a company's environmental performance by experts. The industrial revolution has brought about pressing environmental issues such as climate change, resource depletion, and pollution of water and soil. Despite the progress made in addressing these issues, it is still crucial for individuals, businesses, and government organizations to fulfill their environmental responsibilities. Governments have placed emphasis on environmental performance as part of their efforts to protect natural resources and the environment and achieve the United Nations' sustainable development goals. Environmental performance is essential for not only mitigating the negative impacts of human activities on the natural environment, such as pollution and waste, but also for ensuring the long-term sustainability and success of organizations. (Bombiak, 2018)

Environmental treaties and regulations around the world have become more stringent, requiring organizations to take on greater environmental responsibilities. Organizational greening is critical for fostering social economy and environmental sustainability (Ahmad, 2015). As a result, an increasing number of businesses are adopting corporate social responsibility to promote green development. However, research has shown that employee participation is critical to the implementation of green initiatives in organizations (Sowjanya, 2019). For long-term sustainability and growth, companies should not only concentrate on financial performance but also actively manage and address all social and environmental factors that they may impact.

Green Human Resource Management (GHRM) is a discipline that examines the integration of environmentally sustainable business strategies with conventional HR practices. The objective of this field of study is to investigate methods for enhancing the creativity of green teams and assess the influence of GHRM practices on the long-term viability of organizations. The ultimate aim of GHRM is to align HR practices, such as policies, procedures, and regulations, with environmentally friendly and sustainable practices. (Adubor et al., 2022).

Organizations are facing the challenge of reducing their ecological footprint while also dealing with economic issues. To be successful and profit from their shareholders, organizations need to focus on social, environmental, and economic factors. Implementing sustainable strategies requires strong leadership and a well-defined process. The topic of sustainability is becoming a priority for corporate leaders but is still not well understood by many HR practitioners. To implement environmental programs, various departments such as HR, marketing, IT, and finance, must work together, with HR being a key contributor (Ahmad & Ahmad, 2015). The corporate sector has a significant stake in environmental matters and should actively participate in seeking solutions.

Many workers are dedicated to working for companies that back eco-friendly initiatives. There is global agreement on the importance of proactive environmental management. The business world has seen growth in green marketing, accounting, retailing, and management, leading to the creation of Green Human Resource Management (GHRM). GHRM uses HR policies to support sustainable resource use and environmentalism, which elevates employee morale and happiness. Green HRM initiatives are a part of corporate social responsibility and involve environmentally-friendly HR practices and preservation of knowledge resources. HR and its systems are essential for all businesses, including those focused on sustainability. (Ali et al., 2021). Without implementing sustainable policies and supporting HR, it will be difficult to achieve a green atmosphere. Creating

a green environment will be challenging without adopting sustainable policies and supporting HR. Despite there being literature on GHRM, there is still a lack of clarity on the successful implementation of green HR policies globally. This article examines the existing literature on GHRM and offers insights into typical GHRM processes and eco-friendly HR initiatives.

OBJECTIVES OF THE STUDY

The study aims to:

1. Give a basic understanding of Green Human Resource Management (GHRM).
2. Expand on the different green practices that can be employed to create an environmentally-friendly workplace.
3. Propose green initiatives for HR managers and workers.

METHODOLOGY

This research employed a systematic literature review approach, which is a technique used to gather and assess research on employee engagement, using the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) method. The literature was sourced from online databases, including Scopus and Google Scholar. The article selection process involved several steps, including collection and filtering using Mendeley and Microsoft Excel to eliminate 20 duplicate articles. A preliminary search resulted in 456 articles related to the study's objectives. The main keywords for filtering the studies were "green" and "human resource management." Furthermore, the filtering criteria included articles written in English and published between 2018-2023, to ensure that the research was recent and scholarly.

Out of the 96 remaining articles, 56 were eliminated because they were not relevant to the focus of the study. The remaining 30 articles were thoroughly read, but 10 were discarded because they did not pertain to the focus of the study on Green Human Resource Management engagement. Finally, 20 articles were included in this review.

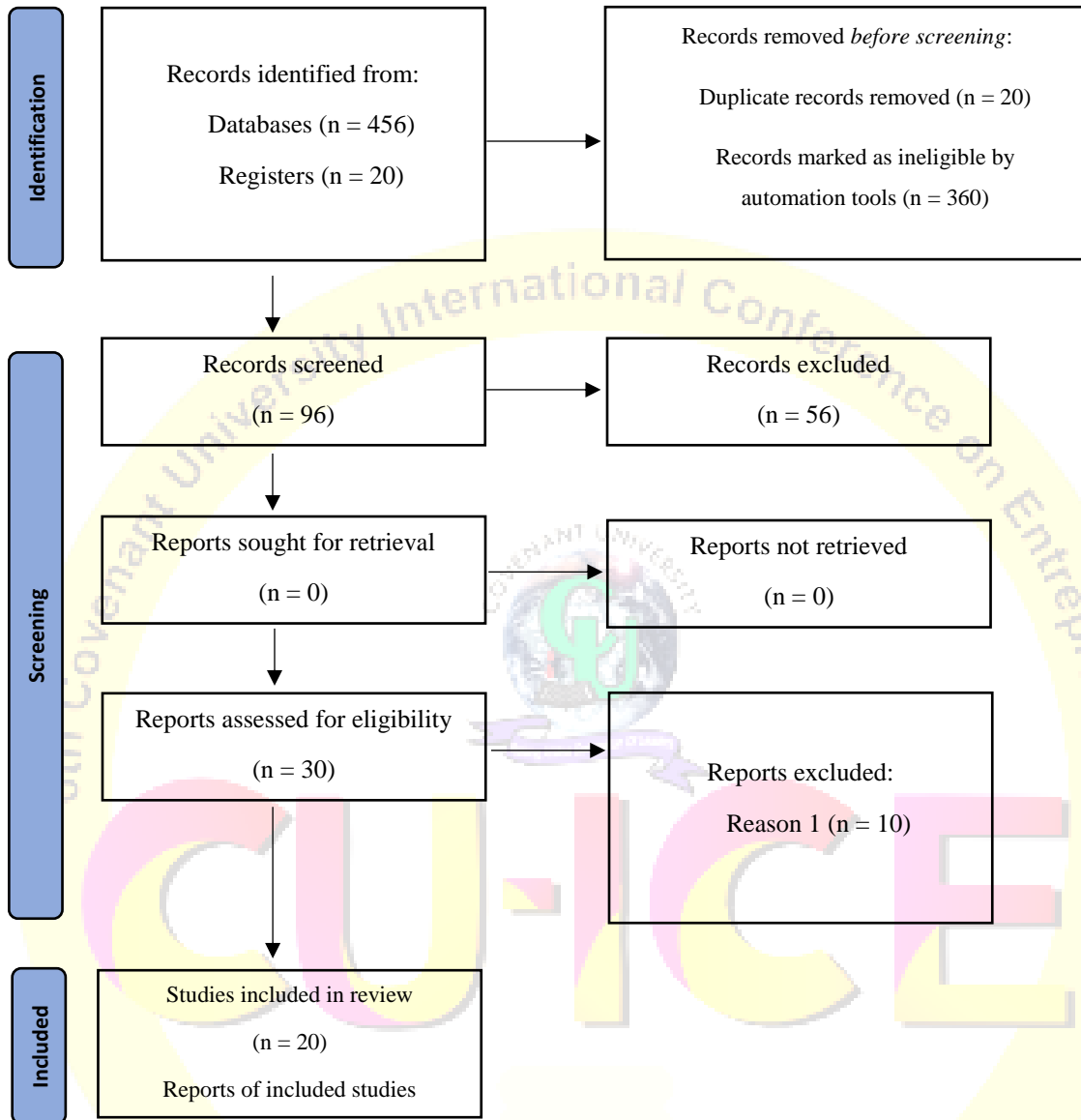


Figure 1: PRISMA-based article selection process flowchart

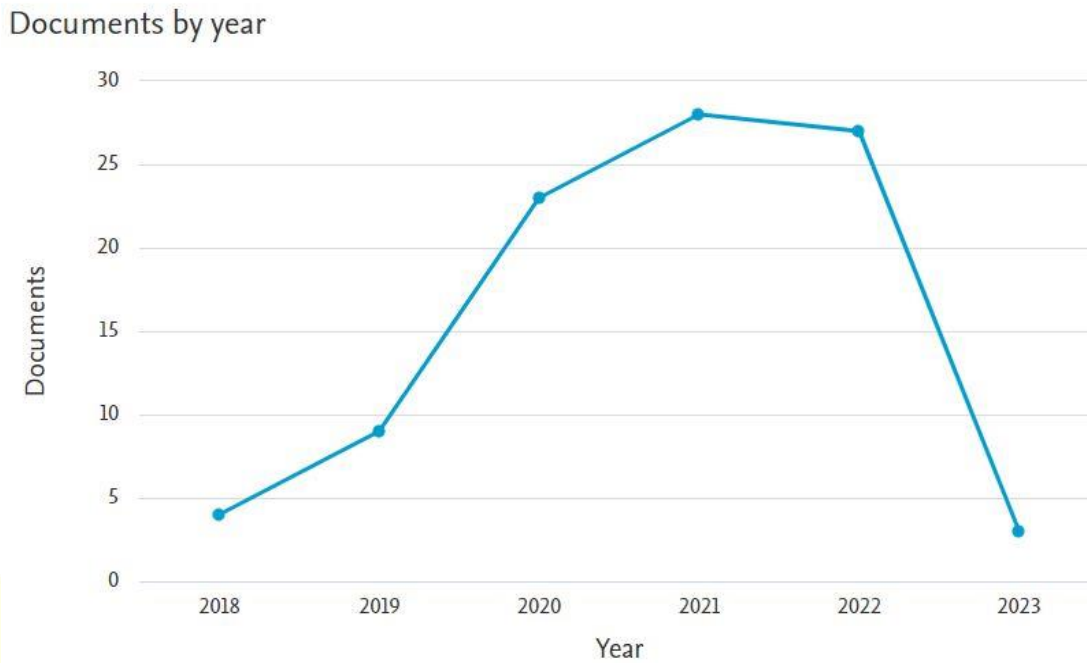


Fig. 2: Documents per year.

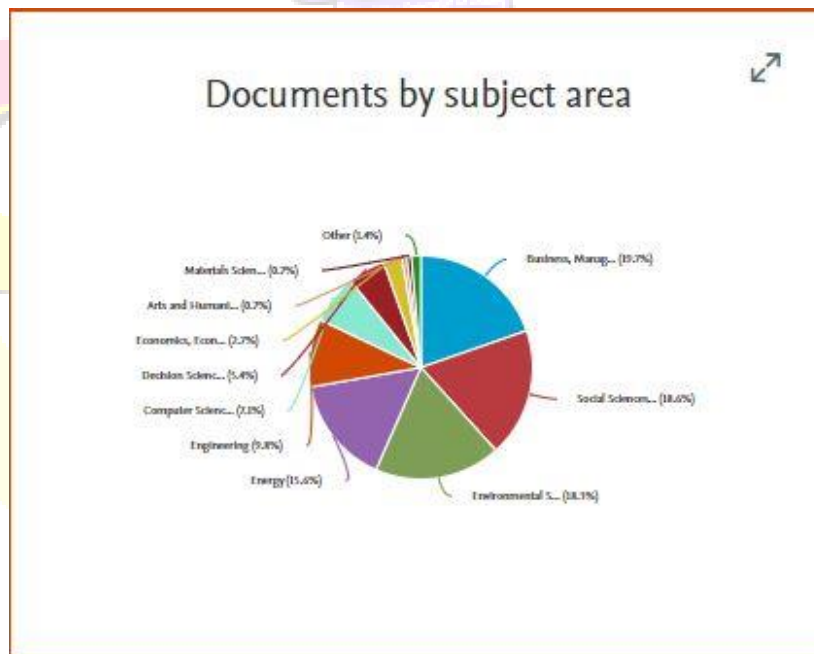


Fig. 3: Documents by subject area.

DISCUSSION OF OBJECTIVES

The Concept of Green HRM

Green refers to environmentalism. In the context of Human Resource Management (HRM), the term "green" or "greening" has four key meanings:

1. Preservation of the natural environment: refers to safeguarding the world's land, forests, plants, animals, and other natural phenomena from harm, loss, or negative change.
2. Conservation of the natural environment: involves being mindful and responsible in the use of natural resources to ensure their longevity for future generations.
3. Avoidance or minimization of environmental pollution: involves preventing contamination of water, air, and atmosphere through harmful and toxic substances and waste. This aims to protect the planet and its inhabitants.
4. Generation of gardens and natural-like spaces: involves creating parks and spaces with plants, trees, and grass.

Therefore, it can be argued that employees, whether they are managers or non-managers, play four roles in becoming a green employee. They are preservationist, conservationist, non-polluter, and maker. The role of preservationist is to keep the natural environment in its original form and protect it from harm, loss, or negative change. (Opatha, 2013).

The role of a conservationist in Green HRM involves being cautious in the use of natural resources to preserve them for future generations. A non-polluter is responsible for avoiding the contamination of water, air, and other environmental resources, and acts as a guardian of the planet. A maker creates parks and natural-looking spaces with plants, trees, and grass. The term "nature-lover" or "eco-activist" encompasses all four roles, and a green employee is considered to be someone who is committed to preserving and protecting the environment.

Why Green?

The rapid destruction of natural resources is a prevalent issue. Both governments and organizations are heavily exploiting these resources to produce goods and services for a growing population, leading to an unsustainable level of consumption. Some individuals prioritize their own wants over the needs of future generations, resulting in harmful practices such as pollution and waste disposal. This has resulted in negative consequences such as deadly air and water contamination, increased frequency of natural disasters, and global warming. Ecologists advocate for a balance between human activities and the natural environment to ensure the survival of the planet. Fortunately, more and more individuals and organizations are recognizing the importance of environmental sustainability and taking steps to protect, conserve, and minimize harm to the environment. The concept of Green HRM, or making both organizations and individuals environmentally conscious, is crucial for our survival and development (Opatha, 2013).

What is Green HRM?

Green HRM encompasses all actions aimed at developing, executing, and maintaining a system that promotes the transformation of an organization's employees into eco-friendly individuals. This aspect of HRM focuses on the creation of Green employees in order to achieve the environmental goals of the organization and contribute to environmental sustainability. Green HRM involves policies, practices, and systems that encourage employees to adopt eco-friendly practices for their own well-being, society, and the environment, as well as for the benefit of the business. The goal

of Green HRM is to foster and maintain an eco-conscious mindset in each employee, leading them to make a positive impact through their role as preservationists, conservationists, non-polluters, and makers. (Arulrajah, A.A.; Opatha, H.H.D.N.P.; Nawaratne, 2015).

Why is Green Human Resource Management Important?

The importance of Green HRM is emphasized by the need for Greening. Greening is crucial for the following:

1. To reduce or eliminate the impact of global warming.
2. To reduce or eliminate natural disasters caused by the excessive and harmful exploitation of natural resources for production and consumption.
3. To reduce or eliminate health problems caused by pollution.
4. To protect animals and other forms of life.
5. To maintain a harmonious balance between plants, animals, humans, and the environment.
6. To ensure long-term survival of humanity and businesses. These are the general reasons for Greening.

Green HRM is necessary to achieve environmentally friendly products and operations, effectively manage corporate environmental programs, and overcome the challenges of implementing these programs. Effective policies in areas such as recruitment, performance appraisal, training and development, employee relations, and reward systems can align employees with a company's environmental strategy and play a critical role in successful environmental management (Ren, 2018). Employees play a crucial role in determining the success or failure of an organization's eco-activities. Green Human Resource Management (Green HRM) is not only important for the organization but also for each individual employee. As employees have both work and personal lives, they serve as employees at work and consumers in their private lives. Encouraging environmentally friendly behavior in both domains leads to a significant individual contribution to successful corporate management and promotes environmental sustainability. (Pham, 2019).

Practice of Green Human Resource Management

To effectively implement green HR and reap its benefits, it is crucial to enhance employee awareness of green energy management and emission reduction and cultivate a green environment. Drawing on existing literature and HR theories, companies can enhance their environmental performance through green HR practices by incorporating six traditional HR modules such as recruitment, training, performance management and evaluation, salary and benefits. (Uddin, 2020).

Recruitment and Selection

Recruitment is a fundamental aspect of HR management, as it plays a crucial role in identifying qualified candidates for open positions and attracting top talent for the growth of the company. Many organizations, particularly multinationals, view green HR practices as part of their corporate branding to attract environmentally conscious young employees. Meanwhile, job seekers tend to consider a company's values when making their choice, and a strong reputation for environmental protection can give organizations a unique advantage in the recruitment process (Rani & Mishra, 2014).

To incorporate green and sustainable development principles in HR practices, companies can include these issues in job descriptions and align them with the organization's environmental and cultural values. New hires can be provided with information on the company's sustainable development policies and commitments. In recruitment interviews, questions can be framed around the company's green initiatives to gauge the interest and capabilities of potential candidates (Malik, 2021). Jobs in recruitment should clearly embody the principles of sustainable development, which will encourage employees to engage in environmental management, continuously expand their environmental knowledge, and attract employees with environmental expertise, particularly for roles that directly impact environmental performance. Companies with a strong environmental focus are more likely to attract employees who share similar values and retain them, giving the company a competitive edge in the market and attracting environmentally conscious customers, suppliers, etc. This will help reduce staff turnover and create a positive work environment (Balanagarajan & Gajapathy, 2018).

Training Development

When organizations seek strategic or organizational change, training is often seen as a valuable means to achieve it, and environmental training is considered a key HR practice in realizing and managing the company's environmental goals. Integrating green issues into employee socialization (Sakka, 2018), environmental training can increase employees' environmental awareness and build their core environmental protection skills, leading to more environmentally friendly behavior and fostering a harmonious relationship between the company and the environment. The training should be structured and phased (Malik, 2021), with a focus on all employees and departments, including top management. The training should encompass environmental protection systems, policies, and cultural aspects such as the company's vision and mission, as well as environmental management skills. The training should aim to improve employees' environmental knowledge, skills, and professional understanding, including their implicit knowledge of environmental management and policies, and can include specialized training sessions for managers. The training should be conducted in a sustainable manner, incorporating green principles in its content, such as focusing on corporate social responsibility, and its delivery methods, such as distance learning, reducing energy usage and waste, and promoting green behavior. Though the impact of a single employee's behavior may be small, collective action by all employees can significantly impact the company's green development (Balanagarajan & Gajapathy, 2018).

Performance and Compensation

The use of compensation as a motivator for employees is crucial and often linked to their performance. Companies can align their performance evaluation with their green objectives, by incorporating environmentally friendly metrics into their appraisal system. Rewarding employees who exhibit environmentally responsible behavior, either through eco-friendly actions at work or beyond, can be achieved through financial incentives or other forms of recognition. For instance, U.S. companies often use recognition awards to encourage green behavior and offer employees opportunities to participate in environmental activities. Providing incentives for employees who provide feedback on the company's green efforts, or for those who possess green skills, can also enhance the effectiveness of the company's green initiatives.

Employee Relations

To achieve this, enterprises can carry out various activities such as green staff training, green salary incentives, and green environmental protection activities, and create a good green working atmosphere. In addition, enterprises can also establish a green communication mechanism, provide information and guidance on green environmental protection policies, and encourage employees to communicate and exchange ideas on environmental protection. In this way, employees can feel the company's commitment to environmental protection and recognize the importance of environmental protection, which will further enhance their participation in green work (Rubel, 2021). To boost resource utilization efficiency and enhance corporate environmental performance, companies can encourage employees to adopt green transportation, host low-carbon events and contests, and foster the growth of environmentally friendly businesses. For firms with a decentralized structure and democratic culture, delegating responsibilities appropriately will increase employee engagement and motivation in green management and practices, and result in wider participation in environmental protection initiatives, as well as drive innovation in green technology. (Karande & Bihade, 2018).

Green initiatives for HR

The Human Resource Management (HRM) system encompasses a range of functions, operations, and processes aimed at attracting, developing, and retaining an organization's workforce. Typically, HR practices are structured to align with the company's culture and business objectives. Over time, the green initiatives outlined in the HRM manifesto can be seen as a component of corporate social responsibility. (Zelazna, 2020). Corporations are incorporating and integrating green initiatives into their operations with the help of their human resources. Management is ensuring that their HR departments are implementing appropriate green HR practices. To establish an effective corporate green management system, some experts suggest it is crucial to cultivate a significant level of technical and management expertise among all employees in the organization. To gain a competitive edge in the business world, organizations globally are adopting and striving to implement Green HRM practices (Sowjanya, 2019). The full implementation and integration of Green HRM in the workplace is not challenging but requires a change in management and staff perspectives on current HR practices. HR environmental executives could play a key role in assisting line managers to secure the full participation of employees in implementing environmental policies, by fostering support and building a network of problem-solvers willing to drive change. There are numerous issues related to Green HRM that HR departments must take into account before launching green initiatives and cannot be fully discussed in one paper. Therefore, this section of the paper will briefly touch on some of the most crucial green initiatives for HR departments. (Saifulina, 2021).

Green building

More and more organizations globally are opting for green buildings as their workplace or office over conventional offices. Green buildings comply with specific standards that minimize the depletion of natural resources used in construction, making it a rapidly growing trend. Additionally, they feature elements related to eco-friendly practices such as energy efficiency, use of renewable energy, and stormwater management. In recent years, there has been a surge in the adoption of green buildings by businesses. The significance of green buildings in addressing environmental challenges has become increasingly recognized in the business world. They can

also help businesses save costs, as they are constructed using low-cost materials and engineering. The implementation of company-wide sustainability programs by Fortune 1000 organizations has heightened the demand for workspace in green or sustainable buildings. (Ren, 2018).

Paperless office

Previously, most office work was done on paper, but with the advent of information technology, paper usage has declined. E-business and education have revolutionized office processes, making them increasingly paperless. The utilization of paper in the office is either reduced or eliminated by digitizing essential official documents and other paperwork into automated processes. (Saifulina, 2021). The digitization technique significantly lowers paper usage and the associated costs for activities such as copying, printing, and archiving, as well as the time spent searching for physical documents. Additionally, reducing paper consumption directly contributes to the conservation of natural resources, minimizes pollution, and reduces the waste of water and energy.

Conservation of energy

Energy efficiency in the office has the potential to greatly impact the environment. To provide more efficient and eco-friendly services, many offices worldwide have introduced various energy conservation measures. The HR department of Sky UK has initiated a program where employees are encouraged to switch off computers, TVs, and lights when departing, utilize 100% renewable energy, and implement solar lighting. Other UK organizations' HR departments are highlighting their travel policies that encourage carpooling and increased use of public transportation (Ahmad, 2015). HR technologies, including e-HR, are believed to have the potential to aid both management and employees in monitoring their carbon footprint. Companies are also promoting the widespread adoption of Energy Star light bulbs and fixtures, which consume at least two-thirds less energy compared to traditional bulbs and fixtures.

Recycling and waste disposal

The act of recycling involves transforming waste into valuable new items, conserving raw materials, saving energy, and reducing the amount of waste sent to landfills. Companies are implementing recycling programs as part of their green initiatives to promote sustainability and environmental conservation. HR specialists play a crucial role in developing and monitoring these programs. By embracing the three Rs of sustainability - Reduce, Reuse, and Recycle - the corporate world is making a concerted effort towards fulfilling its overall social responsibility towards the environment. (Bhandary, 2021).

MANAGERIAL IMPLICATION

This study has practical implications for managers and organizations in deciding whether or not to adopt Green HRM, and if so, what specific green practices are the most significant. It may also provide new ideas to HR managers unfamiliar with Green HRM, potentially leading to greater adoption of such practices and a positive impact on the environment. Results showed that green recruitment and selection, as well as green training and development, were crucial for success in Green HRM. This information is useful for managers in prioritizing green practices during implementation. The "green" movement and Green HRM are still in their early stages, but organizations are becoming increasingly aware of the importance of environmental issues and are

incorporating sustainable HR practices. Areas of focus include waste management, recycling, reducing carbon emissions, and using and producing eco-friendly products.

Employees who have a strong commitment to the environment are more likely to be satisfied with environmentally conscious companies. The effects of Green HRM practices are multi-faceted and need to be continually monitored for a complete understanding of their impact on HRM. Green HRM is aligned with the three pillars of sustainability: environmental, social, and economic balance, and HR managers play a critical role in educating employees and promoting awareness about Green HRM and sustainable development for the preservation of natural resources for future generations.

CONCLUSION

Green HRM is an HR approach focused on promoting environmentally responsible practices within an organization. Adopting this strategy can raise employee awareness of ecology and lead to more sustainable practices. Although green HRM is still a relatively new concept, it has the potential to advance the entire HR system and help companies gain a competitive advantage (Ren et al., 2018). Further research is needed to fully understand the effects of green HRM, including antecedent variables, mechanisms, and outcomes. Nevertheless, the implementation of green HRM can help companies establish a green image and support sustainable economic and social development. Successful companies demonstrate the significance of green HRM. The goal of green HRM is to foster knowledge innovation, conserve non-renewable resources, and promote sustainable development by changing attitudes, enhancing knowledge, and improving skills.

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GREEN ENTREPRENEURIAL OPPORTUNITIES IN ENVIRONMENTAL PHOTOGRAPHY FOR SUSTAINABLE DEVELOPMENT IN NIGERIA

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ABSTRACT

Nigeria is a country which has the abundance of human and natural resources, including skills and talents which are needed to maximize her green entrepreneurial opportunities. This study explores the green entrepreneurial opportunities in environmental photography for sustainable development in Nigeria. It highlights the fact that recognizing and maximizing the green entrepreneurial opportunities in environmental photography is a climate change adaptation and mitigation strategy to ensure sustainable development in Nigeria. This study is so important as climate change poses an immediate and long-term threat to our environment, our people and our planet. This study further identifies environmental photography as one of the veritable tools for climate change education. It further highlights the socio-economic, psychological, and health benefits of environmental photography in Nigeria. It further explores how environmental photography and climate change education can work together towards achieving sustainable development in Nigeria. It concludes by identifying the innovative ways of enhancing green entrepreneurial opportunities in environmental photography across various communities, cities and campuses in Nigeria.

KEYWORDS: *Climate Change, Education, Green Entrepreneurship, Environmental Photography, Sustainable Development.*

INTRODUCTION

Photography has been known for centuries to be a powerful instrument of communication. When employed in communicating environmental issues of concern, it can elicit varied reactions. These reactions may include empathy, pity, awe, fear or skepticism about the issues projected in pictures (Corbett, 2006; DeLuca, 1999). Photographers have long used the camera to bring to light issues afflicting people, places, and spaces. Past nature photographers captured the pristine and beauty of land and nature, they conveyed a world that needed to be preserved (Alinder, 1996; Blewitt, 2010). Outside of the traditional media (e.g., newspapers, television, radio) and politics over environmental issues, a growing group of photographers have recently cultivated media partnerships and alliances with specialized entities to tell stories through niche media channels and emerging media platforms (e.g., email, blogs, websites, podcast, social media) (Archibald, 2009a, 2009b; Blewitt, 2010; Braasch, 2002; Blue Earth, 2013). “An environment is something that is external to a living being and it is simply all the physical, chemical, and biological factors surrounding it. This includes all living and non-living things”(Ambrose,2021). Environmental photographers use photography to demonstrate the harm society places on open spaces and all Earth’s inhabitants. Since the turn of the century, these photographers have documented the impact of our actions on the environment such as global warming, loss of open spaces, drought, impoverished human life, endangered animals, rising sea levels, deforestation, over-development of land, and other threats to the environment(Seelig,2015). Nature and environmental photography consist of strong images of the natural world, ranging from plants, animals, ecosystems, land, water, and remote cultures. Different, however, is the purpose behind constructing such photos.

Nature photographers capture the beauty of the natural world, while environmental photographers show the “damage, human impact, pollution, solutions to these problems and in a sense a warning cry about the impact of humanity on our earth as well as the power of the natural world” (Seelig,2015). Nature photographs reveal the aesthetics and beauty of all that inhabits the natural world, whereas environmental photographers seek to protect nature and all the inhabitants of Earth. Environmental photographers certainly depict the beauty in the natural world, but it turns into something much more(Ambrose,2021). Environmental photography is a diverse niche covering many topics including plastic pollution, waste management, etc. and plays a vital role by helping to draw attention to the issues our world has to face every day. Photography of natural settings can inspire feelings of wonder. Similarly, photography of settings of plastic wastes and plastic pollution both in the terrestrial, celestial and aquatic environment can inspire awe, ecstasy and a sense of urgency towards eradicating plastic pollution. The trend of environmental photography has grown along with wider consideration for environmental concerns, but people are drawn to the practice for many different reasons(Adobe,2021)In this study, we will have a look at what is environmental photography, its purpose, importance and its green entrepreneurial opportunities for sustainable development in Nigeria.

METHODOLOGY

This paper examined current progress with “Green entrepreneurial opportunities in environmental photography for sustainable development in Nigeria” through existing literature review and data collection from relevant agencies. The main purpose of this research work was to survey theoretical backgrounds and previous studies on the above subject matter and the current progress with the implementation of green entrepreneurship through environmental photography for sustainable development in Nigeria.

RESULTS AND DISCUSSION

Climate change has been described as an existential threat to human well-being. Globally, it affects the social and environmental determinants of health: clean air, safe drinking water, sufficient food and secure shelter. The effects of climate change are far-reaching and include heat waves and severe weather, deteriorated air quality, displacement and migration of vectors resulting in increase of a range of diseases related to water and ecological factors. Increasing incidences of mental health issues are being recorded and identified as a consequence of environmental change(Lu, 2016; PAHO, 2013). Climate change is a global challenge which we must of necessity tackle with urgency for our sustainable development in Nigeria (Anabaraonye, Okafor & Hope, 2018).Our climate is changing and impacting every aspect of society and livelihoods. How do educators convey these messages? They can achieve this through sensitization and awareness creation or through classroom instructions(Orji, Bichene & Obi, 2022).This sensitization also includes the use of newspapers, magazines, television and social media. From any of these media, pupils and students and the ordinary people get to know and become empowered on knowledge about their environment and how to protect it. Education continues to be an instrument for effecting desirable behavioural change and removing ignorance about events and happenings in our society.

Awareness of climate change, adoption of climate change mitigation measures, is low among many citizens in Nigeria especially in rural areas. Climate change education is to ensure that people understand issues of global concerns (Anabaraonye, Okafor & Hope, 2018). The intricate nature of the global climate as an interconnected system, comprising earth and socio-ecological systems, necessitates critical enquiries coupled with reflexive and transformative educational methods (Vogel et al., 2015). Educated people are more aware of the risks climate change poses and are better equipped to make informed decisions about responses at local, national and international scales (Luetz and Beaumont, 2019). Climate change education tailored to different target groups aims at creating awareness of climate change and fostering the willingness to engage in climate change mitigation, adaptation, and transformation, thus fostering a development towards a low-carbon society (González-Gaudiano and Meira-Carrea, 2010). The issue of climate change affects every society. Communities, cities and campuses in Nigeria need to be well informed about these climatic events and also know about how to contribute to mitigation efforts. How do educators explain global warming, land degradation, air, water and soil pollution? Environmental photography has proved potent in bringing about this learning and elaborate explanation among both children and adult learners.

UNDERSTANDING ENVIRONMENTAL PHOTOGRAPHY

Environmental photography refers to photographs of the natural environment for artistic, research, or monitoring purposes (Encyclopedia, 2019). “Environmental photography can be done and will be helpful for various reasons such as research, monitoring the environment, creating awareness, sending out a message to the public, or purely for artistic purposes” (Ambrose, 2021). Environmental photography deals with documenting and introducing our surroundings. It's often a tool for raising awareness of important environmental and conservation issues like climate change (Jakobovits, 2022). “Environmental photography can seem quite confusing and challenging for some photographers but it is easy to photograph an environment once you know the importance and the story behind it. It can overlap most genres of photography and hence can be done by anyone who has some awareness and interest about their environment. One can easily become a photojournalist, landscape photographer, wildlife photographer or a research person, conservationist, etc., and capture environmental photographs” (Ambrose, 2021). An environmental photograph is a photograph that describes an environment, its happenings, scenes in and around it and it can be photographed in many ways and for many reasons. To explain in the simplest form, any photograph that you capture of an environment is called environmental photography, but make sure it is meaningful, addresses an issue, tells a story or gives a message. Environmental photography is most often used as a tool to raise awareness and educate humans on the impact they cause on the environment. It plays a huge role in conservation and one of the biggest issues right now, which is climate change. Being a diverse genre, it helps to draw the attention of the audience across the planet to the issues the world faces every day. Climate change poses an immediate and long-term threat to our environment, our people and our planet. Environmental photography may be beneficial if the presentation is one that allays fears, help people relax and keep them hopeful. With environmental photography, more people can be helped to believe this “myth” called climate change and its associated concepts. Information about ecosystem conservation can enhance adaptive behaviours that benefit the environment and human. There is growing evidence that many communities have experienced some climate disasters that threaten the well-being of people and the environment. The resulting climate shocks and environmental changes are adversely impacting the economic livelihoods, health and water and food security of the region's most vulnerable

populations. Environmental photography can be innovatively used in mitigating the negative impacts of climate change in Nigeria. It is a veritable tool which can be used to document photos of environmental degradation scenes across institutions and communities in Nigeria. Another use of environmental photography has been to document the effects of climate change on natural features. A well-known example is the series of pictures taken of various glaciers in the United States, Canada, and elsewhere. The pictures document the retreat of the glaciers as a consequence of a warming environment, and are evocative evidence of the reality of global warming(Encyclopedia, 2019).

Environmental photography encompasses any presentation and documentation on the environment using photographs to communicate environmental concerns more vividly. Environmental photography focuses on education about the environment using visuals as instructional media and serves as a method for educating people about significant environmental concerns. Photographs can be in form of illustrations, drawings or paintings . The teacher or instructor can use these photographs in many ways to concretize the idea to the learners. According to Imogie, 2002, Photographs help the teacher to ;

- a) illustrate the lesson.
- b) to record information,for example, information taken during outdoor or field trip.
- c) to understand the write-up in text books ,newspapers and magazines.
- d)to test and evaluate what has been taught,
- e)to stimulate creative work such as telling, writing or composing stories, poems and other writings or oral work.

GREEN ENTREPRENEURIAL OPPORTUNITIES IN ENVIRONMENTAL PHOTOGRAPHY IN NIGERIA

Anabaraonye et al(2022) defined green entrepreneurship as that “entrepreneurship that seeks to solve environmental problems while generating income for sustainable economic growth”. Green entrepreneurship education involves the strategic training and enlightening of individuals, communities and campuses on the role of green entrepreneurship in achieving sustainable development(Anabaraonye et al,2022).Unemployed and under-employed youths in Nigeria can be gainfully employed through the green entrepreneurial opportunities in environmental photography thereby helping to eradicate poverty and enhance sustainable economic growth in Nigeria. Green entrepreneurship education across communities cities and campuses is vital to enhance the effectiveness and efficiency of entrepreneurs and systems for sustainable economic growth and development in Nigeria. As Ogbonna and Anosike (2018) explain, "green entrepreneurship is not just about creating sustainable businesses, but also about fostering a culture of sustainability that can have a positive impact on the wider community" (p. 103). Green entrepreneurship education is therefore very important for establishing business support and laying a structure for entrepreneurs who desire to manage sound businesses with a special focus on environmental and social impact(Anabaraonye et al,2022).Environmental photography which is a form of art just as poetry and music, can be used innovatively and therapeutically in climate change and green entrepreneurship education across communities, cities and campuses in Nigeria(Anabaraonye et al,2020).Environmental protection, ecosystem conservation and green lifestyle are some of the trendy issues of life globally. Hence, the quest for a green economy for sustainable development worldwide, should turn on the entrepreneurial interest of many especially the youths towards green entrepreneurship in Nigeria. Green entrepreneurs are perceived to have interest in environmentally

friendly activities and practices that maximally protects the environment. There is need for continuous sensitization and awareness on adoption of positive attitude towards ecosystem conservation and climate change mitigation behaviours(Orji,Bichene,&Obi,2022). Environmental photography can be used innovatively and effectively in Environmental education programme across various communities, cities and campuses in Nigeria. According to Babatunde(2009), a well articulated Environmental Education programme is capable of among others in;

- i) Improving the understanding among the general public of the natural environment and the relationship between man and his environment.
- ii) Developing the necessary skills and expertise needed to address environmental challenges.
- iii) Fostering attitudes, motivations and commitments to make informed decisions and take responsible environmental actions.
- iv) Facilitating greater involvement that are targeted at improving, maintaining or restoring of natural resources and environmental quality for all.

Going by the above goals, Environmental photography specifically presents a green entrepreneurial opportunity in the positive modification of behavior on climate change matters. Through incorporating photography in environmental education, salient information about the negative impacts of human activities on the ecosystem and the possible solution to the people using pictures or videos of life events and occurrences are clearly expressed. Activities supporting ecosystem conservation, and paths to meeting some of the agreements entered into by the Nigerian government for climate action such as REDD+, can be presented to citizens by innovatively utilizing the power of visual effects of environmental photography. This is with the view to modify people's intention, elicit their empathy and thereby in general, encourage sustainable lifestyle, livelihoods and development.

Some green entrepreneurial opportunities in environmental photography in Nigeria could take the form of:

1. Documentary journalism which deals with facts and real life events. These real life happenings can be captured in videos or photos like droughts, land slides and flooding with associated devastating effects on humans, plants and animal species. The purpose of a documentary is to inform ,educate and make clearer sense of some ambiguous situations in one's environment or elsewhere. People earn a living from this type of journalism.
2. Photojournalism: This is the process of story-telling using the medium of photograph as your main story telling device . In photojournalism, images created using cameras are used to report events whether in the newspaper, magazine, television or any other media of mass communication.
3. Environmental conservation activism using environmental photography.

WHAT ARE THE BENEFITS OF ENVIRONMENTAL PHOTOGRAPHY?

The Adobe Communications Team(2021) enumerated the benefits of environmental photography as follows:

- A) **Showcase natural beauty:** One of the most common reasons for pursuing environmental photography is the simple desire to capture and display how beautiful nature is — whether it's landscapes, plant life, animals, or even people interacting with their environment. If you're an amateur photographer just looking to bring more green to your social media handles hoping to reach a wider audience, there are endless places to find Mother Nature showing off.
- B) **Expose environmental issues:** Environmental photography is a powerful conservation tool. There are many ways you can raise awareness about the importance of protecting our environment, but the most popular strategy is often through showcasing natural beauty. Environmental photography can assist in demonstrating a visible problem. For example, you might depict litter negatively impacting the environment — or create side-by-side images that demonstrate the effects of climate change over time.
- C) **Research and monitor:** Environmental Photographers are famous for their independence. But if you hope to have an impact on a specific issue, finding teams already engaged in addressing it can reduce the chance that you're simply duplicating someone else's work. Reach out to non-profits and research institutes to see how you can support their ongoing efforts to document and monitor changes in a specific region or environment.
- D) **Support your own personal growth:** Not everyone picks up a camera to fight climate change — and that's okay. Photography can serve as a much-needed creative outlet or a means of discovering a new community. Environmental photography can also help you educate yourself about the environment, and give you an opportunity to spend more time in nature, which can support your mental and physical health.

Furthermore, Socio- economically and psychologically, benefits of environmental photography may include;

- E) Social awareness about impacts of climate change in different parts of the country and how people are adapting. This can generate business ideas that lead to production or trading in such items that enhance adaptation.
- F) Awareness about opportunities for livelihoods in green businesses..
- G) Enhanced awareness of the opportunities in green entrepreneurship in Nigeria and beyond.
- H) It can also be used to create awareness and solicit financial support from government, non-governmental organizations and multilateral organizations like the World Bank Group, United Nations Environment, etc. towards mitigating the negative effects of climate change in Nigeria.

RECOMMENDATIONS

As an aspiring environmental photographer, there are many ways you can pursue your interests and develop your photography skills which include:

- a) **Do research:** Carefully research factors such as the subject matter itself, the surrounding environment, local regulations, and local cultures before pursuing environmental photography. You should also have a good base knowledge of best practices for avoiding any negative impacts on the area where you are photographing.

- b) **Be specific:** If your goal is raise awareness of environmental concerns, try focusing your lens on a particular issue. The forces that threaten the world's ecosystems are sprawling and complex. Pursuing them all is a shortcut to overwhelming you and your viewers. Focus on building a clear and concise narrative around a specific issue, location, animal, or ecosystem.
- c) **Prepare in advance:** When it comes to environmental photography, it is particularly important to ensure that your camera and other gear are prepped and up to the job. Profound natural moments can be fleeting, and you don't want to waste time fiddling with your equipment or worrying about whether it will hold up under harsh conditions.
- d) **Capture the moment:** To ensure that you capture the moment as authentically as possible, get familiar with smart camera tools. Environmental photography is often candid by nature, and therefore you can't rely as much on positioning and other elements of setup.
- e) **Tell a story:** Ideally, even static shots should include dynamic elements to tell a story. You may want to take it a step further and take panoramic shots or full videos to tell an even larger story. These methods can be particularly useful if you are capturing images for a photojournalism project or a documentary.
- f) **Edit and enhance carefully:** While it is important to avoid misrepresentation of environmental elements for ethical reasons, editing and enhancement options are important to fully convey the details of your images. More significant changes like adding effects or removing an element of the photo can also sometimes be necessary, but it's a best practice to ensure that you're doing it for a necessary enhancement or storytelling purpose, and not to substantially distort reality.
- g) **Share your work:** Once you have shot and edited your photos, you'll need to develop a system for effectively organizing and sharing them. There are even options available for editing and sharing a photo through a single app should you want to share your photos as you take them. Such options can be especially helpful for people who post often to their blog or social media.

CONCLUSION

Through this study, it is clearly seen that green entrepreneurial opportunities abound in the environmental photography industry which should be recognized and maximized for sustainable economic growth and development in Nigeria. There is also need for further research on the subject matter of environmental photography which should be undertaken by researchers in the field of environmental sustainability across various communities, cities and campuses in Nigeria.

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Effect of Knowledge Management on Innovation: An Empirical Study of Ibeta Manufacturing Industry, Nnewi, Anambra State, Nigeria.

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Abstract

Knowledge management has gained prominence in recent times and is said to improve organizational performance in the company of innovation. Knowledge working with innovation allows organizations to be part of the rapid competitive and environmental shifts. This requires the development of knowledge as it builds the pathway of innovation since most firms find it troublesome to effectively utilize their existing knowledge towards innovations. This study aims at

examining the effect of knowledge management on Innovation: An empirical study of Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria. The study adopted the descriptive survey design. The population of the study was 35 selected employees of the firm under study. The instrument used for data collection was a questionnaire. Pearson's product moment correlation was used to analyze the research hypothesis. Owing to the fact that the population of the study was small, the researcher decided to use the entire population as the sample size. The findings revealed that knowledge sharing has significant effect on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.. Also, knowledge application has significant effect on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.. Conclusively, knowledge management with innovation as a contributing factor is the key resource needed if an organization intends to operate at a level that is equal to no other. The study therefore recommends that an effective system should be put in place to ensure that relevant knowledge management that will boost organizational innovation is shared and applied.

Keywords: Knowledge management, innovation, knowledge sharing, Knowledge application, Ibeto Manufacturing Industry, Nnewi.

1.1 Introduction

Manufacturing sectors are the engine of economic growth and poverty reduction all over the world (Darroch,2015). More specifically, Manufacturing firms are known to have the power to create jobs in developed and developing countries, contribute to economic growth by expanding the tax base and drive innovations (Hewitt-Dundas, 2016). Given their economic importance, Manufacturing firms are supposed to provide innovative products and services that satisfy customers to remain competitive. Thus, with the increase of players in the market, businesses need to be unique and innovative to provide opportunities for new markets and new inventions and increase interest based on innovation to enhance growth (Huang, 2011).

In light of the knowledge-based theory, Lawson and Samon (2011) related knowledge resources to innovation, and argued that they determine the capacity of the firm to innovate. Further, Imhanzenobe, Adejumo and Ikpesu (2021) noted that without knowledge, there could be no innovation. Similarly, Andrevia and Kianto (2011) argued that the presence of a set of knowledge allow a firm to innovate by bringing new products and processes, or improve the existing ones. Hence, effective management of that knowledge is needed.

In the contrast, Inability to properly create, share and apply knowledge strategies between the employees and customers to give the organization a preferred image has been a problem in industries. According to Donate and Guadamillas (2011), manufacturing industries in Nigeria are faced with the challenge of customer shortage because of unsatisfactory management of knowledge within the organization. Inability to create knowledge according to Inkinen, Kianto and Vanhala (2015) is one of the utmost problems faced by the Nigerian economy. This problem turned out to be more noticeable by globalization and all that go along with it.

Previous scholars have come up with critical factors which are likely to influence innovation in manufacturing firms. For instance, Calantone, Cavusgil and Zhao (2012) related innovation to firm size and age. Other studies associated innovation with such factors as government support and cooperation with top management support and leadership style and organizational culture (Akhavan and Hosseini,2016). However, among the above mentioned studies, none of them has emphasized the effect of knowledge management as a contributing factor to innovation.

Some studies have been conducted to show that KM contributes to innovation in Manufacturing firms. In this context, KM was related to the internal sharing and application (Du-Plessis,2017).It should be noted that none of those studies has looked at KM through the constructs of knowledge sharing and knowledge application. Thus, the main purpose of this study is to examine the extent to which knowledge sharing and knowledge application predict innovation with focus on Ibeto Manufacturing Industry, Nnewi, Anambra State.

1.2 Statement of the Problem

Organizations with the competence to use and broaden the knowledge within the firm are considered to be better prepared for the rapid competitiveness and environmental shifts (Akpa, Babatunde, Asikhia and Nnorom,2020). Thus, organizational learning might be the most strategically treasured dynamic capability as the pathway of innovation depends on the development of knowledge. Companies mostly fail to utilize their existing knowledge within the organization towards innovations and how to operationalize the concept of knowledge management (Chen, Chen and Lee,2018).

Organizations that are prepared for today's rapid environmental change are capable of simulating and improving the knowledge of human resources (Chang, Liao and Wu, 2017). This shift to a fast moving business environment requires an adjustment with respect to how organizations share knowledge and apply knowledge, in order to become a dynamic organization that wants not only to process and share knowledge but rather to create and apply information and knowledge (López-Nicolás and Meroño-Cerdán,2011).

Different publications investigated different levels of this relationship. Liao, Hu,Chen and Lin (2015) discussed the importance of knowledge availability in order to reduce the complexity of an innovation process, while Hussein, Singh, Farouk and Sohal (2016) proved that the investment into knowledge and knowledge workers has a positive influence on innovation efforts. Furthermore, De Vasconcelos and De Oliveira (2018) identify that collective knowledge within an organization helps the organization to compete and thus results in increasing the innovativeness, whereas Byukusenge,Munene and Orobia (2016) specify the successful innovation on the interplay of tacit knowledge with innovation. Of the mentioned research works, only a few was conducted within the context of manufacturing sector. To counteract these limitations, this research will investigate the effect of knowledge management on innovation with the focus on the empirical study of Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.

1.3 Objectives of the Study

The main objective is to examine the effect of knowledge management on Innovation: A empirical study of Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria. The specific objectives are:

- i. To identify the effect of knowledge sharing on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria .
- ii. To determine the effect of knowledge application on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria

1.4 Research Questions

- i.What is the effect of knowledge sharing on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria?

II. What is the effect of knowledge application on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria?

1.5 Research Hypothesis

From the above research questions, the following hypothesis was formulated:

H1: There is no positive relationship between knowledge application and innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.

H2: There is no positive relationship between knowledge sharing and innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.

2.1 Concept of Knowledge

Knowledge is defined as that which must do with a familiarity, awareness or understanding of someone or something, such as facts, information, description, or skills, which is acquired through experience or education or education by perceiving, discovering or learning. It must do with that which is related to the capacity of acknowledgment in human beings (Dimitrios, Ionnis, Efstathios, Christos, Dimitrios and Labros, 2018). Knowledge is the fact or condition of processing in these mental grasp truths, facts, principles, or other objects of perception. It can be an experience concepts, values, or beliefs that increase an individual's capacity to take effective action. Knowledge is also defined as familiarity, awareness, understanding gained through experience or study and results from making comparisons, identifying consequences, and making connections, knowledge is a know-how or applied action (Rifat and Fusun, 2018). It will surprise you to know that, in this century, all jobs are knowledge work and as such all staff or workers are knowledge worker or staff. Thus, the jobs of knowledge workers are assuredly, depend more on knowledge and not manual skills. Knowledge can be acquired through data and information; is there is any difference between knowledge, data and information? Of course, in reverse order, data is said to be raw figures and facts – statistical, while information seen as processed data or a flow of message or message flow; and knowledge is defined as actionable information in the mind of individuals (Reid, 2013). Thus, knowledge is gotten from information, and it is richer and more meaningful than information. However, if you communicate knowledge or articulate it to others, whether as email, sms, speech making or as a document-written down, it stands as information. Knowledge is said to be collective understandings, stories, values, and beliefs, seen in practical activity-based competencies and key member's skills of the organization; it is built and found as conceptual understanding and key members, cognitive skills. It is also built in technology, rules and the procedures of the organization (Tece, 2017).

2.2 Concept of Knowledge Management (KM)

According to Migdali (2019), Knowledge Management is the management of information within the organization with respect to influencing three corporate building blocks, that is, Corporate Strategy, Corporate Culture and Systems. Knowledge Management is all about getting knowledge from those who have it to those who need it to improve organizational effectiveness. It is the collection of processes that govern the creation, dissemination, and utilization of knowledge. It has been in existence for a long time. It is the process or practice of creating, acquiring, capturing, sharing and utilizing knowledge. (Yesil, Koska and Buyukbese, 2013). It is also the process through which organization generate value from their intellectual and knowledge based assets. The

combination of organizational culture, strategic goals, individual needs, and expertise of its people to create an atmosphere of learning and growth (Wang and Ahmed, 2017). However, the process of systematically and activity managing and the stores of knowledge leveraged in an organization is called knowledge management (Wijekoon and Galahitiyawe, 2016). Knowledge management is the systematic management of knowledge processes by which knowledge is created (Tekin and Akyol, 2019). In one word, knowledge management, in all the definition above, is a process; though authors differ in the process of categorization. However, the process should create value for the organization. Our stand in this article is that, knowledge management is a process of creating, capturing, organizing, storing, spreading and application of it, to create organizational benefits of the three variables: Competitive advantages, innovation and growth.

2.3 Concept of Knowledge Sharing

Knowledge sharing is the exchange of employees' knowledge, experiences and skills across the whole organization (Martinez-Roman, Gamero and Tamayo, 2011). Employees share knowledge by talking to their colleagues, by helping one another and by seeking the way to get something done better, more quickly and efficiently. When members of the organization share and exchange knowledge, the level of participation in learning and knowledge creation increases, which results in the development of innovative ideas (Sheng and Hartmann, 2019).

Some empirical studies conducted in different business areas confirmed the positive relationship between knowledge sharing and innovation. For instance, Saunila (2014) investigated the effect of knowledge sharing on product innovation in Iraqi public firms. The results showed that knowledge sharing play a fundamental role in enhancing product innovation in the public sector. A similar study of Yaghoubi, Javadi and Agha-Rahimi (2011) explored the link between knowledge sharing and innovation in electronic industry of Iran. The results revealed significant effects of tacit and explicit knowledge sharing on the speed and quality of innovation. Romijn and Albaladejo (2012) study established the positive association between knowledge sharing and firm innovation capability in Isfahan R&D Scientific Small City (Iran). Given that the positive and significant relationship between knowledge sharing and innovation has been confirmed in different research settings, the researcher was motivated to concur with the effect of knowledge sharing on innovation.

2.4 Concept of Knowledge Application

Knowledge application is described as knowledge use or responsiveness. It refers to the firm's ability to apply different types of information referred to that firm (Saunila, 2016). knowledge application occurs when a firm acquires new knowledge regarding the customers' needs and applies as well as responds immediately to that information. Subramaniam and Youndt (2015) noted that a firm's adaptation is manifested by the quality and timeliness of its responds or application. Saunila (2016) argued that the faster a firm response to customer information results in the high level of customers' satisfaction.

Some empirical studies have shown a positive relationship between knowledge application and innovation. The study by Ullah., Ab-Hamid, Shahzad and Mahmood (2017) examined the association between knowledge application and innovation among 443 firms in New Zealand and found that being responsive to knowledge is a vital factor to boost innovation. The studies by Ullah, Ab-Hamid and Shahzad (2017a) also revealed a direct effect of knowledge application on innovation measured by product and processes innovation. The study carried out by Yaghoub, Teymourzadeh, Bahadori and Ghardashi (2017) on 164 Iranian SMEs found that effective

knowledge application allowed organizational knowledge to be transformed into innovative products. Finally, the study by Saunila (2016) confirmed that an organization that is in a better position to respond to knowledge in time becomes innovative.

2.5 Concept of Innovation

Innovation has to do with introducing and making new types of products or services that are different from previous design by paying more attention to the quality of the new product which complements the short comings of previous outcomes (Urgal, Quintás and Arévalo-Tomé,2013). Innovation can involve the new product or service, procedure, skill, branching out into a new market, or using new material. It can also be an acceptance of a novel knowledge or idea. Innovation can generate maintainable growth which could lead to competitive advantage in both external and internal markets. It allows organizations to present new and/or enhanced products to the market earlier than their opponents. Organizations try to be inventive and creative to generate effective and efficient performance (Zafarian, Mohammady-Elyasi, Farokh and Movahedy=Pur,2012).

Innovation types include but not limited to process, product or service, marketing, and organizational innovation (Zurina, Hazman and Jasmine, 2011). Two types of organizational innovation most mentioned are the product or service and process. Introducing new products or substantially upgraded with respect to its characteristics or anticipated use is called product innovation. It is the modifications or novelty introduced in the product or service. Creating new services or product as well as novel ways of distributing or supplying the goods to the clients is called process innovation. It also refers to the newness and originality introduced in the technique or procedure of creating products or services (Girard and Girard,2015). Product innovations are usually client-focused and market-oriented while process innovations focus on the interior and are presented for efficiency advantages. Product innovation advances an organization's external product mix while process innovation increases a firm's interior operations mix (Lloyd,2016.).

2.6 Relationship Between Knowledge management and Innovation

The concept of innovation encompasses new technologies for production processes, new administrative structures or systems, and new plans or programs belonging to members of the organization Nonaka and Takeuchi,2016). Innovation is often associated with increased productivity that reduces the amount of physical labor required to produce goods and services, but it is not limited to the internal borders of the organization but involves interactive processes, in which organizations interact with external partners, including customers and users. The basis of innovation is organizational learning because this is the way to increase knowledge of the company (Jones and George, 2016). The more knowledge is shared among the employees of a company, the greater the capacity for innovation will be. Consequently, the exchange and dissemination of knowledge facilitates innovation (Kianto, Vanhala and Heilmann,2016). An innovation is fully achieved when it is integrated and combined with prior knowledge. However, innovation in the knowledge-based economy cannot mean the mere reproduction of knowledge. The innovation process is commonly equated with a permanent search for the use of new and unique knowledge. We can reasonably speak of knowledge management and innovation; as a result of the effective management of organizational knowledge (Zheng, Zhang, Wu and Du,2011). The innovation process relies heavily on knowledge, particularly since knowledge represents a much deeper domain than simply that of data, information, and conventional logic. Innovation management and

knowledge management go hand in hand by providing a space where learning is simple and continuous. The role of KM and innovation is generally to amplify and accelerate the creation of value for the organization, even more than any strategy or business model. KM processes could positively affect innovation. Innovation has become one of the key priorities for organizations that want to achieve a competitive advantage (Gupta, Iyer and Aronson,2013). Through the codification of the acquired knowledge, its reuse, storage, refinement, and improvement, organizational innovations can be generated. In sum, derived from the analysis of the relationship between knowledge management and innovation, it is possible to point out the following:

- i. Good knowledge management encourages innovation
- ii. The knowledge required for innovation is distributed within organizations (across all geographically dislocated functions and business units) and across organizations (for example, through IT vendors, consultants, and involved companies)
- iii. A suitable KM allows continuous improvement of products, services, and cost reduction
- iv. KM processes could positively affect innovation
- vii. Through the codification of the acquired knowledge, its reuse, storage, refinement, and improvement, organizational innovations can be generated
- viii. Through knowledge management and innovation, a sustainable competitive advantage can be achieved.

A healthy organization generates knowledge and uses it. As organizations interact with their environments, they absorb information, convert it into knowledge, and carry out actions based on the combination of that knowledge and their experiences, values, and internal norms. Without knowledge, an organization, paradoxically, could not organize itself (Grant,2016).

Innovation has become an imperative in our days. Their presence is a strategic component of the development of organizations and the economic growth of nations. Organizations must be able to propose new models for doing business, modify their organizational competencies and create or provide new capabilities to their members (Magnusson, Nilsson and Valentin,2012). It is a reality that innovation has accelerated, and that competition is increasingly difficult and more global. Innovation, as a dynamic process, crystallizes due to the accumulation of knowledge that occurs through learning and interaction. Thanks to knowledge management, it is possible to detonate administrative, market, technological, and organizational innovations that favor the achievement of the organization's objectives. Innovation and knowledge creation are a virtuous circle, an indissoluble pairing (Imhanzenobe,2021).

Innovation is based on the ability to generate and use knowledge, focus it towards solving problems and introduce the solutions that emerge in the market. In this way, innovation contributes to productivity, which in turn drives competitiveness. Innovation management and knowledge management should be practices of the same process where learning is simple and continuous (Iqbal, Latif, Marimon, Sahibzada, Hussain,2019). The role of knowledge and innovation management is, in general, to amplify and accelerate the creation of value for the organization, even more than any strategy or business model. As the relationship between knowledge and innovation is wide and profuse, its attention by organizations is a necessary (although not sufficient) condition to achieve organizational objectives. Innovation, as a dimension of knowledge management, occurs through the application of knowledge and the creation of new knowledge (Springer. Gaviria-Marin, Merigo and Popa,2018).

A number of academic studies have identified a positive relationship between KM and innovation (Hoskisson, Wan, Yiu and Hitt,2019). Iqbal et al (2019) found that the use of KM techniques is a primary activity in their surveyed firms. It was reported that a significant association between the

use of KM techniques and involvement in innovations existed. However, some studies also found evidence pointing towards mixed innovation accrued from KM processes. Furthermore, a soft approach or 'humanist approaches to KM' have a significant association and positive correlation with innovation performance.

2.7 The Role of Knowledge Management on Innovation

Hewitt-Dundas (2016) noted that knowledge management has been dubbed the decade of the 2000s. Knowledge is as intellectual ideas, facts, concepts, data recorded in human memory which coming from human brain and is based on information that comes with experience, beliefs and personal values and change, and fertility decisions and act with him. Not the same person with knowledge of any other person who receives the information (Du-Plessis,2017). The growing importance of knowledge in modern times inevitably makes organizations as to the meaning of techniques such as creativity, innovation and creativity in product or process, organizational or strategic, think with the more contemplative. This issue facing the organization with challenges in the field of how to processing knowledge and its creation process Lawson et al,2011). Knowledge management, in addition to data management, is also responsible to facilitate the creation and sharing of new knowledge and techniques to manage the sharing and use of knowledge. Depending on the student physically placed where it can be divided into two types of Explicit and implicit. Explicit knowledge can be encrypted and encoded and therefore it can be easily transmitted, processed and stored and transferred in databases. This kind of knowledge can be made form and as a scientific formula or manual published between organizations. Guidelines, regulations, rules, procedures, work, Regulations, which officially organized easily transmitted among individuals explicit knowledge is taken into account. In contrast, implicit knowledge is personal and it is very difficult to formulate (Huang,2011).

2.8 Innovation capability and knowledge management process

Kianto et al (2016) stated that an organization that can better manage its knowledge resources will eventually be able to transform into a more innovative firm. Therefore, knowledge within an organization must be managed and well promoted to guarantee the effectiveness of innovation (Jones et al,2016). It is worth noting that the dominant view in the literature is that as part of knowledge management process, the knowledge sharing process is the most important for building innovation capability of organizations (Grant, 2016). As Inkinen (2015). stated, sharing knowledge creates an opportunity for an organization to maximize its ability to generate solutions that provide organizations with innovation and allow them to achieve competitive advantage, i.e. to maximize the innovation capability of organizations.

As noted by Ullah et al. (2017), knowledge sharing is primarily about how an employee shares their knowledge, work experience, information and knowhow with other employees in the workplace. It is also worth noting that, unless individual knowledge is shared throughout the organization, it will have a limited impact on the organization itself. Knowledge sharing can take place at both an individual and organizational level. At the individual level, it's all about communicating with each other so that you can do something faster, more efficiently, or so that you can learn from one another, while at the organizational level it's about capturing, organizing, sharing and reusing experience-based knowledge , which is available in the organization and shared with others within the company (Girard et al,2015). It can therefore be concluded that knowledge sharing is a process that involves the employee's willingness to communicate with

other employees in such a way as to learn from them, while the process of sharing knowledge consists of the processes of gathering and transferring knowledge. It is worth mentioning here that many researchers emphasize the importance of focusing on learning in the organization while shaping its innovation capability (Gupta et al,2013).

Wijekoon et al (2016) argued that a learning-oriented organization can increase its innovation capacity in the three ways. Firstly that it is more likely to become involved in innovative activities and to use the latest technologies. Secondly, such an organization will not miss emerging market opportunities because it has the knowledge necessary to anticipate customer needs. Thirdly, an organization that learns may simply have greater innovation capacity than its competitors, which results from the fact that such an organization constantly monitors the activities of competition on the market, and therefore knows their strengths and weaknesses, and also learns not only from their successes but also from their failures, and all this enables such a company to build high innovation capacity. Gupta et al (2013) noted that It is worth adding that the atmosphere that encourages employees to share their knowledge with others and thus to transform individual knowledge into team or organizational knowledge, which improves the knowledge resources available to the organization - can generate new ideas and develop new business opportunities, and thus facilitate innovative activities. Moreover, the accumulation of knowledge - internalization and socialization of knowledge, which facilitates the transformation of organizational knowledge into team or individual knowledge - significantly affects the innovative capacity of the company (Ullah et al, 2017).

2.9 Theoretical Framework

Knowledge-based view (KBV) theory was proposed by Grant (2002). This theory states that organizations exist to create, share, apply convert, and transfer knowledge for competitive edge (Wang et al,2017). In addition, knowledge is an elusive varied and hard to copy means which has diverse types at diverse echelons of the firm and connected with the outcomes of performance for competitive edge. The knowledge-based view of an organization talks about the concerns of the being, the limits, and the multi-person's firm internal organization. The key expounding factor is knowledge. Its nature is a vital determining factor that improves the understanding the organization and performance of firms (Teece, 2017).

The knowledge-based view recognizes knowledge as the utmost important resource of an organization where every other resource hang on (Yesil et al,2013). Knowledge-based view explains how organizations generate, obtain, process, use, guard, and transmit knowledge inside the organization and its capacity to build competitive edge for the organizational innovativeness and its stability.

The theory is pertinent to this work since the knowledge-based view theory recognizes knowledge management as the utmost key resource to accelerate any organizational innovativeness (Tekin et al,2019). Organizations are therefore obligated to distinguish the knowledge they process to comprehend what creates greater performance. An organization may have exclusive and treasured knowledge but may not be able to generate and withstand a competitive edge to improve performance unless it uses what it has effectively.

3.1 Research Methodology

The study adopted the descriptive survey design. The population of the study was 35 selected employees of the firm under study. Data for the research was collected from primary sources. The instrument used for data collection was a questionnaire. The questionnaire was structured; the

respondents were placed on a five point likert scale. Pearson's product moment correlation was used to analyze the data. Owing to the fact that the population of the study was small, the researcher decided to use the entire population as the sample size.

4.1 Testing of Hypothesis

Hypothesis one

Ho: There is no positive relationship between knowledge sharing and innovation

H1: There is a positive relationship between knowledge sharing and innovation

Correlation

		KS	IN
KS	Pearson correlation	1	.445
	Sig. (2-tailed)	***	.014
	N	30	30
IN	Pearson Correlation	.445	1
	Sig. (2-tailed)	.014	
	N	30	30

Knowledge sharing has a positive effect on innovation, since the P-value (0.014) is less than 0.05 (at 2-tailed) as can be seen in the table of pearson correlation above. This implies that knowledge sharing contributes positively to the development of innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.

Hypothesis two

Ho: There is no positive relationship between knowledge application and innovation

H1: There is a positive relationship between knowledge application and innovation

Correlation

		KA	IN
KA	Pearson correlation	1	.657
	Sig. (2-tailed)		.000
	N	30	30
IN	Pearson Correlation	.657	1
	Sig. (2-tailed)	.000	
	N	30	30

There is significant relationship between knowledge application and innovation since P-value (0.000) is less than 0.01 at (2-tailed test) as can be seen in the table above. This implies that knowledge application has effect on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria.

4.2 Discussions of Findings

From the investigation above, it was found that knowledge sharing contributed positively to the development of innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria. It further revealed that knowledge application has effect on innovation in Ibeto manufacturing Industry, Nnewi, Anambra State, Nigeria. It is important to note that for an organization to operate effectively and efficiently via the knowledge management system, knowledge sharing and knowledge application are the variables that they cannot afford to misrepresent. Yaghoubi et al (2011), Romijn et al (2012), Saunila (2014), Ullah et al (2017) and Ullah et al (2017a) noted that knowledge sharing as well as knowledge application are important for the smooth operation of knowledge management with the innovation as a contributing factor.

5.1 Conclusions

The continuously increasing pressure of competition and global markets is forcing organizations to become more innovative, with a view to increasing overall competitiveness. Innovation is one of the major outcome of effective knowledge management. This study emphasizes the effect of knowledge management as it links with innovation. The review of the literature has shown there is a clear link between knowledge management and innovation. Furthermore, knowledge activities like knowledge gathering, managing, sharing, application, reuse and retrieval play important role in bringing innovation. Innovation implies the generation, acceptance, and implementation of new ideas, processes, products, or services. It is obvious that a knowledge management is closely related to organizational innovation. Many scholars stress the importance of such an orientation to enhancing innovation capability. Manufacturing firms that rapidly shared and applied new knowledge across the organization can be able to foster innovation as compared to those organizations where innovation is absent. Additionally, knowledge management as well as innovation is the key resource needed if an organization intends to operate at a level that is equal to no other.

organizations that don't focus on this aspect.

5.2 Recommendations

Based on the analysis of the study, the researcher wishes to make the following recommendations;

- i. An effective system should be put in place to ensure that relevant knowledge management that will boost organizational innovation is shared and applied.
- ii. The organization under study should ensure its policies in relation to knowledge management and innovation are shared and applied properly, located in a central place and are accessible to all members of staff.
- iii. The government should increase funds to enable it support knowledge management initiatives with the aim of improving organizational performance across the federation.

5.3 Areas for Further Research

The researcher suggests that;

- i. A study should be conducted on the effect of knowledge management and innovation on organizational performance in a public firm.

ii. A comparative study on the effect of knowledge management on organizational innovativeness should also be conducted in service firms.

5.4 Contribution to Knowledge

This study seeks to make two contributions.

- i. Firstly, it is expected to provide empirical evidence on the contribution of KM on innovation in manufacturing firms from a developing country's perspective.
- ii. Secondly, the paper is meant to provide new insights on the relationship between knowledge sharing, knowledge application and innovation in manufacturing firms.

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Consumption Values and Street Food Patronage Behaviour in a Typical Developing Economy

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Abstract

The study focuses on investigating the nexus between consumption values and patronage behaviour of street food in a typical developing economy. Although the extant literature are gorged with studies on consumption values and on patronage behaviour, studies that investigate the nexus between consumption values and street food patronage behaviour in a typical developing economy with huge informality like Nigeria are grossly under-researched and scarcely reported. Based on the foregoing, this study investigated the effect of consumption values on street food patronage behaviour in Anambra state. In order to achieve this objective, survey design was employed and quota sampling was used as the sampling technique. 336 respondents were statistically drawn as the sample size and the research instrument was questionnaire. The validity and reliability of the manifest variables of the study were tested with Kaiser-Meyer-Olkin (KMO) measure of sample adequacy for latent construct measurement and Bartlett's Test of Sphericity for correlation among indicator variables. The formulated hypotheses were tested using multiple regressions via Partial Least Square- Structural Equation Modeling PLS-SEM. It was found out that convenience, socio-cultural norms, taste, novelty and health and hygiene have positive and significant effects on street food patronage behaviour while price has a negative but significant effect. Also, convenience has the most significant positive effect, follow by socio-cultural norms, taste, novelty, health and hygiene in that order. We conclude that the study provided empirical supports that consumption values have positive and significant effects on street food patronage behaviour. The results and findings of this study has implication for both food products policy makers and marketers in the sense that it develops a robust and comprehensive framework for improving street food marketing activities and achievement of sustainable development goal of zero hunger among others.

Keywords: Consumption values, Street food, Patronage Behaviour, Developing Economy, Anambra, Nigeria, PLS-SEM.

Introduction

Consumption values refer to the beliefs, attitudes, and goals that influence an individual's decision to purchase and consume a particular product or service (Nguyen & Nguyen, 2017). These values can vary across different cultural, social, and economic groups and can be influenced by factors such as individual income, education level, and personal values (Hossain & Kaur, 2018). In the context of street food, consumption values may play a significant role in determining an individual's patronage behavior. Understanding the effect of consumption values on street food patronage behavior can provide insight into the decision-making processes of consumers and help street food vendors and policymakers better serve the needs and preferences of their customers. Research has shown that different consumption values can have an impact on an individual's willingness to purchase and consume street food (Lascu et al., 2014).

Put pointedly, studies have shown that consumption values play a significant role in determining an individual's street food patronage behavior (Javalgi, White, Ali, & Ali, 2007; Lee & Lee, 2012). For example, individuals who place a high value on convenience may be more likely to patronize street food vendors due to the quick and easy access to ready-to-eat food (Lee & Lee, 2012).

Convenience was a particularly important factor, as street food vendors are often located in areas where people are on the go and may not have time to sit down at a restaurant (Chaudhary, 2016). On the other hand, individuals who prioritize health and hygiene may be less likely to patronize street food due to concerns about the cleanliness of the food and preparation conditions (Javalgi et al., 2007). Another study by Bourne (2014) found that individuals who placed a higher value on sustainability and local sourcing were less likely to patronize street food, as many street food vendors do not prioritize these values in their sourcing and production practices. This finding suggests that the promotion of sustainable and locally-sourced options in the street food industry may be an effective strategy for reducing patronage of unhealthy options.

Other consumption values that have been found to influence street food patronage behavior include taste, price, and cultural or social norms (Lee & Lee, 2012). For example, individuals who prioritize taste may be more likely to patronize street food vendors who are known for serving high-quality, flavorful dishes (Lee & Lee, 2012). Taste was also a significant factor, as people are more likely to patronize street food vendors that offer delicious and satisfying food (Chaudhary, 2016). Similarly, price can be a significant factor in an individual's decision to patronize street food, with some individuals being willing to pay a premium for high-quality street food and others seeking out more affordable options (Javalgi et al., 2007). Research has also found that price can be a factor in street food patronage, with individuals who prioritize value for money being more likely to purchase street food (Wang et al., 2018). Price was also a crucial factor, as street food is often more affordable than dining at a restaurant (Chaudhary, 2016).

Cultural and social norms can also play a role in street food patronage, with some individuals being more or less likely to patronize street food based on the local food culture and the social acceptability of street food in their community (Lee & Lee, 2012). For example, a study by Eves and Eves (2013) found that cultural values such as tradition and respect for local cuisine were important predictors of street food patronage in a sample of Chinese consumers. In contrast, individuals who valued tradition and familiar foods were less likely to consume street food.

There is also evidence to suggest that cultural differences in consumption values can impact street food patronage behavior. For instance, in a study of street food consumption in Malaysia, Alam et al. (2016) found that Malay consumers placed a higher value on traditional and cultural values, leading them to be more likely to patronize street food vendors. In contrast, Chinese consumers in the same study placed a higher value on health and safety, leading them to be less likely to patronize street food vendors.

Another study found that the social and cultural context of street food consumption also plays a role in patronage (Lee & Lee, 2018). In South Korea, street food is seen as a way to socialize and interact with others, leading to higher patronage among individuals who value social interaction (Lee & Lee, 2018). In contrast, in the United States, street food is often viewed as unhealthy or low-quality, leading to lower patronage among individuals who prioritize health and nutrition (Lee & Lee, 2018).

Novelty is another value that can impact street food consumption. For example, a study by Huang, Chen, and Chen (2016) found that tourists were more likely to consume street food as a way to experience local culture and try new things. Tourists, in particular, are more likely to purchase street food due to the novelty of trying local and traditional foods (Wang et al., 2018).

Furthermore, the impact of consumption values on street food patronage behavior may vary across different cultural and geographic contexts (Du et al., 2020). For example, values related to health and food safety may be more important in some cultures compared to others (Wang & Chen, 2019). Additionally, the availability and perceived quality of alternative food options, such as sit-down

restaurants or fast-food chains, may also influence an individual's decision to patronize street food (Du et al., 2020).

Put together, consumption values play a significant role in determining an individual's street food patronage behavior. Understanding the influence of factors such as convenience, health and hygiene, taste, price, and cultural and social norms and novelty can help street food vendors and policymakers better serve the needs and preferences of their customers and support the sustainability of the street food industry. Also, it can be useful for street food vendors looking to attract and retain customers, as well as for policymakers seeking to regulate and promote the street food industry.

Generally, it is clear that consumption values are a complex and multifaceted factor that can impact street food patronage behavior. Further research is needed to fully understand the role that these values play in shaping consumer behavior and to identify the most effective strategies for marketing street food to consumers and; to better understand the specific values that influence street food patronage behavior, and how these values may vary across different cultural and geographic contexts hence, this research.

Problem Statement

The effect of consumption values on street food patronage behavior is a topic of significant interest to researchers and practitioners in the food industry, as it has important implications for both street food vendors and policymakers. Despite the importance of this topic, there is a lack of robust and detailed research on the specific consumption values that influence street food patronage behavior and the ways in which these values vary across different cultural, social, and economic groups (Hossain & Kaur, 2018).

Furthermore, the relationship between consumption values and street food patronage behavior is complex and multifaceted, and it is not fully understood how these values interact and influence each other (Nguyen & Nguyen, 2017). For example, it is not clear to what extent personal values, such as an individual's concerns about health and wellness, may override other consumption values, such as convenience or taste, when it comes to deciding to patronize street food (Hossain & Kaur, 2018).

One potential problem with the current research on this topic is that it tends to focus on a limited set of consumption values, such as convenience, taste, price, and hygiene (Hossain & Kaur, 2018). While these values are certainly important, they may not fully capture the complexity of the decision-making process involved in street food patronage behavior. For example, other factors such as social influence, personal values, and cultural traditions may also play a role in an individual's decision to patronize street food (Hossain & Kaur, 2018).

More so, most of the existing research on this topic has been conducted in developed countries, with little attention given to the specific consumption values and patronage behaviors of street food consumers in developing countries (Nguyen & Nguyen, 2017). Given the diversity of cultural, social, and economic conditions found in developing countries, it is important to understand how these factors may influence street food patronage behavior in these contexts.

Additionally, the street food industry is constantly evolving, and there is a need to understand how changes in consumer preferences and trends may impact street food patronage behavior (Nguyen & Nguyen, 2017). For example, as concerns about health and wellness become more prevalent, it is important to understand how this may influence the demand for street food and the ways in which street food vendors adapt to these changing preferences (Hossain & Kaur, 2018).

In summary, the current research on the effect of consumption values on street food patronage behavior is limited in scope and does not fully capture the complexity of this decision-making

process. It is expedient to conduct a more robust and detailed research on the effect of consumption values on street food patronage behavior in order to better understand the factors that influence an individual's decision to patronize street food and the ways in which these values may vary across different cultural, social, and economic groups especially, in a typical developing economy like Nigeria with huge informalities. Accordingly, this study will investigate the nexus between consumption values and street food patronage behaviour in a typical developing economy context. This study shall be sub-divided into the following sub-themes: introduction, literature review, methodology, analysis and result, discussion, conclusions, recommendations, limitations of the study and suggestions for further research.

Review of Related Literature

Consumption Values

Consumption values refer to the beliefs, attitudes, and goals that influence an individual's decision to purchase and consume a particular product or service (Nguyen & Nguyen, 2017). These values can vary across different cultural, social, and economic groups and can be influenced by a variety of factors such as individual income, education level, and personal values (Hossain & Kaur, 2018). Understanding consumption values is important for marketers and policymakers seeking to understand consumer behavior and to develop effective marketing strategies and public policy initiatives (Nguyen & Nguyen, 2017).

One key factor that has been found to influence consumption values is individual income (Hossain & Kaur, 2018). Higher income individuals tend to place a greater emphasis on values such as quality, prestige, and innovation, while lower income individuals may place more value on practicality and affordability (Hossain & Kaur, 2018). Education level has also been found to be related to consumption values, with higher educated individuals tending to place more value on environmental sustainability and health and wellness compared to less educated individuals (Hossain & Kaur, 2018).

Cultural values and traditions can also play a role in influencing consumption values (Nguyen & Nguyen, 2017). For example, certain cultural groups may place a greater emphasis on values such as tradition, family, and community, while others may place more value on individualism and self-expression (Nguyen & Nguyen, 2017). Personal values, such as an individual's concerns about health and wellness, may also influence consumption values (Nguyen & Nguyen, 2017).

A number of studies have examined the relationship between consumption values and consumer behavior in a variety of contexts. For example, a study by Hossain and Kaur (2018) found that convenience, taste, price, and hygiene were the main consumption values that influenced street food patronage behavior in Bangladesh. Similarly, a study by Nguyen and Nguyen (2017) found that these same values were important for street food consumers in Vietnam, although taste was identified as the most important value in this context.

Other studies have focused on the role of consumption values in the context of more traditional retail products and services. For example, a study by Kim et al. (2019) found that value for money, quality, and convenience were the most important consumption values for online grocery shoppers in South Korea. Similarly, a study by Dikeç and Alçiçek (2018) found that price, quality, and customer service were the most important consumption values for Turkish consumers of home appliances.

Research on consumption values has implications for a wide range of industries, including the food and beverage industry. In the context of the food and beverage industry, consumption values such as convenience, taste, price, and hygiene have been found to be important factors influencing

consumer behavior (Hossain & Kaur, 2018). Understanding these values and how they vary across different consumer groups can be useful for food and beverage companies seeking to develop effective marketing strategies and for policymakers seeking to regulate and promote the industry (Nguyen & Nguyen, 2017).

Overall, the research suggests that different consumption values may be more or less important depending on the specific product or service being consumed and the cultural, social, and economic context in which the consumption takes place. This highlights the importance of considering the unique characteristics of a particular market when examining the role of consumption values in consumer behavior.

Patronage Behaviour

Patronage behavior refers to the actions of individuals who support or promote a particular person, group, or cause through financial or other means. This type of behavior has been extensively studied in the fields of sociology, psychology, and marketing, as it has important implications for a wide range of areas, including political campaigns, consumer behavior, and business development.

One early study of patronage behavior was conducted by Blau and Schwartz (1962), who found that individuals are more likely to engage in patronage behaviors when they feel a sense of social obligation or obligation to the recipient. This finding was supported by later research by Grasmick, Tittle, and Bursik (1990), who found that individuals are more likely to engage in patronage behaviors when they feel a sense of social responsibility or obligation to the recipient.

Similarly, one study found that individuals are more likely to engage in patronage behavior when they feel a sense of identification with the organization or cause (Fullerton & McEvily, 1999). This identification can be based on factors such as shared values, beliefs, or experiences. Additionally, feelings of trust and confidence in the organization can also play a role in an individual's willingness to engage in patronage behavior (Gefen, Straub, & Boudreau, 2000).

Another factor that can influence patronage behavior is the presence of social norms and expectations (Bhattacharya & Sen, 2003). When individuals perceive that others within their social network are supporting a particular organization or cause, they may be more likely to do so as well. This can be particularly true when there are strong social ties and a sense of community within the social network (Molinari, 2015).

Other research has focused on the role of personal values in shaping patronage behavior. For example, Bagozzi and Dholakia (1999) found that individuals who place a high value on social responsibility and altruism are more likely to engage in patronage behaviors. Similarly, Kasser and Ryan (1996) found that individuals who value social justice and community involvement are more likely to engage in patronage behaviors.

In addition to personal values, a number of other factors have been found to influence patronage behavior. For example, research by Fournier and Avery (2011) found that individuals are more likely to engage in patronage behaviors when they have a strong personal connection to the recipient, such as a shared personal history or common interests. Other studies have found that individuals are more likely to engage in patronage behaviors when they perceive the recipient as being competent or worthy of support (Dholakia et al., 2004; Richins and Root-Shaffer, 1988). More so, Ukenna and Ayodele (2019) conducted a study that investigated how the components of extended theory of planned behaviour influenced sustainable street food patronage behaviour.

Overall, the literature suggests that patronage behavior is driven by a combination of personal values, identification with the organization or cause, trust and confidence in the organization, and social norms and expectations. In order to effectively elicit this type of behavior, organizations

and causes should strive to foster a sense of identification, build trust and confidence, and tap into existing social networks and norms.

Hypotheses Development

Nexus Between Convenience and Street food Patronage behaviour

One study found that convenience was a key factor driving street food patronage behavior, with individuals citing factors such as the proximity of the street food vendor, the speed of service, and the availability of seating as important considerations (Lehtonen & Pöysti, 2018). Similarly, another study found that convenience was a major driver of street food consumption, with individuals choosing street food due to its availability and accessibility (Hossain & Huq, 2018).

In addition to proximity and accessibility, the convenience of street food can also be influenced by the variety of options available and the ability to customize orders (Hossain & Huq, 2018). For example, street food vendors that offer a wide range of options and allow for customization may be more convenient for individuals with specific dietary restrictions or preferences.

Overall, the literature suggests that convenience plays a significant role in street food patronage behavior, with many individuals choosing to purchase street food due to its accessibility, proximity, speed of service, and the ability to customize orders. In order to effectively attract patrons, street food vendors should consider the convenience of their location, the speed of service, and the variety of options available. Therefore, we hypothesized as follow:

H1: There will be a positive and significant effect of convenience on street food patronage behaviour in Anambra state.

Nexus Between Health/Hygiene and Street food Patronage behaviour

The nexus between health and hygiene and street food patronage behavior is complex, with individuals often weighing the potential risks and benefits of consuming street food. On one hand, concerns about the health and hygiene of street food can act as a deterrent to patronage behavior. For example, one study found that individuals were less likely to purchase street food if they perceived it as being unsanitary or if they had previously experienced food-related illness after consuming street food (Lee & Chen, 2012). In addition, research has also shown that concerns about health and hygiene can be particularly pronounced among individuals with higher levels of education and income, who may have greater access to alternative food options (Kaur & Rana, 2018).

On the other hand, there is also evidence to suggest that street food can be a nutritious and safe option for individuals, particularly in developing countries where access to safe and affordable food can be limited (Gustafson, 2017). In these contexts, street food can provide a convenient and accessible source of essential nutrients, particularly for low-income individuals who may not have the resources to purchase more expensive food options.

Overall, the literature suggests that health and hygiene concerns can influence street food patronage behavior, with individuals weighing the potential risks and benefits of consuming street food. In order to attract patrons, street food vendors should strive to maintain high standards of health and hygiene and address any concerns that individuals may have about the safety of their products. Based on the foregoing, we hypothesized as follow:

H2: There will be a positive and significant effect of concern for health/hygiene on street food patronage in Anambra State.

Nexus Between Price and Street food Patronage behaviour

Price is a key factor that can influence street food patronage behavior, with many individuals considering the cost of street food when deciding whether or not to purchase it. One study found that price was a major determinant of street food patronage behavior, with individuals more likely to purchase street food if it was perceived as being good value for money (Hossain & Huq, 2018). Additionally, research has also shown that price can be particularly influential for lower income individuals, who may have limited financial resources and may be more sensitive to changes in price (Chaudhary, Nautiyal, & Purohit, 2016).

However, it is important to note that price is not the only factor that can influence street food patronage behavior. Other factors, such as the quality and variety of options available, the convenience of the location, and concerns about health and hygiene can also play a role in an individual's decision to purchase street food (Hossain & Huq, 2018).

Overall, the literature suggests that price is an important consideration for many individuals when deciding whether or not to purchase street food. In order to attract patrons, street food vendors should strive to offer good value for money while also considering other factors that can influence patronage behavior. We therefore hypothesized that:

H3: There will be a positive and significant effect of price on street food patronage behaviour in Anambra state.

Nexus Between Taste and Street food Patronage behaviour

Taste is a major factor that can influence street food patronage behavior, with individuals often seeking out street food that is perceived as being high quality and enjoyable to eat. One study found that taste was a key driver of street food patronage behavior, with individuals more likely to purchase street food that was perceived as being delicious and high quality (Hossain & Huq, 2018). Similarly, another study found that taste was an important consideration for individuals when choosing street food, with many individuals seeking out street food that was authentic and representative of local cuisine (Lehtonen & Pöysti, 2018).

In addition to the taste of the food itself, the overall dining experience can also play a role in an individual's decision to purchase street food. For example, research has shown that the ambiance and atmosphere of the street food vendor can be important considerations for many individuals (Bhardwaj & Bhatnagar, 2014). Overall, the literature suggests that taste is a major factor that can influence street food patronage behavior, with many individuals seeking out street food that is perceived as being high quality and enjoyable to eat. In order to attract patrons, street food vendors should focus on offering high quality, tasty food and creating a positive dining experience. We therefore hypothesized that:

H4: There will be a positive and significant effect of taste on street food patronage behaviour in Anambra state.

Nexus Between Novelty and Street food Patronage behaviour

It has been widely documented that there is a nexus between novelty and street food patronage behavior (e.g., González-Neira, Kühn, & Scholderer, 2017; Lee & Lee, 2016). Novelty, defined as the "newness or originality of a product or service," has been identified as a key factor in driving consumer behavior and decision-making (González-Neira et al., 2017). This is especially true when it comes to street food, which is often associated with cultural diversity and the opportunity to try new and unique flavors (Lee & Lee, 2016).

One study found that consumers who seek novelty in their food choices are more likely to patronize street food vendors (González-Neira et al., 2017). This is because street food offers a wide range of diverse and unfamiliar options that may not be available at traditional restaurants. Additionally, the casual and laid-back atmosphere of street food markets and festivals can create a sense of novelty and excitement, further increasing the attractiveness of these types of food options (Lee & Lee, 2016).

In addition to the appeal of novelty, the convenience and accessibility of street food also contribute to its popularity. Street food vendors are often located in high-traffic areas, making them easy for consumers to access, and the quick and affordable nature of street food makes it a convenient choice for busy individuals (González-Neira et al., 2017). Overall, the nexus between novelty and street food patronage behavior is a complex and multifaceted phenomenon. While novelty is an important factor driving consumer behavior, it is not the only factor. Convenience, accessibility, and the overall atmosphere of street food markets and festivals also play a role in attracting patrons. Based on the foregoing, we therefore hypothesized that:

H5: There will be a positive and significant effect of novelty on street food patronage behaviour in Anambra state.

Nexus Between Cultural/Social Norms and Street Food Patronage Behaviour

There is a strong nexus between cultural and social norms and street food patronage behavior. This relationship has been well documented in a number of studies (e.g., Chaudhary, Hwang, & Shin, 2017; DeSouza & D'Souza, 2018; Sivamani & Ramaswamy, 2016).

Cultural norms, which refer to the values, beliefs, and behaviors that are socially transmitted within a particular group or society, can have a significant influence on street food patronage behavior. For example, in some cultures, street food may be considered a traditional or preferred form of dining, while in others it may be viewed as less desirable or even taboo (Chaudhary et al., 2017). Similarly, social norms, which are the unwritten rules that govern behavior within a particular group or society, can also shape street food patronage behavior. For example, in some societies, it may be socially acceptable or even expected to purchase food from street vendors, while in others it may be seen as a violation of social norms (DeSouza & D'Souza, 2018).

Overall, the nexus between cultural and social norms and street food patronage behavior is complex and multifaceted. These norms can influence consumer attitudes and behaviors towards street food, and in turn, shape the overall prevalence and acceptance of street food within a particular society. Based on the foregoing, we therefore hypothesized as follow:

H6: There will be a positive and significant effect of cultural/social norms on street food patronage behaviour in Anambra state.

Theoretical Framework

Consumption values are defined as the personal and social values that influence an individual's consumption behavior (Belk, 1988). In relation to food consumption, these values can include factors such as health, convenience, taste, social status, and environmental sustainability (Frewer & Sheperd, 2005).

One key concept in understanding consumption values and food consumption is Maslow's hierarchy of needs (Maslow, 1943). This theory proposes that individuals have basic physiological needs that must be met before they can move on to higher level needs such as safety, love and belonging, esteem, and self-actualization. Food is a basic physiological need and therefore,

individuals may prioritize meeting this need over other values such as health or sustainability (Grier & Bryant, 2005).

Another important factor in understanding consumption values and food consumption is the concept of identity (Belk, 1988). Individuals often use their consumption choices, including food choices, to express their personal identity and to signal membership in a particular social group (Frewer & Sheperd, 2005). For example, an individual who values health may choose to consume organic, locally-grown produce to signal their commitment to a healthy lifestyle and to align with a social group that values environmental sustainability (Grier & Bryant, 2005).

In addition, societal norms and cultural values also play a role in shaping an individual's consumption values and food consumption (Frewer & Sheperd, 2005). For example, in some cultures, food is seen as a means of social bonding and sharing, while in other cultures, food may be seen as a status symbol (Grier & Bryant, 2005).

Overall, consumption values are complex and multifaceted, and they play a significant role in shaping an individual's food consumption behavior. Understanding these values can help individuals make more informed and mindful choices about the food they consume.

Empirical Review

A study by Kim and Ryu (2016) found that convenience significantly influenced the frequency of street food consumption in South Korea. Participants reported that the availability of street food vendors and the convenience of their location were important factors in their decision to purchase street food. Additionally, the study found that the convenience of mobile payment options, such as credit cards and mobile apps, increased the likelihood of street food consumption.

Similarly, a study conducted in Malaysia by Ahmad et al. (2019) found that convenience was a major factor influencing street food patronage behaviour. Participants reported that the availability of street food vendors in close proximity to their location and the convenience of ordering and payment methods were important considerations when deciding to purchase street food.

In contrast, a study by Li et al. (2017) found that convenience did not significantly impact street food patronage behaviour in China. Instead, the study found that factors such as the taste and quality of the food and the reputation of the vendor were more important in determining consumer decisions.

A review by Kim and Lee (2018) also found mixed results on the effect of convenience on street food patronage behaviour. Some studies reported that convenience played a significant role in consumer decisions, while others found that factors such as taste, quality, and reputation were more important. The review suggests that the impact of convenience on street food patronage behaviour may vary depending on the specific context and cultural differences.

Other factors that may influence the effect of convenience on street food patronage behaviour include the type of street food being consumed (e.g. traditional or westernized) and the availability of alternative food options (e.g. fast food chains or sit-down restaurants). A study by Wong et al. (2015) found that convenience was a significant factor in the patronage behaviour of individuals who regularly consumed traditional street food in Hong Kong. However, for those who occasionally purchased westernized street food, the convenience of the location was less important compared to the taste and quality of the food.

Street food is a popular and convenient food source for many people around the world, especially in urban areas. However, there are concerns about the hygiene and health risks associated with street food. This review aims to examine the effect of health and hygiene on street food patronage behavior.

One study found that perceived health risks were the main factor influencing street food patronage behavior in India (Gupta & Singh, 2018). Another study in Bangladesh found that perceptions of food safety and hygiene were the main determinants of street food consumption (Ali et al., 2014). In Thailand, a study found that the presence of visible hygiene practices, such as hand washing, was a key factor in determining the level of trust and willingness to purchase street food (Thakur et al., 2016).

In terms of the actual impact of hygiene and health risks on street food patronage behavior, one study in Vietnam found that the prevalence of foodborne illnesses was significantly higher among street food consumers compared to those who did not consume street food (Tran et al., 2017). Another study in China found that the incidence of food poisoning was significantly higher among street food consumers compared to those who did not consume street food (Wang et al., 2019).

There have also been several studies examining the impact of hygiene and health education on street food patronage behavior. A study in Nigeria found that hygiene education significantly increased the number of street food vendors who practiced good hygiene and food handling practices, leading to a reduction in the incidence of foodborne illnesses (Adeyemi & Adeyemo, 2015). In India, a study found that health education significantly increased the awareness and understanding of hygiene and food safety among street food vendors, leading to improved hygiene practices (Gupta & Singh, 2018).

Overall, the evidence suggests that health and hygiene are important factors influencing street food patronage behavior. Perceptions of health risks and food safety are key determinants of street food consumption, and the presence of visible hygiene practices can increase trust in the food. There is also evidence that poor hygiene and health risks are associated with an increased incidence of foodborne illnesses among street food consumers. Finally, education on hygiene and health can improve the practices of street food vendors and reduce the risk of foodborne illnesses.

There is a wealth of research on the effect of price on street food patronage behavior. According to a study by Javalgi, White, and Ali (2007), price is a significant factor in determining consumer purchasing decisions, particularly in the street food industry where consumers may be more price-sensitive due to lower incomes or the informal nature of the market.

A study by Kaur and Kaur (2013) found that consumers are more likely to purchase street food when it is perceived as being good value for money, with a reasonable price-quality balance. In contrast, high prices can deter consumers, especially if there are alternative, lower-priced options available (Javalgi et al., 2007).

However, price is not the only factor influencing consumer behavior. A study by Chen and Chen (2015) found that factors such as taste, hygiene, and convenience also play a role in consumer purchasing decisions for street food. In addition, cultural and personal factors, such as tradition and personal preferences, may also impact consumer behavior (Javalgi et al., 2007).

Overall, the research suggests that price is a significant factor in determining consumer purchasing decisions for street food, but it is not the only factor. In order to attract and retain customers, street food vendors should consider not only the price of their products, but also factors such as taste, hygiene, convenience, and cultural and personal factors.

Taste has long been recognized as a key factor influencing street food patronage behavior (Li, Li, & Fan, 2016; Shafiei, Bagheri, & Baseri, 2016). In fact, numerous studies have shown that taste is consistently ranked as the most important attribute influencing consumers' decision to purchase street food (Jabeen, Jamil, & Niazi, 2016; Li et al., 2016; Shafiei et al., 2016).

One study conducted in China found that taste was the most important factor influencing street food choice, followed by price and convenience (Li et al., 2016). Similarly, a study in Pakistan

found that taste was the top determinant of street food purchase, followed by price and hygiene (Jabeen et al., 2016). These findings are supported by a study in Iran which found that taste and price were the most important factors influencing street food choice, with taste being the primary determinant (Shafiei et al., 2016).

The influence of taste on street food patronage behavior can also vary by demographic factors. A study in India found that younger consumers were more likely to be influenced by taste when purchasing street food, while older consumers were more concerned with hygiene and price (Gupta & Jain, 2017). Another study in China found that taste was more important to younger consumers, while older consumers placed more importance on hygiene and reputation (Zhang, Li, & Zhang, 2018).

In addition to individual factors, cultural and environmental factors can also impact the influence of taste on street food patronage behavior. A study in Indonesia found that cultural factors, such as the importance of food in the local culture, significantly impacted the importance of taste in street food choice (Sriwidodo, 2018). Another study in China found that the influence of taste on street food choice was higher in areas with a higher density of street food vendors, suggesting that competition may increase the importance of taste in attracting customers (Zhang et al., 2018).

The effect of novelty on street food patronage behaviour has been widely studied and debated in the literature. According to a review by Lee and Cho (2018), novelty refers to the presence of new or unfamiliar elements in a food or dining experience. It has been suggested that the incorporation of novelty can increase consumers' interest and motivation to try new foods, leading to increased patronage behaviour (Lee & Cho, 2018).

One study found that the presence of novelty in street food increased consumers' intention to visit the food stand (Lee & Cho, 2018). Similarly, a study by Kim and Lee (2017) found that consumers were more likely to visit street food stands that offered unique and novel menu items, as opposed to those that only offered traditional or familiar options. This suggests that the incorporation of novelty can be an effective marketing strategy for street food vendors, as it can attract new customers and increase the overall popularity of the stand.

However, the impact of novelty on street food patronage behaviour may depend on the specific context and individual characteristics of the consumer. For example, a study by Kim et al. (2019) found that consumers who were more adventurous and open to trying new foods were more likely to be influenced by novelty in their street food patronage behaviour. On the other hand, those who were more conservative and preferred familiar foods were less likely to be affected by novelty (Kim et al., 2019). This suggests that the impact of novelty on street food patronage behaviour may be moderated by individual differences in food attitudes and preferences.

In addition to individual differences, the type of novelty incorporated into the street food experience may also impact patronage behaviour. A study by Lee and Cho (2018) found that consumers were more likely to visit street food stands that offered unique and innovative menu items, rather than those that only offered unusual or unfamiliar ingredients. This suggests that novelty that is innovative and enhances the overall dining experience may be more effective in attracting customers than novelty that is simply unusual or unfamiliar.

Cultural and social norms have a significant impact on street food patronage behaviour. According to a study by Chen et al. (2019), cultural values and norms can shape an individual's attitude towards street food, either positively or negatively. For instance, in some cultures, street food is seen as a symbol of cultural authenticity and pride (Chen et al., 2019). In such cultures, people are more likely to patronize street food as it represents their cultural identity. On the other hand, some

culture view street food as dirty, unhygienic, or low-quality (Chen et al., 2019). In these cultures, people may be less likely to patronize street food due to negative cultural beliefs.

In addition to cultural norms, social norms also play a role in street food patronage behaviour. A study by Hossain et al. (2017) found that social norms, such as the influence of friends and family, can impact an individual's decision to patronize street food. For example, if a person's friends and family frequently patronize street food, they are more likely to do so as well (Hossain et al., 2017). On the other hand, if a person's social circle does not typically consume street food, they may be less likely to do so due to social influence.

Moreover, the perceived safety and quality of street food can also impact an individual's decision to patronize it. A study by Lin et al. (2018) found that people are more likely to patronize street food if they perceive it to be safe and of high quality. In contrast, if people perceive street food to be unsafe or of low quality, they are less likely to patronize it (Lin et al., 2018). This suggests that the safety and quality of street food can act as a determinant of patronage behaviour.

In conclusion, cultural and social norms have a significant impact on street food patronage behaviour. Cultural values and norms can shape an individual's attitude towards street food, while social norms, such as the influence of friends and family, can also impact an individual's decision to patronize street food. Additionally, the perceived safety and quality of street food can also determine whether or not people choose to patronize it.

Materials and Methods

This study adopts positivism as the research philosophy because it helps to minimize the influence of personal biases on the research process. Also, this research philosophy was employed in order to develop theories and laws that can explain consumption values and street food patronage behaviour with a minimum of assumptions. Positivism was adopted in this because it increases the generalizability of this study; meaning that the results of this study can be applied to other similar populations or contexts.

Survey research design was used because it helped to minimize bias and allow for objective data collection. Since our sample size is large, survey research design was employed because it allows for the inclusion of a large sample size, which can increase the generalizability of the results.

This study population comprises adults that have patronized street food vendors in the past 3 months; and reside in the cities of Awka, Onitsha and Nnewi in Anambra state. These are the most developed urban centres in Anambra state. This population is infinite because there is no sampling frame for persons that patronize street food vendors in these urban centres. Quota sampling technique was employed for this study because it allows for the inclusion of specific subgroups within the population, ensuring that the sample is representative of the overall population. Also, it was used because the population of study is not easily accessible or is dispersed over a large area (consumers of street food vendors are largely dispersed).

Since the study population is infinite, a formula that estimates the representativeness of the sample on certain parameters at an acceptance level of probability will be adopted. The formula is stated below:

$$n = \frac{z^2(p)(1 - p)}{C^2}$$

Source: <http://www.surveysystems.com>

Where n = sample size

Z = standard deviation at a given level of confidence

P = Assumed success rate of the research instrument (after pilot study)

C = Confidence interval expressed as decimal.

Thus,

Z = at 95% confidence level is 1.96 (See standard normal distribution table).

P = 0.65 (after distributing 50 copies of questionnaire among the respondents)

$$1-p = (1-0.65) = 0.35$$

C = 0.05 (Since 95% confidence limit was chosen)

$$n = \frac{(1.96)^2(0.65)(0.35)}{(0.05)^2} = 349.5 \sim 350$$

The simple size is 350 respondents.

Furthermore, Bouley's proportional formula was used to allocate the sample among the three urban centres using their 2006 national census figures as proxy. The formula is stated thus,

$$n_A = \frac{n^1(n_o)}{N}$$

Where; n_A = Allocated proportion

n^1 = Size of each population segment

n_o = sample size

N = Total population size

Questionnaire was adopted as the research instrument. This study employed questionnaire because questionnaires are a quick and easy way to collect data from a large number of participants. This is especially useful for studies with a large sample size. Also, questionnaires provide a standardized way to collect data, ensuring that all participants are asked the same questions in the same way. This helps to reduce bias and increase the reliability of the data. The validity and reliability of the manifest variables of the study were tested with *Kaiser-Meyer-Olkin* (KMO) measure of sample adequacy for latent construct measurement and Bartlett's Test of Sphericity for correlation among indicator variables. There feedbacks were used to make any necessary revisions to the instrument. The study made use of multiple regressions as the statistical tool for data analysis. Multiple regressions were adopted because it examines how different variables (consumption values) are related to one another, and how changes in one variable may affect other variables. Also, multiple regressions help us to predict outcomes based on multiple predictors (consumption values), which can be more accurate than using a single predictor. The data analysis was done via Partial Least Square-Structural Equation Modelling (PLS-SEM) 2023.

Analysis and Results

Table 1: Principal Component Analysis (PCA)

Indicator variables	Component loadings
Convenience	0.912
Total Eigen values	2.897
Total variance explained	57.946
Health & hygiene	0.788
Total Eigen values	1.116
Total variance explained	22.312
Prices of street food	0.784
Total Eigen values	1.597

Total variance explained	39.934
Taste	0.812
Total Eigen values	1.688
Total variance explained	33.757
Novelty	0.849
Total Eigen values	1.066
Total variance explained	21.314
Cultural & socio norms	0.751
Total Eigen values	1.274
Total variance explained	25.481
Street food patronage behaviour	0.868
Total Eigen values	1.021
Total variance explained	25.531

Source; Researcher's Estimation with SEM, 2023.

Results of the PCA (Table 1) shows the component coefficients for the consumption values and street food patronage behaviour. From the result of rotated component matrix suggests that all the consumption value and street food behaviour constructs were adequately loaded with scores above 0.5 which suggest a high component coefficient (Shrestha and Basnet 2018). This therefore implies the latent constructs of convenience, health & hygiene, taste, socio-cultural norms and street food behaviour were significantly explained by their respective loaded component coefficients that are associated with each construct indicators employed for further analysis. The systemic selection of these components was based total eigen values loaded above 1 and their associated total variance explained as shown in Table 1. However, for the purpose of the regression analysis conducted in this study, the effect of consumption values on street food patronage behaviour was estimated with these latent construct indicators using structural equal models (Figure 1).

Table 2: Validity and Reliability Tests

Indicator Variables	KMO Test	Bartlett's Test	Significance
Convenience	0.626	880.328	P<0.01
Health & hygiene	0.586	349.025	P<0.01
Prices of street food	0.601	54.407	P<0.01
Taste	0.529	122.285	P<0.01
Novelty	0.555	84.038	P<0.01
Cultural & socio norms	0.519	67.538	P<0.01
Street food patronage behaviour	0.474	69.586	P<0.01

Source; Researcher's estimation with SEM, 2023. KMO is Kaiser-Meyer-Olkin measure of Sampling Adequacy.

The validity and reliability of the manifest variables of the study were tested with KMO measure of sample adequacy for latent construct measurement and Bartlett's Test of Sphericity for correlation among indicator variables (Table 2). These tests show that the construct indicators correctly measured their latent constructs and the manifest variables are significantly related. The

decision rule derived from the rule of thumb for KMO score of 0.5 and above bench mark for acceptable sample adequacy for latent variable estimation with principal component analysis (PCA). The next step in the data analysis is the subjection of these indicator variables to structural path analysis under structural equation modelling approach (Figure 1).

Here the independent manifest variables in the rectangular box comprise of consumption values while the phenomenon of street food patronage behaviour in a square box constitutes the dependent manifest variable for this study. The double arrow curve indicates the direction of the covariance among the manifest variables' representation of the consumption values and street food patronage latent constructs. The regression weights are captured using the single straight arrow head that connects the endogenous variable- patronage behaviour for street food vendors with its predictors which in this study is represented as consumption values of those that patronize street food vendors.

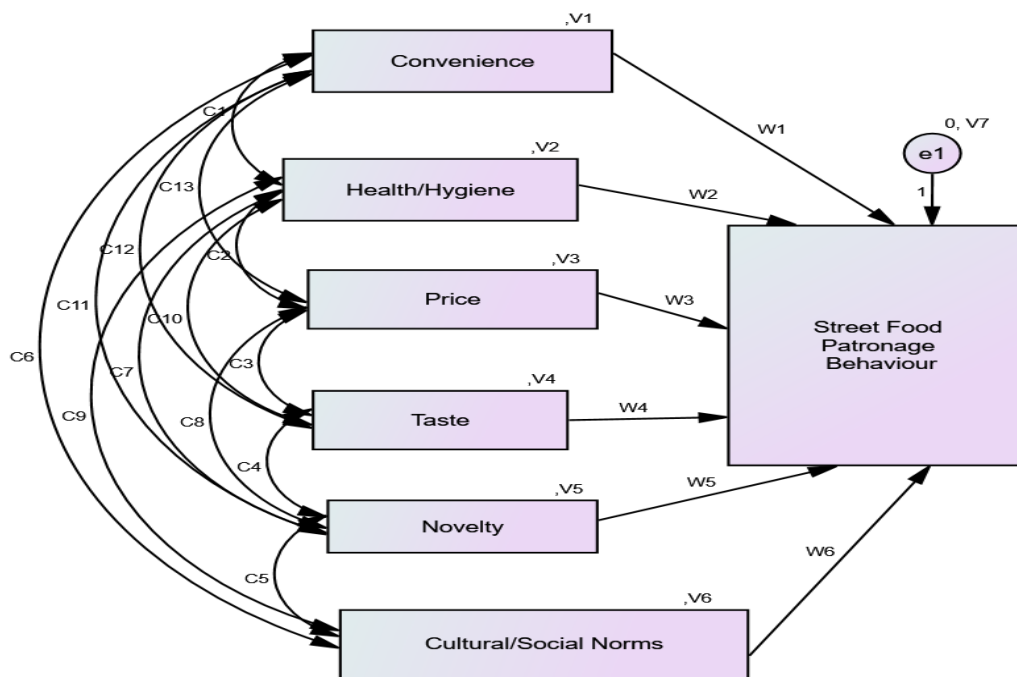


Figure 1 Structural Path Analysis of consumption value and street food patronage behavior

Figure 1 shows the structural equation model for the analysis of the effect of consumption values comprising of convenience, health & hygiene, price, taste, novelty and socio-cultural norms on street food patronage behaviour. These latent constructs were transformed through principal components analysis to uncorrelated components loadings through their respective indicators which shows that they are valid variables that adequately explained consumptions values and street

food patronage behaviour as demonstrated in validity and reliability tests (Table 2). The detailed result from the analysis of figure 1 is as presented in Tables 3 and 4 (Appendix Figure1) which comprises of the covariance (C1...C13) and regression weights (W1...W6) analysis. A total of six regression weights and thirteen covariances with an error term were estimated in the structural path diagram of figure 1.

Table 3: Covariance Estimates

Indicator variables			Estimate	S.E.	C.R.	P	Label
Convenience	↔	Health\Hygiene	.210	.130	1.611	.107	C1
Health\Hygiene	↔	Price of street food	-.110	.116	-.947	.344	C2
Price of street food	↔	Taste of street food	.185	.109	1.691	.091	C3
Taste of street food	↔	Novelty of the street food	-.006	.108	-.052	.958	C4
Novelty of the street food	↔	Socio-cultural norms	-.310	.115	-	.007	C5
Convenience	↔	Socio-cultural norms	-.316	.123	2.570	.010	C6
Health\Hygiene	↔	Novelty of the street food	-.250	.122	-	.041	C7
Price of street food	↔	Novelty of the street food	-.319	.124	2.581	.010	C8
Health\Hygiene	↔	Socio-cultural norms	.473	.112	4.213	***	C9
Health\Hygiene	↔	Taste of street food	-.404	.106	-	***	C10
Convenience	↔	Novelty of the street food	-.113	.134	-.845	.398	C11
Convenience	↔	Taste of street food	-.033	.116	-.286	.775	C12
Convenience	↔	Price of street food	-.324	.132	-	.014	C13

Source; Researcher's computation with SEM,2023. S.E; CR; P denotes standard error of estimates, coefficient ratio and significance level respectively while C1...C13 represents the covariance labels

Result of Table shows the covariances among the variables used in the study. The covariance result shows there exist no high correlation among the independent variables that could constitute a bias between consumption value estimates and street food patronage behaviour. The covariance results show the highest score of 0.473 between health\hygiene and socio-cultural norms is still found below 0.8 considered as high correlation effect that could result to multicollinearity bias. When this occurs the reliability of the model estimates could be affected leading to a spurious result.

However, the evidence from Table 3 indicates there is absence of strong interrelated ness among the consumption value manifest variables. Hence these variables are seen to statistically fit for the regression analysis with structural path diagram. The result of the regression estimates indicating the effects of consumption values on street food patronage behaviour is as depicted in Table 4

Table 4: Regression Result

Indicator variables	Estimate	S.E.	C.R.	P	Label
Street food patronage behaviour ← Convenience	0.662	0.045	14.630	***	W1
Street food patronage behaviour ← Health/Hygiene	0.094	0.052	1.810	0.070	W2
Street food patronage behaviour ← Price of street food	-0.345	0.048	-7.129	***	W3
Street food patronage behaviour ← Taste of street food	0.170	0.055	3.106	0.002	W4
Street food patronage behaviour ← Novelty of the food	0.142	0.048	2.956	0.003	W5
Street food patronage behaviour ← Socio-cultural norms	0.213	0.055	3.908	***	W6

Source; Researcher's Estimate with SEM, 2023. W1...W6 connotes regression weights.

The analysis of the effect of consumption values on street food patronage behaviour is presented in Table 4. The result shows that all the consumption values have significant effect on street food patronage behaviour although the price of street food is seen to exert a significant negative effect on its patronage at significance level of 1 percent accounting for -7.129 negative influence. In terms of convenience, it is notable that the more the wide variety of options, the higher the patronage behaviour by 0.662 percent validated at 1 percent level of significance. At 10 percent significance level health and hygiene level of street food vendor was responsible for 0.094 percent improved patronage behaviour of the customers while taste, novelty and socio-cultural norms were individually responsible for 0.170 percent, 0.142 percent and 0.213 percent enhanced patronage disposition at 1 percent significance level. It could therefore be deduced from the study result that wide variety of options and socio-cultural norms accounted for the highest significant factors that affect street food patronage behaviour particularly in the area of cleanliness and safety of the street food.

Table 5: Diagnostic Tests of Model Fit and Parsimony

Fitness Index	ECVI	RMSEA	NCP
Model	1.606	0.823	367.246
Cut-off point	1.853-1.387	0.754-0.895	307.771-434.123
P-close		P<0.01	

Source; Researcher's computation with SEM 2023

SEM analysis consists of a comprehensive estimation process employed to investigate a system of equations and most often entails latent variables. The study thus utilized a set of diagnostic criteria to ascertain the statistical relevance of the overall fitness of the system of equation model analysis and result. In the present investigation the diagnostic measured applied were explained. The expected cross validation index (ECVI= 1.606) confirms the statistical parsimony of the estimated model of street food patronage behaviour. The model goodness of fit was measured using the minimization of discrepancy approach between the sample covariance and implied covariance matrix. The discrepancy function was derived using the normality of distribution theory of maximum likelihood discrepancy function. Hence the non-centrality parameter (NCP) of 367.246 indicates the model fitness is still within the statistically acceptable limit of low and high 90 percent confidence interval. The root mean-square error of approximations (RMSEA =0.823) above the minimum value of 700 validated the model fit while rejecting the null hypothesis of model overall misfit (Maydeu-Olivares, 2017a).

Discussion

Based on the findings, it was revealed that convenience has a positive and significant effect on street food patronage behaviour. This is consonance with the findings of Kim and Ryu (2006), Ahmad et al. (2019), Kim and Lee (2018) and Wong et al. (2015). However, Li et al. (2017) submitted that convenience may not necessarily have positive and significant effect on patronage behaviour. More so, Sriwidodo (2018), Javalgi et al. (2007), Chen et al. (2019) and Hossain et al. (2017) corroborate our finding that socio-cultural norms has a positive and significant effect on street food patronage behaviour. Furthermore, taste of the food was found to have a positive and significant effect on street food patronage behaviour, this supports the findings of Cheng and Cheng (2015), Li, Li and Fen (2016), Shafiei, Bagheri and Baseri (2016). Moreover, novelty of the food was found to be positively significant with street food patronage behaviour. This is supported by studies of Lee and Cho (2018) and Kim and Lee (2017). Health and hygiene were found have have a positive and significant effect on street food patronage behaviour. This corroborates the findings of Tran et al. (2017), Wang et al. (2019), Adeyemi and Adeyemo (2015) and; Gupta and Singh (2018). Price of the food was found to have negative but significant effect on street food patronage behaviour. This is in contrast with the study of Javalgi, White and Ali (2007) and Kaur and Kaur (2013).

Conclusions

Conclusively, the present study has established that consumption values (as they relate to food patronage behaviour) have significant effects on street food patronage behaviour in a typical developing economy like Nigeria. Also, the study has provided an empirical support that consumption values do significantly have effects on street food patronage behaviour.

Implications

The results and findings of this study has implication for both food products policy makers and marketers in the sense that it develops a robust and comprehensive framework for improving street food marketing activities and achievement of sustainable development goal of zero hunger among others.

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Appendix 1

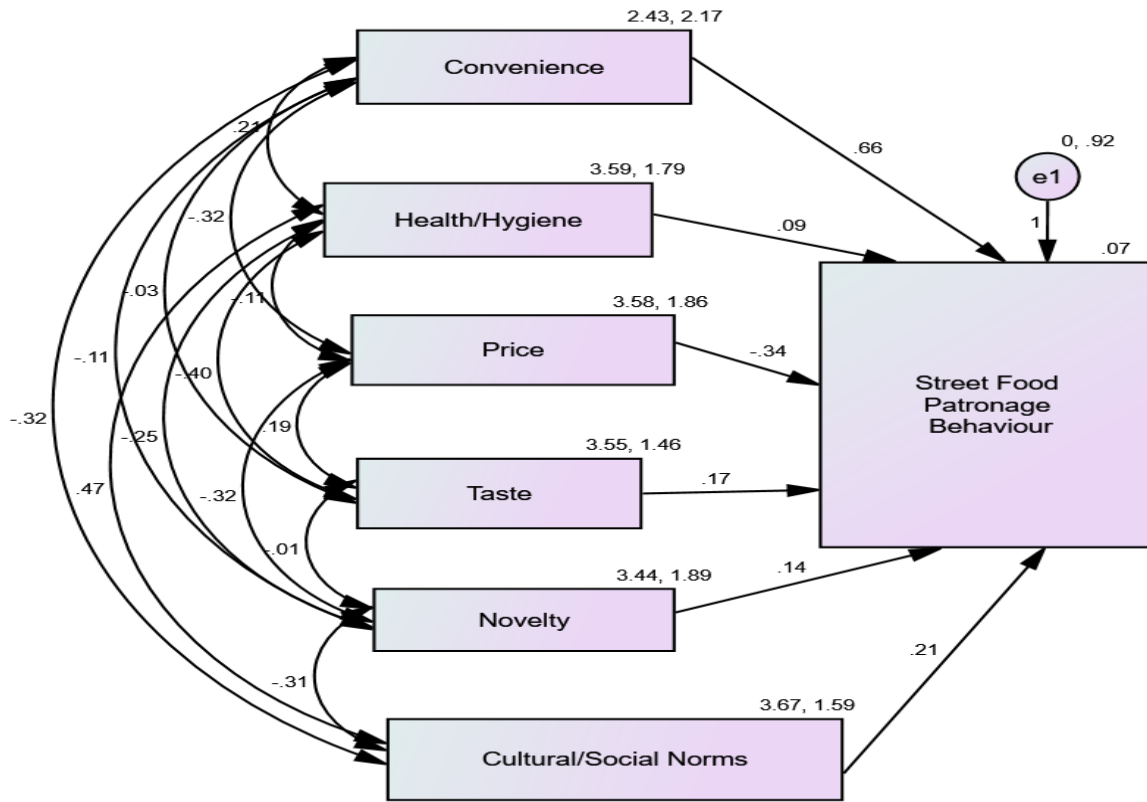


Figure 1: Structural Path Analysis

Managing Materials Vendor Risks in Construction Industry and Effects on Operational Performance

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Abstract

Choosing and implementing appropriate risk management strategy can help firms overcome operational performance defects. Yet, little is known of the operational performance gains that could accrue to construction project firms through effective management of materials vendor risks. This study examined the relationship between vendor risk management (vendor risk identification and vendor risk prevention) and operational performance of construction firms (measured by project quality, scheduled completion time). The survey research design was used to recruit into the study, 43 construction material vendors from 86 registered construction firms in Rivers State-Nigeria. The primary data for this study was collected through the structured questionnaire, and analysed using both descriptive and statistical inferential techniques. It was found that significant relationships exist between vendor risks identification, vendor risks prevention, and operational performance outcomes (scheduled completion time and project quality). It is recommended that managers must request vendors to endorse warranty policy before being selected as construction vendors. They must also ensure that the financial capacity of the vendors is authenticated by reputable financial experts.

Keywords: Vendor Risk Management; Construction Project Management; Construction Supply Chain; Sustainable Project Quality; Project Schedule.

1. INTRODUCTION

All over the world, the construction industry consists of many players including the main contractor, designers, sub-contractors, materials vendors, and facilities managers amongst others. Each of these actors are important to ensuring positive performance outcomes. Though each participant is a potential source of successful construction operation, they could, on the other hand, become a bane to the performance of construction operation if not properly coordinated by the integrated project management team.

In particular, construction vendors (i.e suppliers of critical contract materials) through their activities, could become a very painful source of risk to project completion if not effectively managed. Managing construction vendor risks has become an interesting topical issue in construction supply chain literature in the last 10 years (Bahamid, Doh, Khoiry, Kassem, & Al-Sharafi, 2022; Rao and Goldsby, 2009; Zuofa & Ochieng, 2014). The reason is not far fetch; the construction projects is known to be complex, multiple stakeholders, capital intensive, and temporary in the nature of delivery; and as such its processes including materials supplies are exposed to various (Amoah, Ahadzie, & Dansoh, 2011). Thus, the risks associated with construction vendors could delay construction delivery time, increases budget overruns, and may even ruin the reputation of the entire industry.

In Nigeria, the construction industry has made significant contribution (about 15.7%) to National GDP (CIBN, 2020, 2021). However, it has battled credibility issues over the years, given the spate of construction failures and building collapse in many cities and metropolitan centres (Abimbola 2012; Damoah & Kumi, 2018; Eja & Ramegowda 2020; Nweze, 2016). Doubtless, suggestions

have been made towards strengthening the performance of construction projects in the industry. For instance, Zuofa & Ochieng, (2014) advocated involving only trained project management professionals, instituting stiffer punitive actions on unethical practices, and improving project management training. Stephen, (2015) suggested the adoption of a portfolio approach that treats construction projects as investment with relevant performance indicators and expectations. Bothale, (2017) encouraged project management training for public sector professionals, proper monitoring, construction supervision and enforcement. While these suggestions look satisfactory, on a closer examination, they appear to dwell more on the project design and implementation issues while ignoring the role that proper management of supply chain vendor risks could play in construction related project performance (Akande *et al.*, 2018).

Generally, the concept of risks (understood as the exposure to a situation in which the outcome is not certain, Rao and Goldsby, 2009), and the strategies for managing risks has been studied and reported widely (Manuj and Mentzer, 2018). In the context of construction, vendor risks management (VRM) which could also be termed “Supplier Risk Management (SRM)” is the process for the implementation of strategies that helps in purposefully identifying negative supply-side occurrences based on continuous risk assessment of reducing vulnerability and ensuring construction project continuity (Tang, 2006).

In the holistic context of construction, VRM is a part of supplier management which deals with the monitoring and controlling the risks associated to operational performance of construction project which mostly generates from third party vendors (Dias, Leal Junior, and Oliveira, 2019). VRM activities are concerned with ensuring that third-party material vendors and construction service providers do not cause disruption to project performance (Gurtu & Johnny, 2021). This simply means that managing construction vendor risks allows the understanding and evaluation of the effect of risk on projects in the construction industry (Bode and Wagner, 2015).

Proper vendor risks management provides many important benefits for construction project managers. Primarily, it helps a project manager to be better prepared for project risks, threats and hazards, and therefore prioritize their resource planning and utilisation decision. Better management of vendor risk saves delivery time and reduces supply chain costs (Manuj & Mentzer, 2018). According to Reddy, (2016) project managers with good understanding of material vendor risks enhances better quality project performance, maximise project development opportunities, and reduce supply chain stakeholder disputes (Scott, 2019; Reddy, 2016). Thus, proper vendor risk management is a germane to ensuring that construction projects are delivered within their planned performance objectives- low budget overrun, increase project durability and quality, less stakeholder disputes.

In Nigeria for instance, risk management has been severally carried out with limitations and ineffectiveness, attributed to a little or no knowledge of the processes and methodologies of project risk events in the construction industry. Furthermore, a reductionist approach has been the dominant method to managing vendor risks (Adeleke *et al.*, 2016). This has so far brought little or no operational performance improvement in construction projects (Adeleke *et al.*, 2016; Ojo, 2010). Likewise, a formal approach to project risks management that yield significant reduction in operating costs and enhances on-time project delivery appear non-existent (Windapo *et al.*, 2010;

Ojo, 2010). Poor quality of work, schedule and budget overrun, on-site disputes have characterised many construction projects executed in Nigeria, which is the consequence of poor risk identification, risks prevention and management amongst other factors (Aibinu and Henry, 2016). Given this situation, it is tempting to deduce that many construction projects that are abandoned in Nigeria are due to poor attention to supplier risk management (Ojo, 2010; Odeyinka *et al.*, 2018; Dada and Jagboro, 2017). The construction companies and clients in the sector have not enjoyed the full benefits of VRM due to poor approach to managing risks and uncertainties associated with material vendors (Adeleke *et al.*, 2016).

Aim and Objectives of the Study

The broad aim of this study is to examine the relationship that might exist between the management of vendor risks and operational performance of construction project firms. In specific terms, the study aims at achieving the following objectives, to:

- i. Examine the relationship between construction vendor risk identification and project quality
- ii. Assess the association between construction vendor risk identification and scheduled completion time
- iii. Evaluate the linkage between construction vendor risk prevention and project quality
- iv. Determine the relationship between construction vendor risks prevention and scheduled completion time
- v. Estimate the moderating effect of risk-oriented culture on the relationship between vendor risk management and operational performance of construction project firms.

Research Hypotheses

The following null research hypotheses are tested in this study

H₁: Construction vendor risk identification is not positively related to project quality

H₂: Construction vendor risk identification is not positively associated with project scheduled completion time

H₃: Construction vendor risk prevention is not positively related to project quality.

H₄: Construction vendor risks prevention is not positively related to project scheduled completion time.

H₅: Risk-oriented culture is not a significant moderator of the relationship between vendor risk management and operational performance of construction project firms.

2. LITERATURE REVIEW

Managing vendor risks in construction supply chain entails putting in place those mechanisms that highlights the main risk management elements, including risk identification, risk assessment, risks prevention and risk response or risks control (Bahamid and Doh, 2017). For construction supply chain, vendor risks could evolve from procurement delays, theft or shortages of major components, trucking and logistics breakdown, materials quality liabilities, and natural disasters amongst others (Kern *et al.*, 2012; Christopher *et al.*, 2016).

Effective supplier risk management enables an organisation to be better prepared for threats, prioritize investment decision, enhance better quality performance, and maximise opportunities (Manuj & Mentzer, 2018). Thun and Hoenig, (2011) noted that improved management of vendor risks reduce disputes amongst project stakeholders, creates strategic competitive advantage,

improves at the long run the strategic business performance, promotes logistics agility and flexibility, enhances employees' health and safety of and promotes a healthy and eco-friendly environment (Scott, 2019; Reddy, 2016). Construction managers are therefore challenged to increase their risk management skills and capabilities in all areas of their professions including materials supplies.

Consequently, this study advocates that, the proper management of construction vendor risks is likely to significantly reduce the myriads of operational performance problems (poor quality of work, schedule overrun, budget overrun, and disputes) associated with of construction projects in Nigeria. This study thus brings into understanding the full benefits of effective risk management in construction as it helps improve the interest of stakeholders in risk management practices and implementation across the entire value chain of construction projects. The outcome of this study will also improve the risk performance rating of the construction industry of Nigeria and other developing nations. It will also add to the existing global knowledge on risk management.

Risks management associated with vendors of construction project materials is necessary for infrastructural development of nations (Eze *et al.*, 2021; Rad and Yamini, 2017). However, the Nigerian construction industry (including other developing nations) has suffered numerous challenges, ranging from material delays, poor quality supplies (less durability), budget overruns, safety issues, communal disputes, and client's dissatisfaction (Bayraktar, 2020). For construction stakeholders, this situation creates an atmosphere of high risks and uncertainties (Gulam, 2018) which could undermine positive project outcomes.

According to Gulam (2018) and Bahamid and Dohm (2017), the management of vendor risks as a philosophy is still a challenging responsibility for construction practitioners in developing nations. Vendor risks and uncertainties have hampered construction project managers' efforts toward improving project operational performance because of the ineffective approach to managing them. While the techniques of managing vendor risks are reported to have gained significant attention and application in construction industries of developed nations (Rad and Yamini, 2017; Szymanski, 2017), the construction industry of developing countries including Nigeria appear not very acquainted with vendor risk management analysis (Ogunbayo, 2014).

In addition, the review of the several literatures on construction risks management in the Nigerian context has been centred on general risk types, risk analysis process, the effect of risks on construction project performance such as cost and time (e.g. Ijigah *et al.*, 2013; Sebastian *et al.*, 2018; Nnadi, 2016; Adeleke *et al.*, 2016; Ezeabasili *et al.*, 2021; Ugwu *et al.*, 2019; Ubani *et al.*, 2015; Ogunbayo, 2014; Dada and Jagboro, 2007; Ojo, 2010). However, emphasis on how to manage construction vendor risks, its benefits and probably the impediment to implementation has not received much empirical attention in Nigerian context. This implies that empirical studies on construction vendor risk management in terms of risk identification and prevention mechanisms, as well as the risk culture (i. e attitude, behaviour, norms, or perception about risk) of project management professionals, have not been fully explored in Nigeria. Specifically, construction vendor risk management research in Rivers State, to the best of the researcher's knowledge, appear none existence. Therefore, more context-specific research of vendor risks management practices in construction project is needed to close this knowledge gap.

3. METHODOLOGY

Research Design

A research design is systematically specifies the steps to undertake for collection of data and ultimately for analyzing data in order to describe a phenomena or explain the relationship amongst variables (Upagade and Shende, 2012). It determines the type of data to be collected that answers the research questions in order to achieve the research objectives (Okesina, 2020), as well as the sampling technique to be adopted (Hair, *et al.*, 2003).

This study is a quantitative research because primary data about the variables of interest were collected using the questionnaire with quantitatively-ordered scale and analysed using quantitative statistical techniques. In addition, the study adopted the cross-sectional survey design to understand the effect of vendor risks management on the operational performance of construction project companies in Rivers State. The cross-sectional survey was found appropriate because of its economy; it enables the selection of representative unit for the larger population through sampling process, and collection of data from the population sample, over a short period of time within a single frame of time (Hunger and Wheelen, 2018).

A further justification for choosing the cross-sectional survey and quantitative design was the convenience it provided the researcher in collecting relevant data about the specific vendor risks management practices adopted by construction professionals in the study area, without necessarily manipulating the study variables or population characteristics of study participants (Halldorsson and Arlbjorn, 2005). In addition, because surveys are easily amenable to descriptive analysis, summarising and drawing inferences on the relationships amongst study variables are also easier using this approach. Besides, many extant studies relating to construction project risks management tends to adopt more of the cross-sectional survey design and quantitative approach than other methods (Joe. Thomas, and Monica, 2012; Brammer & Walker, 2011; Fayezi, 2018). With the inherent limitations of cross-sectional study in terms of its inability to analyse the behaviour of the variables over a long period of time, and to establish a true cause and effect relationship (Solem 2015), the careful selection of appropriate study sample counterbalanced these weaknesses.

Research Population

A target population is generally a large collection of individuals or objects which is the main focus of a scientific inquiry. The target population of this research was all 86 registered construction companies currently involved in a public construction works under the Rivers State Urban and Rural Regeneration Programme. This targeted population was considered appropriate for this study because of their homogenous characteristics. For instance, all the target firms were currently operating in the Nigerian construction industry, involved in the Rivers State public infrastructure projects, and carried out similar materials vendor selection and procurement activities in similar construction programmes initiated by the Rivers State Government. Rivers state was chosen for this study because of the numerous construction projects that was going on in the state at the time of the study; which provided better opportunity to study the targeted population seamlessly without also compromising the required thoroughness of a scientific study.

Sample Size and Sampling Technique

By utilising the target population of 86 registered construction companies in Rivers State, the target sample size of this study was 73 randomly selected respondents. The determination of adequate sample size for this study was guided by the Krejcie & Morgan's (1970) sample size determination table (available at the appendix section of this paper). In order to avoid prejudice in sampling selection, the random sampling approach was adopted to select respondents who were mainly construction professionals in the industry and were administered the questionnaire. In terms of sample size adequacy, which also denotes its representativeness, Mugenda and Mugenda (2003) opined that a good population sample is between 45% and 50% of the total population. Accordingly, the sample size for this study was 84.9% of the population, therefore justifying its representativeness.

Data Collection Instrument

The primary data collection instrument used was developed by the researcher which is the structured, closed-ended, questionnaire. The decision to utilise the questionnaire above other forms of scientific enquiries for this study was founded on its economy, standardisation, and convenience (Christou, 2012; Creswell and Clark, 2010). A thorough literature review was carried out and used to develop the initial questionnaire. This provided the basis for the design of the questionnaire tagged: "Survey of Construction Vendor Risks Management Practices". The questionnaire items were scored on the basis of the 5-point Likert scale of 1 to 5, thus 1 represents Strongly Disagree, and 5 represents Strongly Agree. The structured questionnaire had three sections, namely: The demographic section with questions meant to collect information about the profile of respondents and organization's demographics, the vendor risk management practices section, and the operational performance section. A total of 21 questionnaire items were designed for this study's data collection. The instrument had a covering letter, informing the respondents about the importance and aim of the study, assuring them of confidentiality of information and anonymity of participation, and also how their data would be utilised throughout the study. This was necessary to maintain ethical standards of this research.

Validity and Reliability of Instrument

In determining the good quality of the items in the questionnaire, some reliability and validity measures were taken. A pilot survey was carried out with two academic experts and four industry practitioners. This resulted in few modifications in the initial items in the questionnaire. Some items were deleted either due to their lack of clarity or their likely irrelevance to the Nigerian construction industry. Few items were also combined for more understanding of the participants. And some additional items were included as per recommendations received during the pilot phase. As an outcome of this exercise, a list of 21 vendor risk management questions constituted the concluded version of the questionnaire. At a later stage of this study, Cronbach's reliability analysis was calculated in order to check the internal consistency of the questionnaire items on the pilot survey data. As shown on the results (Table 2), the reliability of scale items was found to be above $\alpha = 0.70$ threshold. According to Nunnally and Bernstein's (1994) reliability threshold of 0.7 is an indication that an instrument is good enough and so confirmed the internal reliability of the items included in the questionnaire.

Measurement of Variables

The independent or predictor variable in this study is vendor risk management, while the dependent or response variable is operational performance of construction firms. The predictor variable (vendor risk management) was further operationalized into two dimensions in the context of this study as follows: 1) construction vendor risk identification, 2). construction vendor risk prevention. These constructs are called predictors because, according to Christou, (2012), Hunger and Wheelen, (2012) they might cause a change in the behaviour or numerical value of the dependent or outcome variable. The dependent or response variable –operational performance- was likewise measured by two indicators – scheduled timelines (i.e meeting project completion deadlines), and project quality (i.e less or no defect)- an indicator of project durability. These indicators are needed in this study because they are generally believed to respond to changes in the value of the predictor variable (Saunders *et al.*, 2012). Risk management culture- a contextual factor was considered the moderating variable for this study. It was included to observe the direction of relationship between vendor risk management and operational performance of construction project firms.

Method of Data Analysis

This study adopted both descriptive statistics such as Mean Score (M), Standard deviation (SD); and inferential data analysis techniques such as the Spearman's ranked correlation techniques, partial correlation, and factor analysis. These statistical analysis tools were adopted for various reasons such as practicality, ease of interpretation, and computational speed. The mean and standard deviation were used to answer the research questions, while the Pearson's correlation was conducted to examine the relationship between dependent and independent variables of the study as well as the individual constructs. An assessment was also done on all the loadings of the individual variables to ascertain indicator reliability and internal consistency. This was measured against the minimum benchmarks recommended by Nunnally and Bernstein (1994) and Hair, *et al.* (2017). Also, Cronbach alpha was assessed using thresholds recommended by scholars (Fornell & Larcker, 1981; Chin, 1998; Gefen and Straub, 2005; Sarstedt, Ringle and Hair, 2017). The test for moderating effect was conducted using partial correlation analysis. All data coding, processing and analysis were performed using the IBM@SPSS version 27.

4. RESULTS AND DISCUSSION

In this section, data analysis results are presented and the findings are discussed. It begins with the result of demographic profile of respondents. This is followed by descriptive and correlation results which provided answer to the research questions and aids in ensuring reliability and internal consistency of measures. Thereafter, the results of hypotheses testing and the findings are discussed.

Analysis of Respondent's Demographic Data

A total of 73 copies of the questionnaire were administered on project managers and engineers in the selected construction companies. However, 43 copies were appropriately filled and returned within stipulated time, and they were used for the purpose of analysis. This translates to an effective response rate of 58.9%. Following Pagell, Yang, Krumwiede and Sheu's (2014) recommendation of minimum 45% response rate for a supplier risk management study in a developing nation's context, this study concludes that the response rate (actual sample size) was adequate for use in this study.

The sample characteristics and demographic profile of respondents are as presented in Table 1. As indicated, 77.1% of the respondents were male while 22.9% were female; indicating the usual

dominance of the male folks in the construction project industry. The results of respondent's age show that majority of the responses (58.4%) came from those between 41-50 years, followed by those between 31-40 years (19.8%), 51 years and above (11.9%), in that order respectively. Correspondingly, for the years of experience, 13.9% of the respondents have less than 5 years of experience, 11.9% have years of experience between 6 to 10, 74.2% of the respondents have 11 years and above experience. Given the years of working experience, it can be inferred that most respondents were experienced professional and knowledgeable enough to make reliable opinions on the subject matter.

Furthermore, respondents were generally well educated as majority (38.6%) holds bachelor degree. Moreover, the respondents who took part in the study were Civil Engineers (48.5%), 23.8% were Project Managers, 7.9% were Construction Managers, 5.0% were Quantity surveyors, 12.4% of respondents were sampled from stores supervision group, and the remaining 2.8% were These results are similar to those of previous studies, such as Waris, Mohammed, Moshood and Arazi, (2014), whose respondents were predominantly project managers, and construction engineers, and that of Izwan, Syuhaida, Zainai and Abd-Latif (2018), in whose study, about 42% of the respondents were equipment managers and civil engineers. In addition, majority of respondents 65.7% were in procurement-related units, 37.1% were those occupying the positions and performing procurement roles. This analysis implies that the socio-demographic characteristics were widespread and typical of construction project industry.

Table 1 Respondent's demographic profile (N= 43)

Sample characteristics	Components	Per cent %
Gender	Male	77.1
	Female	22.9
Age	Less than 30yrs	12.3
	30-40 yrs	19.8
	41-50yrs	58.4
	51-60yrs	11.9
Size of workforce	Less than 15	11.2
	15-20	23.8
	21-50	54.2
	51-100	10.0
	More than 100	0.8
Highest Qualification	Bachelor Degree	69.9
	Master's Degree	26.0
	Doctorate Degree	4.1
Department	Warehouse & Stores	22.1
	Procurement & logistics	65.7
	IT	8.88

	Project Design	3.32
Job position	Project Manager	23.8
	Quantity Surveyor	5.0
	Construction Manager	7.9
	Civil Engineer	48.5
	Stores Supervisor	12.4
	Developer representative	2.8

Univariate (Descriptive) Analysis of Data

Table 2 shows the results for descriptive univariate analysis and reliability test. For descriptive analysis, the target mean score of 3.0 was used as a benchmark for decision making i.e whether agree or disagree. Following Saunders et al., (2012) the 3.0 score was determined by dividing the sum of the 5-point Likert scale by 5. Thus, a mean scores ≥ 3.00 for any construct signifies agreement and vice versa.

Table 2 also shows the factor loadings (l_k) of the indicators of the independent and dependent variables. With respect to the dimensions of construction vendor risks management, all loadings scored above 0.70, which range from vendor risks identification (VRI) ($l_k = 0.82$) to vendor risks prevention (VRP) ($l_k = 0.85$). Moreover, all the measures of project operational performance scored above 0.70, which range from scheduled completion time (SCT) ($l_k = 0.84$) to project quality (PQ) ($l_k = 0.83$). Furthermore, Table 2 indicates that values for composite reliability (CR), and Cronbach's alpha coefficient (α) for the constructs are well above the Nunally's, (2004) recommended cut-off of 0.65, thus satisfying conditions for construct reliability and internal consistency. For instance, the Cronbach and composite reliability outcomes for all the variables yielded as follows: VRI ($\alpha = 0.87$) (CR=0.79); VRP ($\alpha = 0.75$) (CR=0.72); SCT ($\alpha = 0.89$) (CR=0.81); and PQ ($\alpha = 0.85$) (CR=0.76). These results confirm that each construct sufficiently discriminates itself from any other one in the model thus preventing autocorrelation and has no discriminant problem.

Table 2: Descriptive and Reliability Analysis

Variable	Construct	Mean	Std.Dev	Rank	Loadings
Vendor risk (VRI) identification ($\alpha = 0.87$) (CR=0.79)	Risks of damaged materials during handling (transportation & storage)	4.05	0.83	3	0.70

	Unethical practices among material vendors	3.41	1.10	13	0.74
	Materials procurement price escalation risks	3.46	1.07	10	0.81
	Risk of non-compliance to specification	3.30	0.49	16	0.82
	Material delivery delay risks	3.27	1.09	17	0.78
Vendor risk (VRP) prevention ($\alpha = 0.75$) (CR=0.72)	Vendor previous assessment score	2.70	1.06	19	0.72
	Vendor financial capacity	2.33	1.15	20	0.73
	Warranty policy before selecting vendors	2.31	1.12	21	0.78
	Vendor technical capacity and delivery flexibility	3.80	0.95	6	0.71
	Continuously monitor of vendor risks	3.85	0.81	5	0.85
Scheduled completion time (SCT)($\alpha = 0.89$) (CR=0.81)	Changes in material specifications affects scheduled completion time	3.35	1.09	15	0.72
	Material wastages affect completion time	3.15	0.95	4	0.69
	Improved delivery time over the years	3.45	1.15	11	0.82
	Improved time between order placement and delivery	4.05	1.04	18	0.76
	Better supplier recovery time from material failure	3.60	0.88	8	0.84
Project quality (PQ) ($\alpha = 0.85$) (CR=0.76)	Enriched quality of finished construction works	4.20	0.77	1	0.83
	Reduced rate of project failure or defect	3.45	1.15	12	0.71
	Increased client/user satisfaction	3.60	0.88	9	0.68
	Improved quality of materials shipped by contractors.	3.41	1.35	14	0.79
	Enhanced buyer-vendor relationship	4.06	0.82	2	0.77
	Rewarding management of materials quality efforts	3.64	0.84	7	0.81

Note: α = Cronbach alpha coefficient, **CR**= Composite reliability index

Results of descriptive analysis in Table 2 also that the mean score for most constructs defining the relationship between construction vendor risks management and project operational performance were above the target benchmark (except otherwise stated). For instance, all but three items relating to vendor risk prevention had mean score less than 3.0 as follows: vendor previous assessment score (Mean= 2.70, SD= 1.06), vendor financial capacity (Mean=2.33, SD= 1.15), and warranty policy before selecting vendors (Mean= 2.31, SD=1.12). This results simply suggest that the construction firms under study are not paying the required attention to preventing materials vendor risk in terms of requesting vendors to present previous assessment score of past performance before award of contract, ascertaining the financial position/capability of vendors, and committing vendors to robust warranty policies to prevent operational and future default. On the other hand, respondents agreed to the fact that it is important to identify vendor risks in relation to damaged materials during handling i.e transportation & storage risks (Mean= 2.31, SD=1.12), and the need to continuously monitor vendor risks in the construction process (Mean= 3.85, SD=0.81). Furthermore, respondents also agreed that proper management of vendor risk through risk identification and prevention would help improve operational performance in terms of time between order placement and delivery (Mean= 4.05, SD=1.12), and also enrich the quality of finished construction works (Mean= 4.20, SD=0.77).

Bivariate Analysis -Test of Hypotheses

Table 3 shows the results of the first four hypotheses testing concerning the relationship between the dimensions of vendor risk management (construction vendor risk identification, construction vendor risk prevention) and the two measures of project operational performance (i.e scheduled completion time, project quality).

Table 3: Correlation Analysis

Variable Code		VRI	VRP	SCT	PQ
VRI	Correlation Coefficient	1.000	.306*	.316*	.535**
	Sig. (2-tailed)		.040	.012	.002
	N	43	175	175	175
VRP	Correlation Coefficient	.306*	1.000	.329*	.502*
	Sig. (2-tailed)	.040		.020	.011
	N	43	175	175	175
SCT	Correlation Coefficient	.316*	.329*	1.000	.521**
	Sig. (2-tailed)	.012	.020		.000
	N	43	175	175	175
PQ	Correlation Coefficient	.322**	.252*	.320**	1.000
	Sig. (2-tailed)	.000	.001	.000	
	N	43	175	175	175

Note: *VRI* = Vendor Risks Identification, *VRP* = Vendor Risks Prevention, *SCT* = Scheduled completion time, *PQ*= Project Quality

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

The results reveals that vendor risks identification has a positive and significant relationship with scheduled project completion time ($\rho = .316$, $n = 43$, $P < 0.01$), and with project quality ($\rho = .322$, $n = 45$, $P < 0.01$). Similarly, vendor risks prevention has a positive and significant relationship with scheduled project completion time ($\rho = .329$, $n = 43$, $P < 0.01$), and with project quality ($\rho = .252$, $n = 43$, $P < 0.01$). Hence, null hypothesis 1, 2, 3 and 4 are rejected. The results suggest that a unit increase in each of the two vendor risk management variables (vendor risks identification, vendor risks prevention) is associated with improvement in operational performance of project firms in terms of scheduled project delivery time and project quality.

Multivariate Analysis- moderating effect of risk-oriented culture on vendor risk management and operational performance

The last hypothesis (H_5) addresses the moderating effect of risk-oriented culture on the relationship between vendor risk management and operational performance. This hypothesis was tested using partial correlation. Table 4 shows the outcome of the test.

Table 4: Moderation Analysis

Control Variables			Vendor Risk Management	Operational Performance	Risk-Oriented Culture
-none ^a	Vendor Risk Management	Correlation	1.000	.592	.274
		Significance (2-tailed)		.000	.013
		Df	0	41	41
	Operational Performance	Correlation	.592	1.000	.250
		Significance (2-tailed)	.000		.032
		Df	41	0	41
	Risk-Oriented Culture	Correlation	.274	.250	1.000
		Significance (2-tailed)	.013	.032	
		Df	41	41	0
Risk-Oriented Culture	Vendor Risk Management	Correlation	1.000	.688	
		Significance (2-tailed)		.000	
		Df	0	110	
	Operational Performance	Correlation	.688	1.000	
		Significance (2-tailed)	.000		
		Df			

Df	41	0
a. Cells contain zero-order (Pearson) correlations.		

Table 4 shows that, in the absence of risk-oriented culture, vendor risks management scores a moderate, positive and significant association with operational performance ($r = .592$, $df = 41$, $p < .001$). However, when risk-oriented culture was introduced, a significant increase was observed on the strength of the relationship between vendor risks management and operational performance ($r = .688$, $df = 41$, $p < 0.01$). Thus, the null hypothesis that “risk-oriented culture is not a significant moderator of the relationship between vendor risk management and operational performance of construction project firms is not supported.

5. CONCLUSION AND RECOMMENDATIONS

The study attempted to examine how construction firms develop risk management practices to mitigate the potential negative impact of disruptions in their project supply chains. The research model presents relevant variables that practitioners find useful and meaningful for construction firms. Furthermore, the survey questionnaire used in this research have been empirically validated and show high levels of reliability and validity. Thus, this instrument might be used as a benchmark tool for assessing risk management practices of other firms and their network participants. The study also adopts a quantitative methodology to explore the relationships between vendor risks identification, vendor risks prevention practices, and operational performance outcomes (scheduled completion time and project quality). The research findings report that increasingly, the need to develop strategies to identify construction vendor risks is very crucial for project managers in the construction industry. This implies that managers that give attention to identifying vendor risks associated with material handling (transportation & storage), unethical procurement practices, price escalation risks, non-compliance to specification, and delivery delay are likely to improved operational outcomes such as expedited delivery time, reduced rate of project failure, and client/user satisfaction.

Based on the findings in this study, three major recommendations are suggested 1). Project managers in the construction industry should pay attention to risk prevention as a proactive measure of managing material vendors risk. Specifically, there is need to ensure that previous assessment report of the suppliers is presented before new procurement contract are signed. 2). In addition, managers must request vendors to endorse robust warranty/guaranty policy before being selected as construction vendors. 3). Lastly, managers must ensure that the financial capacity of the vendor is authenticated by reputable financial expert or bank before being selected as subcontractor to construction project works.

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Appendix I

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970

Appendix 2: Survey Instrument

In order to counter risks of the material flow along your construction supply chain, you undertake the following:

Variable	Construct	SA	A	U	D	SD
		5	4	3	2	1
Vendor risk identification	Our company identifies material damaged during transportation and storage					
	Our company identifies unethical practices by material vendors					

	Our company identifies incidence of materials procurement price escalation					
	Our company identifies Non-compliance of material to specification					
	Our company identifies delay in material delivery					
Vendor risk prevention	Our company take steps to determine previous vendor assessment score					
	Our company take steps to ascertain financial capacity of vendors					
	Our company request for warranty policy before selecting vendors					
	Our company take steps to determine technical and capacity and delivery flexibility of vendors					
	Our company assign persons responsible for the monitoring of vendor risks					
Scheduled timelines	Changes in material types and specifications during construction affects our scheduled completion time					
	Material wastages affect completion time					
	Our delivery time has improved over the years					
	Time between order placement and delivery has improved over the years					
	Supplier recovery time from material failure is better					
Project quality	Quality of our finished construction works has improved over the years					
	The rate of project failure or defective rate has dropped significantly over the years					
	Client/user satisfaction with project has increased over the years					
	Quality of materials shipped by contractors has improved over the years					
	Our relationship with materials vendor has improved significantly					
	Our materials quality management effort and standards has improved					

WORK-LIFE BALANCE AND PERFORMANCE OF DEPOSIT MONEY BANKS (DMB's) IN ENUGU STATE, NIGERIA

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ABSTRACT

This study examined the effect of work-life-balance on the performance of Deposit Money Banks in Enugu State, Nigeria. Specific objectives of the study were to: identify the extent to which the employee assistance program affect employee commitment in deposit money banks in Enugu State, Nigeria. Access the nature of relationship between leave policies and job satisfaction among employees of deposit money banks in Enugu State, Nigeria. The study adopted survey research design. The population of the study was 268 staff of the selected 3 banks. Simple random sampling was adopted in the selection. The sample size of 161 was obtained from application of Taro Yamane's (1964) formula while Bowley's proportional allocation statistical technique was adopted to determine the allocation of questionnaire to each bank. Primary data were collected through the administration of questionnaire. The questionnaire was structured in five-point likert scale. Face and content validity were determined by five experts, three from the department of Management, University of Nigeria, Enugu Campus and two from the financial industry. A test-retest method was used to determine the reliability of the questionnaire using Cronbach Alpha method. The result gave a coefficient of 0.876. The study of the finding revealed that employee assistance programs positively affected employee commitment ($p = 0.02 < 0.05$). Annual leave, maternity leave and sick leave had a positive relationship with job satisfaction ($r = .94, p < 0.05$). The study concluded that non-adherence by the management of the selected banks to work-life balance initiatives is the major challenge to employees' performance, retention, and the overall actualization of set goals in the Nigeria banking sector. The study recommended amongst others that the captains of DMBs in Nigeria particularly in Enugu state should adequately and effectively implement employee assistance programme in order to maintain a productive, effective and functional workforce.

Introduction

Work-life balance is one of the concepts in organization behavior that have attracted wide range of interest amongst industrial actors and researchers of recent. Gulbahar (2014) defines work life balance as the proper prioritizing between work" (career and ambition) on the one hand and "life" (Health, pleasure, leisure and family) on the other hand. Conversely Orogbu, Onyeizugbe and Chukwuemeka (2015) describe the concept as a very important phenomenon that is of great

concern to various employees in both private and public sector. In their opinion work-life balance goes beyond prioritizing the work role and one's personal life. It also affects the social, psychological, economical and mental well-being of the individual. All these are reflected in the output of the individual, which affects his or her performance in the work place on the long run. Work-life balance has been shown to have implication on employee attitude, behavior, wellbeing as well as organizational effectiveness (Eby, Casper, Lockwood, Bordeanx and Brindley, 2005) cited in Orogbu et al (2015).

Work life balance refers to the effective management of multiple responsibilities at work, at home, and in the other aspects of life (Naithani 2010). It is an issue that is important both to the organizations and to employees. In a recessing economic scenario, organizations look forward for higher productivity and need employees with improved work-life balance as an employee with better work-life balance will contribute more meaningfully towards the organizational growth and success. The term work-life balance is commonly used as a more comprehensive expression to describe policies that have been previously termed 'family-friendly', but are now extended beyond the scope of the family. Sturges and Guest, (2004) posits that work and family are the two most important domains in a person's life and their interface has been the object of study for researchers world-wide..

According to Olumuyiwa, Daniel, Deji and Dare (2015), instituting a family friendly work environment in the banking sector becomes critical and pivotal to the realization of employee loyalty, job satisfaction and reduced turnover intention, this also improves the performance rate of organization. A comprehensive study of this nature to explore is needed to better enlighten policy makers in order to make easy implementation of same in the future. The multi-faced demand between work and home responsibilities have assumed increased relevance for employees in commercial banks in recent years. This is due to demographic and workplace changes, such as; transformation in family structures, growing reluctance for long number of hours acceptance culture, greater number of women in the workforce and technological advancement (Orogbu et al 2015).

This Western European nation with a population of just over half a million and a GDP per capita of \$110,000 has a workforce that spend 15.1 hours per day devoted to personal leisure and only 3.5 per cent of its workforce working long hours. Other countries in the list include Costa Rico, Spain, Ireland, Brazil, Russia, Luxemburg, Belgium, Norway, Lithuania, Finland, France, Netherland, Germany etc,. However, the reverse is the case here in Nigeria especially in the banking sector. In- spite of the numerous contributions of Money Deposit Banks (MDBs) there is a growing concern that bank workers often have work life imbalance. That is, striking a balance between the work hours spent on their jobs and time to pursue other areas of life such as family, careers and hobbies etc. this is due to the long hour work cultural practices of Nigerian banks and work overload saddled on its workers.

The inability of employees to achieve balance between the work and home domains causes negative consequences for both the individual and the organization. Perceived work-life balance is measured using two items: the extent to which workers feel successful in balancing work and personal life, and the amount of conflict they face in balancing work and personal life. In response to this concern, an increasing number of banks now offer some level of work-life programs for their employees. Work-life programs most commonly include factors such as flexible hours and part-time work while commercial banks like United Bank for Africa plc, First Bank of Nigeria plc, Zenith bank plc have a poor working organizational culture such as inconvenient period of leave

for employees and the inability of employers to keep to leave policy in their employment agreement. All these may lead to stretched workloads which bring about different issues in the organization. These issues involve both psychological and emotional wellbeing of employee who may eventually lead to reduction in employee performance, poor service delivery and health related issues; in the long run these may affect the performance of these organizations.

Objectives of the Study

The main objective of this study is to examine the effect of work-life balance on the performance of deposit money banks in Enugu State, Nigeria. The Specific objectives of the study were to:

- i. identify the extent to which employee assistance program affect employee commitment in deposit money banks in Enugu State, Nigeria.
- ii. assess the nature of relationship between leave policies and job satisfaction among employees of deposit money banks in Enugu State, Nigeria.

Research Questions

The following research questions guided the study:

- i To what extent does employee assistance program affect employee commitment in deposit money banks, Enugu State, Nigeria?
- ii. What is the nature of relationship between leave policies and job satisfaction among employees of deposit money banks in Enugu State, Nigeria?

Research Hypotheses

Based on the highlighted research objectives and research questions, the following research hypotheses were formulated:

- i. Employee assistance program affect employee commitment in deposit money banks, Enugu State, Nigeria.
- ii. Maternity leave, sick leave and annual leave, have a positive relationship with job satisfaction among employees of deposit money banks in Enugu State, Nigeria.

Review of Related Literature

Concept of Work-life Balance (WLB)

The concept of “work-life” balance is generally broader when compared with family friendly work policy. This directly infers that individuals may strive for all aspects of life to be in balance, such that personal resources are devoted across all important life domains (Kirchmeyer, 2000). Work-life balance can be traced to work-life conflicts or challenges that persons encounter in an attempt to find a leverage or sense of balance within and outside the work environment. The work-life notion is of the opinion that that most individuals perform multiple roles to the extent that the notion of work-life balance is pertinent to achieving balance in all spheres or at least minimising the work-family conflict (Lero and Bardoel, 2009). Besides, the concept ‘work-life balance’ allows for a wider understanding of ‘non- work’ areas of life, focusing on workers with varied family concerns, giving increased span to include men and all and sundry within the work place, and also giving allowance for spill over and variability between work and other areas of life (Gregory and Mimer, 2009).

Maertz and Boyar (2009) defines work-life balance as a specific set of organizational practices, policies, programmes, plus a philosophy, which actively supports efforts to help employees achieve success both at work and at home. Work-life programmes cover reward, gains and other

human resource programmes all of which tackle the significant connections of employees, their families, communities, and the workplace. Clark (2000) describes work-family balance as satisfaction and good functioning at work and at home, with a minimum of role conflict. Collins and Shaw (2003) define work-life balance as the extent to which an individual is equally engaged in — and equally satisfied with — his or her work role and family role. Work-life can be viewed from the lenses of creating and supporting healthy environment which will enable employees have balance between work and personal responsibilities that tends to strengthen employee loyalty and productivity. Aslam (2011) defines work-life conflict as inter-role conflict arising due to conflicting roles required by organization and from one's family. Roehing (2003) defines work-life balance as a direct result of compatible pressure from an individual family roles and work domain. Lockwood (2008) observes that the meaning of work-life balance has changing features since it implies various things to various groups, and its meaning is frequently determined by the perspective of the discussion and the belief of the author. Clarke, Koch and Hill (2004) contend that in a wide sense, work-life balance has to do with an acceptable degree of 'fit' between the numerous responsibilities in an individual's life.

Bird (2003) contends that one's best individual work-life balance would vary over time, often on a daily basis. The right balance for one person today will probably be different for the same person tomorrow. The right balance for a single person will be different when he/she marries, or if one has children; when a new career is started versus when one is nearing retirement. According to him, there is no perfect, one-size fit all, balance that should be strived for. The best work-life balance is different for everyone because we all have different priorities and different lives. Similar to the explanation of work-life balance by Bird (2003) is that of Lockwood (2003), who in her article states that: "The meaning of work-life balance has chameleon characteristics. It means different things to different groups, and the meaning often depends on the context of the conversation and the speaker's viewpoint." The concept of work-life balance is based on the notion that paid work and personal life should be seen less as competing priorities than as complementary elements of a full life (Lewis, 2000). He asserts that the way to achieve this is to adopt an approach that is "conceptualized as a two way process involving a consideration of the needs of employees as well as those of employers." Work-life balance, in its broadest sense, is a satisfactory level of involvement or 'fit' between the multiple roles in a person's life. Although definitions and explanations vary, work-life balance is generally associated with equilibrium, or maintaining an overall sense of harmony in life (Clarke et al, 2004). The study of work-life balance involves the examination of people's ability to manage simultaneously the multifaceted demands of life. Although work-life balance has traditionally been assumed to involve the devotion of equal amounts of time to paid work and non-work roles, more recently the concept has been recognized as more complex and has been developed to incorporate additional components (Greenhaus, Collins and Shaw, 2002).

The central thrust of work-life balance is that work and private lives are viewed more as harmonizing ingredients of a complete life than as challenging priorities. Lewis (2008) adds that realization has to do with assuming a method thought of as a collaborative course of action entailing a reflection on the desires of both the workers and the employers. While the descriptions and explanations of work-life balance differ, it is usually linked with symmetry, or keeping in general a sagacity of synchronization in life. Achieving work-life balance has positive implications

for both individuals and organizations. Work-life imbalance has been linked with a variety of negative work, family, and stress-related outcomes, such as intentions to turnover, life dissatisfaction and depression (Allen, Bradley and Brown, 2000). Achieving balance between work and non-work is greatly influenced by support in the work domain. The availability of family-friendly benefits predicted increased affective commitment, and decreased intention to leave the organization. However, Henry and Anderson (2009) also suggest that the mere existence of work-life policies is not enough to ensure their use or to alleviate work-life conflict. Employees must perceive a supportive work environment that sanctions and encourages the use of such policies (Thompson, Chandra and Charanjeet, 1999).

However, the concept of work-life balance has been critiqued. Firstly, the concept of 'balance' is thought to reinforce the separateness between paid employment and other areas of life, focusing on the movement between roles as opposed to numerous role interactions. This approach fails to encompass the interwoven nature of life demands and experiences, neglecting the fact that there is no clear-cut distinction between the world of work and the work of family, friends, and social networks and community (Taylor, 2001).

Work-Life Balance Initiatives

Work-life balance initiatives are policies and programmes of the organization aimed at achieving individual and corporate goals. Organizations can implement various work-life balance initiatives that may assist employees to better balance their work and family responsibilities, gain improvements in well-being, and provide organizational benefits. There are a large variety of family friendly policies which include but are not limited to the following: flexible working hours, employee assistance programme, leave programme, alternative work arrangement, dependent care policies, job sharing, part-time work, compressed work weeks, telecommuting, on-site child care facility (Hartel, 2007).

1. Employee Assistance Programme (EAP)

Employee Assistance Programme (EAP) is a workplace programme that is designed to address problems that negatively affect employees' well-being. Employee Assistance Programs (EAPs) are "job-based programs operating within a work organization for the purposes of identifying 'troubled employees,' motivating them to resolve their troubles, and providing access to counselling or treatment for those employees who need these services." (Martin, J. and Roman, 2004). Breaugh and Frye (2007) define employee assistance programme as a work site focused programme designed to assist in identification of problems which affect or may affect performance. They state that the objective of employee assistance programmes is not to eliminate symptoms and diseases; rather, it is to help employees build lifestyles that will enable them to achieve their full physical and mental potential for enhancement of organizational goal. Kleyhans and Markham (2000) submit that the essence of employee assistance programme is to provide mechanism for counselling and other forms of assistance, advice and information to employee on a systematic and uniform basis and to recognize standard. Brough and Kafliath (2005) point out that EAPs can be as simple and inexpensive as providing information on the hazards of smoking or how to lose weight, or comprehensive and expensive, such as providing professional health screening and offering top of the range fitness facilities. Dickson and Williams (2008), employee assistance programmes involves services on corporate-wiliness, health, crisis management, work-

life balance, employee financial issues, alcoholism reduction, absenteeism, marital issues, stress management, welfare issues.

2. Leave Policy

Leave is the amount of hours/days employees of an organization are permitted to be away from their employment position within a period of time without consequences. This time off is paid by the company and employees are allowed to request the time for any reason they wish to be off work. It also gives the ability for employee to release themselves from work stress and create a balance between work and their family activities. This type of work-life balances helps employees to perform other duties outside work, which creates a balancing effect between work activities and life activities (Burke and Moffett, 2003). There are different types of leave policy which are:

- i. **Annual leave:** Annual leave can be defined as paid leave for the purpose of recreation to which employees become entitled after a period of qualifying service or employment with a particular employer (Burke and Moffett, 2003).
- ii. **Parental Leave:** Parental Leave is an official permission given to employees with child care giving responsibilities. Women are entitled to twelve weeks' maternity leave with at least half pay but usually the customary benefits are more generous with maternity leave fully paid (Burke and Moffett, 2003). The female employees often times are the greater beneficiaries of this leave in Nigeria where maternity leave allows a nursing mother to be away from work for 3 months. In 2009, the Nigerian government extended the maternity leave to sixteen weeks for federal public service with full pay and advised the public sector to follow suit.
- iii. **Career's leave:** Career's leave is an official permission for an employee to take time off to take care for an immediate family or household member who is sick or injured or help during a family emergency (Burke and Moffett, 2003).
- iv. **Paid Family and Medical leave:** Paid family and medical leave relates to officially granted leave of absence from work to attend to dependent care challenges or personal health concerns of the employee (Burke and Moffett, 2003).
- v. **Sick leave:** Sick leave is time off from work that an employee can use to address their health and safety needs without losing pay (Burke and Moffett, 2003).
- vi. **Study leave:** Study leave is given to any staff member who is undertaking an approved study course. Training leave is given to an employee for self-development and organization development (Burke and Moffett, 2003).

Employee Assistance Programmes and Employee Commitment

The impacts of work-life balance (WLB) on both male and female employees have brought into saliency phrases such as "good providers", which deals with men as sole providers of monetary income in traditional African environment. This has also brought to the front burner the concept of "new fatherhood" that underscores provision of family monetary income by both parents. However, work-life imbalance causes both working men and women to put more time and energy to work in order to provide for their children and families, particularly single parents or divorcees. In doing this, the length of time as well as level of commitment that they put in to work is being affected adversely as stress from taking care of their children or wards, including social pressures impinge on their level of commitment and vice versa (Harpaz and Snir, 2003). Besides, on the part of organizations, family-friendly policies/initiatives such as employee assistance programmes and

compensation packages have now become significant parts of most companies' human resource management packages in order to retain commitment, satisfaction, and motivation from employee (Netemeyer and McMurrian, 1996).

Maxwell and McDougall (2004) contend that employees are affected negatively by stress, marital, financial and other problems which can negatively affect their commitment to the organization. They stress that there is a need for systematic ways to manage troubled employees in order to induce greater commitment for the achievement of organizational goal. Kopelman and Comiolly (2008) assert that organizations must adopt employee assistance programme in order to maintain a productive, effective and functional working environment. To them, one of the primary goals of an employee assistance programme is to ensure a stable health of workers so that they can consistently contribute to the growth of the organization. It is also meant to increase the level of commitments, and reduce the amount of time employee take away from work. Employee Assistance Programme (EAP) is a workplace programme that is designed to address problems that negatively affect employees' well-being. It is an organized attempt by employers to improve the employees work environment towards an enhanced job performance (Jacobson and Paul, 2005). Carrel (1989) explains that employee assistance programmes are initiated by employers as a humanitarian and moral act to assist employees to cope with work place demands and to overcome the difficulties that are related to work.

Commitment is the knowledge, skills, abilities, and experience of the work force which is useful to the organization only if the employees are willing to apply it to the achievement of the goals of the organization (Kaufman and Uhlenberg, 2000). Commitment is the measure of the relative strength of an employee's identification with and involvement in a particular organization (Matheus and Zajac, 2003). It could be seen as identification and acceptance of organizational goals and values (Karatepe, 2010). Employee commitment is a psychological state that characterizes the employee's relationships with the organization and has implications for the decision to continue membership in the organization (Meyer and Allen, 2002). Akinloye (2000) refers employee commitment to congruence between the goals of the individual and the organization whereby the individual identifies with and extends effort on behalf of the general goals of the organization.

Commitment is a more global response to an organization and job satisfaction is more of a response to a specific job or various facets of the job and also an attitude toward work related conditions, facets, or aspects of the job. Therefore, commitment suggests more of an attachment to the employing organization as opposed to specific tasks, environmental factors, and the location where the duties are performed (Deery, 2008). Organisational commitment is one of the most important factors that affect organisational growth and productivity as well as a defining factor in shaping human resource management (Padala, 2011; Ahuja, 2006). Organisational commitment is a person's attitude to work, which reveals his or her identification with and involvement in a particular organization (Lambert, (2006). Accordingly, organisational commitment deals with "an identification with the goals and values of the organisation, a desire to belong to the organisation and a willingness to display effort on behalf of the organisation" (Boles and Pullig, 2007).

Allen and Meyer (2001) conceptualized three components of organizational commitment as affective, continuance and normative commitment. To them, affective commitment is the

willingness or motivation to exert considerable efforts on behalf of the organization and a strong desire to maintain membership of the organization. Affective commitment ties people to their organization, in other words employees remain in their organization because they want to. Some of the behaviour often exhibited by affectively committed employees include desire to remain with the organization, high level performance, lower rate of absenteeism, advancement and growth. They describe continuance commitment as a cost that the employee associates with learning the organization. They explain that employees with strong continuance commitment feels controlled (external regulation) and that they are under pressure to satisfy the minimum job requirement for staying with the organization. Normative commitment represents employees' strong attachment to their organization because they feel an obligation to do so. According to them, if an organization is loyal to the employees by supporting his/her educational progress, the employee may exhibit higher degree of normative commitment in line with the earlier reviewed norm of reciprocity.

Employee assistance programmes is a decisive factor on commitment. The feeling of commitment increases among the employee due to level of care and appreciation at work. EAP elicit workers perception of being valued and cared for which invariably strengthened commitment to the organization. It has also been established in the study that EAP increases feeling of wholeness, harmony and wellbeing, due to the level of care and appreciation at work (Gray and Jacqueline, 2003).

Leave Policy and Job Satisfaction

Organizations are social systems where human resources are the most important factors for effectiveness and efficiency and need effective managers and employees to achieve their objectives. Organizations cannot succeed without their personnel efforts and commitment. Job satisfaction is critical to retaining and attracting well-qualified personnel. Exceptional organizations have leaders that create work environments where people can achieve work-life balance and wellbeing as they define it for themselves (Spinks, 2004). A satisfied work force is essential for the success of organizations and their businesses. Dissatisfied employees make organizations dysfunctional, damaging their financial performance. Job satisfaction and work-life balance are more likely to drive employees to remain with their current employers than benefits and salary (Douglas and Eakin, 2003).

Leave is the amount of hours/days employees of an organization are permitted to be away from their employment position within a period of time without consequences. This time off is paid by the company and employees are allowed to request the time for any reason they wish to be off work. It also gives the ability for employee to release themselves from work stress and create a balance between work and their family activities. This type of work-life balances helps employees to perform other duties outside work, which creates a balancing effect between work activities and life activities (Burke and Moffett, 2003). Every employee has a personal and professional life; both of these are very difficult to separate. If an organization wishes to have better productivity and more commitment from employees then they have to be happy and satisfied. This is achieved when an individual's right to have a fulfilled life inside and outside work is accepted and respected, to the mutual benefit of the individual and the organization (Newstrom, 2002).

Job satisfaction can be defined as being the positive emotional reactions and attitudes an individual has towards his/her job (Robbins, 2003). Locke and Lathan (2000) give a comprehensive definition of job satisfaction as pleasurable or positive emotional state resulting from the appraisal of one's

job or job experience. Job satisfaction is a result of employee's perception of how well their job provides those things that are viewed as important (Osterman, 2001). Hussami (2008) contend that job satisfaction and dissatisfaction not only depends on the nature of the job, it also depend on the expectation what's the job supply to an employee. Employees that can better manage both work and family would be more satisfied, which in turn, can result in higher productivity, job satisfaction, commitment, job retention, and organizational loyalty. If employees are satisfied, job turnover and absenteeism would be reduced. There will be also an increase in job performance and financial gains resulting in reduced training and developmental costs (Greenberg, 2001).

Daniel and Paul (2007) assert that job satisfaction is a direct result of work-life and that efficient and effective implementation of leave policies such as annual leave, parental leave, career's leave, medical leave, sick leave can provide less anxiety for working parents. Burke and Moffett (2003) argue that the major issue that may hinder employee performance is when work-life balance incentives like, leave entitlement and other incentives are not adhered to by the management. To them, these may lead workers to work round the clock with little attention to themselves and their families, which may result in job dissatisfaction and poor productivity. Providing paid and unpaid family leave is considered best practice to enable workers to meet their paid work and family responsibilities.

Homer and Hollingsworth, (2007) however, having those policies available in the organization can improve employee perception about their employer and thereby increase employees' overall positive feeling toward employer which probably impact job satisfaction. Crooker and Grover (2004) also demonstrate that providing leave benefits to employees positively influences their attachment to work through the symbolic action. To them, employees may contribute with greater loyalty to the organization and better morale in response to the offering of efficient and effective leave programs. O'Driscoll and Biggs (2009) observe that parents with little or no access to paid parental leave were more likely to return to work due to financial pressures. They also report a range of negative outcomes on their personal health and wellbeing and in the work sphere reduced satisfaction and commitment.

Theoretical Framework

A theory is a system of related ideas that helps one to elucidate and foretell phenomena (Casey and Grzywacz, 2008). The importance of theory in every research cannot be ignored. Therefore, the theoretical foundation of this study aligns with the Role Theory but is anchored on Social Exchange and Spill Over Theories of work-life balance.

Role Theory

Role theory attempts to explain the interactions between individuals in organisations by focusing on the roles they play. The theory proposes that organisations (i.e. work and family institutions) may be regarded as role systems where the relationships between individuals are sustained by the expectations that have been developed by roles (Blyton and Dastmalchian, 2005). The origin of Role theory is dated back to the time when social scientists took seriously the possibility that social life could be compared with the theatre, where actors played predictable "roles." Social philosopher George Herbert Mead (1934), Anthropologist Ralph Linton (1947) and Psychologist Jacob Moreno (1934) are considered the founders of role theory.

Work-life balance research has been greatly dominated by the role theory. A role can be referred to as a set of activities or behaviours that others expect an individual to execute (Bailey and

Kurland, 2002). It is important to reiterate that roles make up a fraction of the micro system level of the ecological system theory. It is assumed in the role theory that both work and non-work institutions demand varied roles, each of which places great responsibility on the individual. These varying responsibilities in the two life domains often contend for set amount of time, physical energy and psychological resources (Berg and Appelbaum, 2004). Intra-role conflict occurs when there are contradicting expectations within a particular role. Many of the expectations often turn failed expectations where an individual has multiple roles to meet. The roles will inevitably conflict and emerge as role ambiguity or inter-role conflict (Bailey and Kurland, 2002).

In applying the role theory to this study, there is a strong indication of role conflicts in balancing the work and family responsibilities of staff in the study of the selected federal health institutions in South-East, Nigeria. Thus, role conflict results when an individual encounters tensions as the result of incompatible roles and this situation seems to be more pronounced for health professionals found in many hospitals in Nigeria. The adoption of the role theory in this research highlights the constraints imposed on working parents as they seek to balance their families' responsibilities with their work demands. Parents who are engaged in paid labour force, particularly those in the health sector, are more likely to experience greater pressure than those who are not married. This present study, therefore, critically considers the time demand of the health sector on the health workers. These demands are considered as a serious strain on them because the more the average time spent by them on their work roles outside the home, the less time they will likely spend at home fulfilling their responsibilities with the potential to generate work-family conflict and the inability not to balance their work-family roles.

Social Exchange Theory

The basic premise of social exchange theory examined the tendencies that individuals have to maximize social interaction to suit their self-interest (Mannon and Kiger, 2003). Social exchange theory, proposes that employees are likely to perform better when they perceive that they are receiving social benefits they should reciprocate (Sullivan and Lewis, 2001).

The theory emerged in the twentieth century. The focus of the theory emerged out of its application to family science by Peter Blau (1965), George Homans (1958), John Thibaut and Harold Kelly (1959). Social exchange theory grew out of the intersection of economics, psychology and sociology. According to Shira and Barbara (2002), one of the initiators of the theory, states that the theory was developed to understand the social behaviour of humans in economic undertakings. To them, the focus of these sociologists was on individual interest in human social interaction. The theory provides a conceptual economic base for social relation as limited to actions that are contingent on rewarding reactions from others. It is a two-sided relationship and also mutually rewarding process involving exchange. The basic premise of social exchange theory examined the tendencies that individuals have to maximize social interaction to suit their self-interest (Mannon and Kiger, 2003).

This theory is useful in identifying positive outcomes associated with perceived organizational support, leave policies and alternative working arrangements. According to Muse and Stamper (2007), in social exchange “the parties involved are willing to act now in the hope of future undefined rewards”. This implies that organizations that provide effective support can expect positive reactions from their staff. Greater level of support should logically lead to a decrease in

work-family conflict experience as well as higher perceptions of organizational support (resulting in higher trust), which in turn can be expected to result in lower psychological stress, higher commitment and lower turnover intentions.

Lambert and Kass (2006) applied social exchange theory to the work-family interface and suggests that work-family benefits make employees feel the duty to reciprocate with extra effort at high performance. They contend that the lower work-to-family conflict resulting from a positive work-family culture and the availability of work-family policies associated with a high level of organizational support and employee assistance can be expected to culminate in greater efforts by employees to ensure the success of the organization as well as a greater sense of loyalty.

Social exchange theory clearly explains the relationship between work-life balance, employee retention and turnover, employee assistance and commitment. This theory supports the possibility that work-life balance policies promote employee participation in the organization to the extent that the employees feel obligated to exert “extra effort” in return for these “extra benefits.” These are extra role activities that employees perform and are not mandated to do, but are beneficial towards the organization, is a further indication of their organizational commitment (Mahwish and Shama, 2002). The theory provides a lens for understanding how employees achieve task performance and commit to their organizations through the relationship between employees and their organization. Social exchange occurs when both parties value the exchange relation based on mutual trust and reciprocity (Reynolds, 2005). He submit that when employees perceive their organization’s efforts for their own well-being and perceive their organization as contributing more than it promised to provide, they are willing to strengthen their social exchange relationship. Indeed, employees have a strong intention to repay their organization by increasing their efforts to the organization (Reynolds.2005).

In this study, the researchers viewed the experience (recognition) of work-life balance in the workplace as the result of organizational efforts for the employees’ well-being and this experience leads employees to feel an obligation to contribute to organizational success. Besides, in this context, this work will focus on health workers in the health sector showing the reciprocity and the balance needed to be achieved by the employer and the employee. In other word, there has to be certain policies in place in the organisation that can help workers have time to take their mind off multitask roles knowing these are being taken care of. This will in turn increase balance between work and family roles and productivity which is the target of every organisation.

Spill over Theory

Spill over theory by Guest (2002) postulates the conditions under which spill over between the work micro system and the family micro system occurs. It can either be positive or negative. If work- family interactions are rigidly structured in time and space, then spill over in term of time, energy and behaviour is negative. When flexibility occurs which enables individuals to integrate and overlap work and family responsibilities in time and space lead to positive spill over which is instrumental in achieving healthy work-life balance. According to him, the determinants of work-life balance are located in the work and home contexts. Contextual determinants include demands of work, culture of work, demands of home and culture of home. Individual determinants include work orientation (i.e. the extent to which work or home is a central life interest), personality, energy, personal control and coping, gender and age, life and career stage. The variables of the study are under the contextual determinants, which are leave policy; dependent care policies;

alternative work arrangements; managerial support and employee assistance programmes. The nature of work-life balance was defined both objectively and subjectively. The objective indicators include hours of work and hours of uncommitted or free time outside work. Subjective Indicators refer to the states of balance and imbalance. He also noted that balance may be reported when equal weight is given both to work and home or, when home or work dominates by choice. Spill over occurs when there is interference of one sphere of life with other. Also, numerous outcomes of work-life balance which include personal satisfaction and wellbeing at work, home and life as a whole, performance at work and home, impact on others at work, family and friends.

Methodology

The study adopted survey research design. The population of the study was 268 staff of the selected 3 banks. Convenience was adopted to select the banks while simple random sampling was used in selecting staff that participated in the study. A sample size of 161 was obtained from application of Taro Yamane's (1964) formula while Bowley's proportional allocation statistical technique was adopted to determine the allocation of questionnaire to each bank. Primary data were collected through the administration of questionnaire. The questionnaire was structured in five-point likert scale. Face and content validity were determined by five experts, three from the department of Management, University of Nigeria, Enugu Campus and two from the financial industry. A test-retest method was used to determine the reliability of the questionnaire using Cronbach Alpha method. The result gave a coefficient of 0.876. Hypothesis one was tested with simple regression while hypothesis two was tested using Product Moment Correlation Coefficient (PPMC). The P-Value approach was used in acceptance or rejection of Hypothesis.

Test of Hypotheses

The results from the tests of the various hypotheses are presented below.

Test of Hypothesis one

Ho: Employee assistance programme has no effect on employee commitment in selected Deposit Money Banks in Enugu State, Nigeria.

In testing this hypothesis, data collated were tested using Simple Linear Regression.

Table 1.1a Descriptive Statistics

	Mean	Std.Deviation	N
Employee Assistance Programme	5.4683	3.4265	152
Employee Commitment	3.2796	1.6473	152

Table 1.1b Correlation

	Employee Assistance Programme	Employee Commitment
Pearson Correlation Employee Assistance Programme Employee Commitment	1.867	867.1
Sig. (1-tailed) Employee Assistance Programme Employee Commitment	.659	659
N Employee Assistance Programme Employee Commitment	608 608	608 608

Table 1.1c Model Summary^b

R	R Square	Adjusted R Square	Std. Error of the Estimate	DurbinWatson
.867a	.795	.658	0.3671	1.877

- a. Predictors: (Constant), Employee assistance Programme
- b. Dependent Variable: Employee Commitment

Interpretation:

The regression sum of squares (89.216) is greater than the residual sum of squares (75.681), which indicates that more of the variation in the dependent variable is not explained by the model. The significance value of the F statistics (0.021) is less than 0.05, which means that the variation explained by the model is not due to chance. "R," the correlation coefficient which has a value of 0.867, indicates that there is positive relationship between employee assistance programme and employee commitment. R square, the coefficient of determination shows that 79.5% of the variation in employee commitment is explained by the model. With the linear regression model, the error of estimate is low, with a value of about 0.3671. The Durbin Watson statistics of 1.877 which is not more than 2 indicates non-autocorrelation. Employee assistance programme

coefficient of 0.867 indicates a positive significance effect of employee assistance programme on employee commitment, which is statistically significant (with $t = 6.312$). The null hypothesis is therefore rejected and the alternative hypothesis accepted. Thus we concluded that employee assistance programme positively affects employee commitment in the study area.

Test of Hypothesis Two

Ho: Annual leave, maternity leave and sick leave have no positive relationship with job satisfaction in selected Deposit Money Banks in Enugu State, Nigeria

In testing this hypothesis, data collated were tested using Pearson Product Moment Correlation Coefficient.

Table 1.2a Descriptive Statistics of the Relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction

	Mean	Std. Deviation	N
Job satisfaction	1.3594	.6187	152
Annual leave	1.2875	.6937	152
Maternity leave	1.3658	.7190	152
Sick leave	1.4281	.8749	152

Table 4.7a shows the descriptive statistics of mean (m), standard deviation (std. deviation) and number of cases (respondents) (N) to determine the nature of relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction. Job satisfaction has mean of (1.36), std. deviation (0.62) and number of respondents (9), annual leave had mean of (1.29), std. deviation (0.69) and number of respondents (152), maternity leave had mean of (1.36), std. deviation (0.72) and number of respondents (152) and sick leave has mean of (1.43), std. deviation (0.87) and number of respondents (152). By careful observation of the standard deviation values, there is no much difference in terms of the standard deviation scores. This implies that there is about the same variability of data points amongst the dependent and independent variables.

Table 1.2b Multiple Correlation Matrix on the relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction

	Job satisfaction	Annual leave	Maternity leave	Sick leave
Job satisfaction Pearson Correlation	1	.939**	.795**	.828**
Sig. (2-tailed)		.000	.001992	.000
N	152	152	152	152

Annual leave Pearson Correlation Sig. (2-tailed) N	.939 .000 152	1 152	.689** .000 152	.708** .000 152
Maternity leave Pearson Correlation Sig. (2-tailed) N	.795** .001 152	.689** .000 152	1 152	.743** .000 152
Sick leave Pearson Correlation Sig. (2-tailed) N	.828** .000 152	.708 .000 152	.743** .000 152	1 152

** Correlation is significant at the 0.05 level (2 tailed)

Source: Author's Computation, 2022

Table 4.7b is the Pearson correlation matrix of job satisfaction, annual leave, maternity leave and sick leave showing the correlation coefficients, significant values and the number of cases. The result in the multiple correlation matrix show that there is a relationship between annual leave and employee job satisfaction ($r = .94$); relationship between maternity leave and job satisfaction ($r = .79$); relationship between sick leave and job satisfaction ($r = .83$). The computed correlation coefficients of the relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction ($r = .94$; $r = .79$; $r = .83$) respectively are greater than the table value of $r = .195$ with 990 degrees of freedom ($df = n - 2$) at alpha level for a two-tailed test ($r = .94$, $p < 0.05$; $r = .79$, $p < 0.05$; $r = .83$, $p < 0.05$). Since the computed $r = .94$, $r = .79$, $r = .83$ are greater than the table value of $.195$ we reject the null hypothesis and concludes that annual leave, maternity leave and sick leave have a positive relationship with job satisfaction in Deposit Money Banks in Enugu State, Nigeria.

Discussion of Findings

The discussion of results is in line with the objectives the study sets out to accomplish and the hypotheses.

Objective One

Employee Assistance Programme and Employee Commitment

Sequel to an objective of study to ascertain the extent to which employee assistance programme affect employee commitment, the result of analysis of research question one revealed that 92% of the participants either strongly agreed or agree that employee assistance programme affect employee commitment. The computed mean of the observed responses was 4.6 higher than the expected mean of 3.00 affirming that employee assistance programmes to a large extent affects employees' commitment. The test of hypothesis — 1 using , Simple Linear Regression to ascertain

the extent to which employee assistance programme affect employee commitment led to the rejection of the null hypothesis and the acceptance of the alternate hypothesis and to a conclusion that employee assistance programme positively affected employees' commitment ($r = 0.867$; $t = 6.31$; $F = 84.21$ $p < 0.05$). The finding of the present study re-enacts the previous research findings of Azeem and Akhtar (2014) that efficient and effective implementation of employee assistance programme is imperative for inducing employee commitment and enhances productivity. The finding of the study also provides support for the assertion of Fapohunda (2014) that employee assistance programme in the organization creates a good avenue for an organization to extend a helping hand to individual staff and this impact positively on staff commitment to corporate goal. He added that employee assistance programmes is veritable tool for inducing the needed commitment for greater productivity. This assertion was further strengthened by Ojo (2012) finding that effective implementation of employee assistance programmes do not only benefit the workers in terms of striking a balance between work-life and family life but it is of a great value to the industry in terms of obtaining expected commitment from the staff and increasing productivity. Ojo (2012) concluded that strict adherence to employee assistance programmes will reduce absenteeism, labour turnover and also promotes good working relationship between management and workers. However, a previous research finding of Sakthivel and Selvarania (2012) was discordant with the present study. Sakthivel and Selvarania (2012) found out a negative effect of employee assistance programmes on employees' commitment to productivity. The variance of Sakthivel and Selvarania (2012) empirical evidence with the present study may be due to differences in sample sizes, nature of data, cultural values of respondents and setting of the studies.

Objective Two

Relationship between leave policies and job satisfaction

Objective two sought to assess the nature of relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction. The result of the analysis of research question shows that 94% of the participants agreed that annual leave helps workers to reduce work related stress. In addition, the analysis of research question also revealed that 77% of the respondents agreed that maternity leave allows nursing mothers to meet their family responsibilities. Furthermore, from the analysis of research question it was also found out that, 96% of the respondents agreed that sick leave helps workers to take care of their health problem and also improve employee attendance rate. The overall result of the analysis based on the cumulative response revealed that 89% of the participants agreed that there is a positive relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction. The computed mean of the observed responses was 4.4 higher than the expected mean of 3.00 affirms a positive link between leave policies and job satisfaction. The test of hypothesis — 2 using Pearson product moment correlation coefficient to assess the nature of relationship between leave policies (annual leave, maternity leave and sick leave) and job satisfaction led to the rejection of the null hypothesis and the acceptance of the alternate hypothesis and to a conclusion that annual leave, maternity leave and sick leave have a positive relationship with job satisfaction ($r .94$, $p < 0 .05$; $r .79$ $p < 0.05$; $r .83$ $p < 0.05$). This finding was consistent with the finding of Orogbo and Chukwuemeka (2015) that there is a significant positive relationship between leave policy and job satisfaction among

commercial banks workers which in turned significantly affected their service delivery. This finding was further strengthened by Joyce, Viona, and Obino (2013) observation that effective implementation of leave policies create a change of environment which impacts positively on employees' satisfaction, psychosocial well-being and work related stress and translated to better organizational performance.

Summary of Findings

The result based on the descriptive statistics reveals the following:

1. Employee assistance programs positively affected employees' commitment ($r = 0.867$; $t = 6.31$; $F = 84.21$; $p = 0.02 < 0.05$).
2. Annual leave, maternity leave and sick leave had a positive relationship with job satisfaction ($r = .94$, $p < 0.05$; $r = .79$, $p < 0.05$; $r = .83$, $p < 0.05$).

Conclusion

The study concludes that non-adherence by the management of the selected banks to work-life balance initiatives is the major challenge to employees' performance, retention, and the overall actualization of set goals in the Nigeria banking sector. Management are yet to recognize that unbalanced work-family life caused by increased work demands leads to higher levels of stress and stress caused by higher demands from work results in family-work conflicts which impacts negatively not only on the wellbeing of workers but also on their families.

Recommendations

Based on the findings and the conclusion of this study, we made the following recommendations:

1. The captains of DMBs in Nigeria particularly in Enugu state should adequately and effectively implement employee assistance programme in order to maintain a productive, effective and functional workforce. They should know that employee assistance programmes do not only benefit the workers in terms of striking a balance between work-life and family life but it is a veritable tool for inducing commitment for greater productivity.
2. To have a satisfactory and productive workforce, DMBs should consciously design and fashion out an effective leave system that will create a change of environment and impacts positively on employees' psychosocial well-being in order to keep the morale of employees high. They should know that job satisfaction is very important and without job satisfaction the best fit talents might continue to leave the organization. The loss of knowledge is a potential threat to an organization existence, especially if an employee with valuable knowledge leaves to join a competitor.

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EFFECT OF AGRICULTURE PROMOTION POLICY ON FARM PRODUCTIVITY IN OGUN STATE

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Abstract

The study examined the effect of agriculture promotion policy on farm productivity in Ogun State. Specifically, the study seeks to verify the effect of agriculture promotion policy on productivity in Ogun State. There are claims that recent agriculture policy led to increased food production, yet quality output in terms of improved yield and nutrition value is relatively low due to low productivity. Objective of the study is to examine the effect of agriculture promotion policy on farm productivity in Ogun State, Nigeria. Methodology used in the study was a descriptive survey designed with the aid of administration of questionnaire to collect data from key respondents. Two hundred and eighty-three (283) samples were derived using Taro Yamane statistical formula. The study used regression analysis to determine the effect of agriculture promotion policy on farmers productivity and analysed research hypotheses using SPSS version 20. The findings of the study reveal that agriculture promotion policy has a positive significant effect on productivity indicated by (coefficient of 0.353, f test= 86.568 and $p=0.000$). The study recommended that since agriculture promotion policy is anchored upon improving the productive capacity of farmers, agricultural research system should not be left only in the hands of private institutions, a working synergy be formed between public and private enterprises to improve varieties of seeds, livestock and other inputs.

Keywords: *Agriculture Promotion Policy, Agricultural system, Farm productivity, Food production, improved yield and Nutrition value*

Introduction

Before, during and a few years after the independence era, agriculture was the backbone of the Nigerian economy and the nation was self-sufficient in the production of numerous crops and livestock (Odunze, 2019). Suddenly, oil boom boosted the economy in the early military era from 1966 till late 1970s. This led to gradual neglect in the agriculture sector, crude oil became the main source of revenue. The consequence of overdependence on crude oil made Nigeria a net food importer. Agriculture in Nigeria today, has become a source of livelihood especially to people in the informal sector. However, these people are small hold farmers mainly holding less than one hectare of crops farmland. For those in animal husbandry, very few small ruminants and other livestock let to roam free range. The limitation of small-scale farming or subsistence agriculture in Nigeria, is that it led to rural-urban migration of young people, leaving behind an ageing farming population that cannot sustain agricultural production sufficient enough to cater for the food needs of the country (Lokpobiri, 2019). Dellal and Bolat, (2019) defined agriculture is defined broadly as the set of activities that use land and other natural resources to produce food and animal products for subsistence or commercial purpose. According to Ahmed et. al (2022), agricultural policy refers to a set of laws that govern domestic agriculture as well as imports of foreign agricultural

products. Agricultural policies are typically implemented by governments with the goal of achieving a specific outcome in domestic agricultural product markets.

The Agriculture Promotion Policy (APP) is the successor of the Agricultural Transformation Agenda (ATA) which was implemented over the period 2011 and 2015. It was developed and approved by the Federal Government of Nigeria as the national policy framework for driving the growth and development of Nigeria's agriculture sector over the period 2016 – 2020 (Oladunni, 2021). One of the thematic areas of the APP is productivity enhancement, with focus on: access to land, soil fertility, access to information and knowledge, access to inputs, production management, storage, processing and marketing. The expected outcome includes: an increase in agricultural productivity measured annually, reduced post-harvest losses, increased share of agricultural input used in Nigeria by manufacturing enterprises in form of raw materials and market orientation. The policy impact on farm productivity may be reflected on its successes. In one of the APP objectives, which is promoting agribusiness sector to optimally play its driving role for increasing productivity, and jobs in agriculture and food system in Nigeria. According to the APP policy document report, there have been increase in output of staple foods, example rice, maize and millet by 5.74%, 1.3% and 9.21% respectively.

Farm productivity is a result-based phenomenon that harps on increment, improvement and positive outcomes as it relates to agriculture. Omodanisi, Egwakhe and Ajike (2020) insist that smart agripreneurship dimensions have a significant effect on farm productivity. However, the focus is on result. Awotide et al (2015) in their study identified that increase in agricultural productivity translates to an increase in farm income, food security, poverty reduction, and improved rural household welfare, while leading to inclusive industrial development and economic growth on the aggregate. Various policies formulated by successful Government indicates that that agriculture still remains the largest sector of the Nigerian economy and employs the largest proportion of the country's entire labour force. However, according to Lokpobiri, (2019) the sector remains bedevilled with challenges such as outdated land tenure system that constrains access to land with about 1.8 million ha/farming household, limited adoption of research findings and technologies, high cost of farm inputs, poor access to credit, inefficient fertilizer procurement and distribution process, inadequate storage facilities and poor access to markets have all combined to keep agricultural productivity low at an average of 1.2 metric tons of cereals/ha, with high post-harvest losses and waste (FAO, 2015).

Ogun State in recent times has shown more commitments to agricultural development. The State Ministry of Agriculture through its organ Ogun State Agriculture Development Project (OGADEP) have demonstrated commitments through providing inputs, example, improved seedlings and trainings to beneficiaries. With good chunk of arable land of about 350,000 hectares (OGADEP) with likelihood of becoming number one in cassava production output and highest numbers of agro-allied industries in Nigeria. It has become imperative to examine the effect of APP on farm productivity in the State.

The thrust of this paper is to examined the effect of APP on farm productivity in order to determine how the APP addresses productivity enhancement vis-à-vis the thematic areas and its relationship with farm productivity in Ogun State. Thus, the objective of this paper is to examined the effect of APP on farm productivity of farmers and agripreneurs in Ogun State. Hypothesis was tested to ascertain statistically the effect of APP on farm productivity in Ogun State. The significance of the study is the value or contribution that the research will make to existing knowledge. It has

theoretical and practical significance, it serves as a guide to researchers, agripreneurs and policy makers. There is no literature relating statistically agricultural promotion policy on farm productivity in Ogun State; the closest was a study on the performance assessment of Ogun State Agricultural Credit Agency in Credit Delivery and Operations by Adegbite, Olaoye & Oloruntoba (2008). Thus, this study sought to contribute by analysing statistically how agriculture promotion policy affects the farm productivity in Ogun State.

Problem Statement

Two salient problems highlighted by the Federal Ministry of Agriculture and Rural Development (FMARD, 2016) in the Agriculture Promotion Policy are the inability of Nigeria to meet its domestic requirement for food and the failure to meet the quality requirement for success in international markets (Odunze, 2019). The former problem is a productivity challenge driven by an input system and farming model that is largely inefficient. The later challenge is driven by an equally inefficient system for setting and enforcing food quality standards, as well as poor knowledge of target markets (FMARD, 2016). There are claims that recent agriculture policy led to increased food production, yet quality output in terms of improved yield and nutrition value is relatively low due to low productivity. The problem of low productivity in the agricultural sector is attributed to several factors including inefficient extension services, low level of adoption of improved seedlings, poor inputs quality and inefficient input distribution system, ineffective and inadequate mechanisation and irrigation facilities, poor access to credit, poorly managed soil fertility profile and aging farmer population (Olomola & Nwafor, 2018). The APP as a strategic document is designed to raise productivity and quality standards of food production in Nigeria, however, this cannot be achieved if the policy does not critically address productivity problems, ensure food security and promote value chain participation.

Literature Review

Agriculture Promotion Policy

The Agriculture Promotion Policy statement is anchored on three main pillars, in line with the constitutional provision for the role of Federal Government in agricultural development; promotion of agricultural investment; financing agricultural development programmes and research for agricultural innovation and productivity (FMARD, 2016). According to Lokpobiri, (2019), the Agriculture promotion policy choices would boost productivity, reduce post-harvest losses, and expand market access related activities. The target outcome is a blend of metrics that includes rises in farm productivity versus base year (% yield increases), reductions in post-harvest wastes, share of agricultural inputs used in Nigerian by consumer goods companies, and share of Nigerians fresh goods for the export markets. The Agriculture Promotion Policy (APP) main focus is eliminating various constraints which affect agricultural productivity in Nigeria. The inability to meet domestic food demand and the failure to deliver quality yield for the export market are the two key identified gaps in the agricultural sector in this new plan. In the APP, there are set targets aimed at increasing agricultural production, expanding and improving quality export and ensuring that essential infrastructure and farm inputs are available for farmers at all levels (FMARD, 2016), (Ahmed et al. 2022). Agriculture Promotion Policy (APP) is an action plan of Government that focuses on solving the issues of limited food production and delivery of quality standards, for the overall benefits of the citizens and the country. The citizens benefit through improved standard of living, the country benefits through improved foreign exchange earnings.

Productivity

For the purpose of this study, farm productivity is relevant to agricultural productivity. Fowowe, (2020) viewed agricultural productivity as the ratio of agricultural outputs to agricultural inputs. It arises more due to efficient use of one or more of the three factors of production that is land, labour and capital. These give rise to three broad categories of agricultural productivity: land, labour and capital productivity. Sheng and Chancellor, cited in Omodanisi, Egwakhe & Ajike (2020) opined that the productivity of a farm be measured by how long it takes to produce. Ajekwe and Ibiamke (2020) insist that farm inputs examples, seeds, fertilizers, and agrochemicals, need to be available, affordable, accessible, and of good quality and are essential for improving the productivity and incomes of agripreneurs. Otache, (2017) opines that when people develop entrepreneurially in agriculture and their capacity is enhanced, the outcome is that productivity is boosted. This is what makes agripreneurial productivity an ingredient of agripreneurship. From the plethora of definitions and relevance to productivity, farm productivity is an outcome that arises from the efficient and timely use of agriculture inputs and resources (human, financial, physical and social) that results in more than commensurate output. So many factors affect farm productivity, however, these factors can be categorised as internal (agricultural practices, managerial decision, and biological (diseases, insects, pests, weeds) and external (environmental (climatic condition, soil fertility, topography, water quality, etc).

Nexus between Agriculture Promotion Policy and Productivity

Ojong and Anam (2018) concluded that policy implementation is a perennial problem and poses a big challenge to developing the agricultural sector. They opine that the agriculture promotion policy did not specify in clear terms how the vulnerable rural poor will be able to access farming support programmes without collaterals, considering the fact that they constitute the largest group of primary producers in the value chain. Ositanwosu and Qiquan, (2016) considering the aspect of productivity, enhanced income for farmers and food security, opine that agricultural policy programmes have impacted positively on farmer/agripreneurs. Meludu, et al (2017) based on access to inputs, skills, yield and income generation among studied farmer/agripreneurs, confirmed a positive effect of agriculture promotion policy programmes. Alhassan, Umar and Ayuba (2019), in view of inputs, such as improved varieties of seed, agro-chemicals, value addition techniques, capacity building and farmers' training, facilities provisions, as market stalls, overhead tanks, affirmed a positive impact of agricultural policy programme on the livelihood of participants. Uche and Familusi (2018) opine that smart agripreneurship is a productivity enhancement method that adopts innovative and technological methods.

Empirical Review

Olanrewaju (2019) made an assessment of awareness and determinants of anchor borrowers program's adoption among rice farmers in Kaduna State, Nigeria. Primary data was obtained from 240 respondents with the aid of a well-structured questionnaire using a multistage sampling procedure. The results revealed that only 40% of the respondents were aware of ABP. Other findings revealed that access to credit, engagement in off-farm work, and memberships of cooperative society were critical to adoption of ABP. It found that there is no awareness created on government intervention programmes. However, this work focused on the anchors borrowers' programme, and credence mainly given to rice production that is an aspect of the anchors borrowers programme. Okeke, Mbanasor and Nto (2019) did a comparative analysis of the technical efficiency of beneficiary and non-beneficiary rice farmers of the Anchor Borrowers' Programme in Benue State, Nigeria. A well-structured questionnaire was administered to the

respondents', collected data were analysed using descriptive statistics, multiple regression analysis, and stochastic frontier production function. The findings revealed that the beneficiary rice farmers achieved lower levels of technical efficiency compared to the non-beneficiary rice farmers due to fertiliser and other agro-chemical usage. It further revealed that socio-economic characteristics of the beneficiary rice farmers significantly influenced their level of technical inefficiency. The work was on anchors borrowers programme, it focused on Benue State. Inference cannot be, for reasonable generalisation, given the Nigerian peculiarities. Moreover, the focus was on rice production. Awotide et al (2015) examined the impact of access to credit on agricultural productivity focusing on small hold cassava farmers. Primary data were obtained through the issue questionnaires. The major finding was that access to credit has a positive impact on productivity. However, credit (finance) is not only the input that can enhance productivity. Ahmed et al, (2021) examined the role of agricultural policies in economic development and integration in Nigeria. The study involved a literature review for retrieving documents and analysing them. The findings of the study indicate that from 1960 to 2020 integration in Nigeria. The study involved a literature review for retrieving documents and analysing them. The findings of the study indicate that from 1960 to 2020 there were numerous policies aimed at enhancing agricultural development and economic integration in rural and urban areas. However, the success of this policies depended on Government's commitment and farmers' assimilation. Ogunsumi et al (2013) examined the prospect of Agricultural Transformation Agenda amongst rice farmers in Ogun State where rice production is a growing industry in attempt to achieve food sustainability. Well-structured and validated questionnaires were used on respondents to get needed information. It found that the level of awareness of the agriculture transformation agenda was very low in the area of study. Though the theme was on food security, the focus was on rice, there is need for studies on other food items aside rice.

Theoretical Framework

The ABARES (Australian Bureau of Agricultural Economics and Sciences) framed a model that can suite farm productivity in Ogun State. The definition of productivity is defined and made to suite the agricultural practices in Australia. Productivity measures the efficiency with which farmers use inputs (such as land, labour, capital, materials and services) to produce outputs (such as crops, livestock and wool). Productivity growth measures changes in productivity over time. In the long term, productivity growth reflects changes in the efficiency with which farmers use inputs to produce outputs, largely driven by technological progress. Ongoing productivity growth has enabled Australian farmers to maintain profits by producing more output from each unit of input that they use.

Productivity movements over time reflect changes in input and output quantities. Productivity will increase if: Output increases while inputs decrease and remain unchanged, if output and input increases but output increases at a faster rate and both output and input decrease but output decreases at a slower rate. Thus, farm productivity is driven by three Ps: production, profit and productivity. Production and profit, enhances productivity. The essence is that why production is maximised at the least cost, more profits is made at maximum point. The criticism of this model is that profit is determined by the quantities of inputs used and outputs produced, and by prices paid and received. Farmers generally cannot control the input or output prices they face. The main objective of farm productivity is to contribute to higher profits in two ways, to reduce production cost and boost revenue. This model if internalised and adopted by stakeholders especially policy makers and implementers in Ogun State will boost farm productivity.

Methodology

Population, Sample and Sampling Techniques

Five hundred and seventy-eight (578) registered farm businesses with Ogun State Ministry of Agriculture serve as population of the study. The sample size of two hundred and thirty-six (236) was drawn from the population using Taro Yamane's statistical formula. In order to ensure that minimum samples are met the sample size is increased by 20% to cover for non-response rate. Hence the sample size is $(236 + 236 * 0.20)$ that is, $236 + 47 = 283$. The main sample size adopted for this study is two hundred and eighty-three (283). A simple random technique was applied in reaching out to respondents.

The sample size was derived using Taro Yamane's statistical formula (for arriving at given sample). Taro Yamane's formula for sample size determination is:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{N}{1 + N(e)^2}$$

n = Sample size

N = The population size

e = Expected error of 0.05

1 = Constant

$$n = \frac{578}{1 + 578(0.05)^2}$$

$$= \frac{578}{1 + 578(0.0025)}$$

$$= \frac{578}{2.445}$$

$$= 236.400818$$

$$= 236 \text{ sample size}$$

Data Collection

For primary data, questionnaires were measured using five-point Likert scale with range of values in descending order (5 to 1) indicating, 5-strongly agreed, 4-agreed, 3-neutral, 2-disagreed and 1-strongly disagreed were administered. Secondary sources of data were recent scholarly works done within the subject matter, periodicals, governmental agencies report example, FMARD.

For the reliability test, a pilot survey involving twenty-nine (29) respondents were administered the structured questionnaire to ascertain the clarity of the instrument. Cronbach Alpha was used to ascertain the internal consistency. Outcome of the Cronbach test was (0.7746), value that is greater than 0.70 is considered to be good to conduct a study.

The statistical technique adopted in this was regression. Regression technique was used to test the hypotheses and it is useful for estimating the independent variable (agriculture policies) regressed on each of the explanatory variables. There is a relationship between the independent variable (agriculture promotion policy) with the dependent variables farm productivity). The software package for social sciences (SPSS) was used to analyse the data.

Model Specification

The model parameters $\beta_0 + \beta_1 + \dots + \beta_p$ and σ are estimated from data.

$$Y = f(X)$$

$$FP = \beta_0 + \beta_1 AP + e_i$$

Where FP = Farm Productivity
 AP = Agriculture promotion policy
 β_0 = constant
 β_1 = regression coefficients
 $\sigma = \sigma$ residual standard deviation.

Data Analysis and Results

The number of questionnaires distributed was 283 out of which 231 was appropriately completed and returned representing 81.6% response rate.

Agriculture promotion policy has no significant effect on farm productivity in Ogun State.

Model Summary Table 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524a	.274	.271	1.93521

a. Predictors: (Constant), AP

Source: SPSS OUTPUT 2021

The coefficient of determination (R Square) 0.274 in table 1 implies that agriculture promotion policy accounts for 27% variation in farm productivity, while the remaining 73% is explained by other factors that are not included in the model. This is further justified by the .271% result of the Adjusted R-Square.

ANOVA

ANOVA b

Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	324.202	1	324.202	86.568	.000a
	Residual	857.616	229	3.745		
	Total	1181.818	230			

a. Predictors: (Constant), AP

b. Dependent Variable: FP

Source: SPSS OUTPUT 2021

The F-test table above shows the goodness of fit of the model. The criteria are that if (Sig value is less than 0.05) at alpha 0.05 and 95% level of confidence, it means the model is fit for the study. However, the value of our Sig is less than 0.05, which means that the model is fit for the study.

Table 1.3

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig
1	(Constant)	-.829	.454		-1.826	.069
	AP	.353	.127	.524	9.304	.000

a. Dependent Variable: FP

Source: SPSS OUTPUT

The result from the table above shows that Agriculture promotion policy has a coefficient of .353 and a p-value of 0 .000. Based on the p-value that is less than 0.05 level of significant, it means

that there is no sufficient evidence to accept the null hypothesis one, which states that, Agriculture promotion policy has no significant effect on farm productivity in Ogun State.

Discussion of Findings

The result of our analysis shows that agriculture promotion policy has a positive significant effect on farm productivity in Ogun State, which means that the agriculture policy already on ground is effective according to the stakeholders. The finding is in line with those of Awotide et al (2015), Olanrewaju (2019) and Omodanisi, Egwakhe and Ajike (2020).

Aligning this finding with the theoretical model adopted in this study, ABARES which harps on productivity outcomes. Stakeholders in the State develop a productivity model using ABARES has a guide, however, taking in cognizance the peculiarities in the State.

Conclusion and Recommendation

This study examined the effect of agriculture promotion policy on farm productivity in Ogun State, and the research is categorised into five: Introduction; brief overview of the subject matter, stating the objective and discussion of the problem. Literature review; conceptual review of agriculture promotion policy and farm productivity, empirical review and developing a theoretical model. Methodology; sampling and sampling techniques, method of data collection, techniques and model specification. Data analysis and results, finally discussion of findings and conclusions. Conclusively, the study found that the Agriculture Promotion Policy has a positive significant effect on farm productivity in Ogun State. In line with the findings and conclusions from this study, the study makes the following recommendation: Since agricultural promotion policy anchored upon improving the productive capacity of farmers, Ogun State has no agriculture research centres, however collaborations with agricultural research centres is vital to improve varieties of seeds, livestock and other input and improvement on the deplorable infrastructure through infrastructural renewal; this will bring down production cost and ensure global price competitiveness of agricultural products. It will make financing more accessible and readily available by reducing lending rate to agriculture practitioners and encouraging private sector led lending. The subsidy programme should be re-introduced and re-focused to ensure that it gets to target end users by ensuring accountability, monitoring, evaluation and impact assessment on beneficiaries.

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A SYSTEMATIC REVIEW ON ACCELERATORS

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Abstract

The rise of accelerators as key organizations supporting entrepreneurship and innovation has been observed over the past 15 years, but there is still limited understanding of how they operate and the role they play in supporting entrepreneurship and innovation. This report examines 51 research papers on accelerators to shed light on their functions. It was found that accelerators help entrepreneurs and innovators through four processes: testing and refining ideas and products, refining product development and improving business models, facilitating market entry and growth and fostering innovation. The report identifies gaps in current research and offers suggestions for further studies and practical applications in the industry.

Keywords: Accelerators, startups, innovation, systematic literature review, corporate accelerator, business accelerator.

1.0 Introduction

Despite being a relatively recent development, accelerators as a specific type of innovation intermediary have had a significant effect on growing entrepreneurial communities and encouraging innovation (Drori and Wright 2018). As of 2016, there were over 3000 accelerators around the world (Hochberg 2016), and by 2018, they had provided funding to more than 7,000 startups (Seed-DB 2018).

Some studies view accelerators as a unique form of incubators (Hausberg and Korreck 2018), Some studies view accelerators as a separate type of organization that have unique characteristics based on the services offered to start-ups (Pauwels et al. 2016).

Despite being a recent development, there is abundant research available on the topic of accelerators as a distinct form of innovation intermediaries (Cohen et al. 2019) including two systematic literature reviews (SLR) that focus on business accelerators, one specifically examining business incubation intermediaries (Hausberg and Korreck 2018) and a second systematic literature review which focuses on innovation intermediaries (Gliedt et al. 2018), There have been several publications on the topic of accelerators, including two systematic literature reviews focusing on business incubation intermediaries and innovation intermediaries, a collection of articles edited by Drori and Wright (2018), and a book on social accelerators by (Roberts and Lall, 2018). Despite the extensive research done on accelerators, there is a growing need for more systematic studies to comprehend their nature, functioning, and impact on supporting participating start-ups and shaping the innovation entrepreneurial landscape (Drori and Wright, 2018). Recent studies advocate for further examination of accelerators as distinct organizational entities (Drover et al. 2017; Roundy 2017) Calls have been made in recent research to study accelerators as distinct organizational forms with unique business models (Cohen et al. 2019) There is a need for more research to

gain a deeper understanding of the acceleration process and the unique characteristics of accelerators as specific organizational forms with their own business models.

This study intends to give a complete overview of the way accelerators work and what they do by considering the environment they operate in, the methods they use, the services they offer, and the results they produce. The study's emphasis on accelerators sets it apart from other evaluations that looked at intermediary organizations that provide support to start-ups in general (Hausberg and Korreck 2018).

2.0 Methodology

The study conducts a systematic literature review (SLR) to analyze previous literature on accelerators for start-ups. The PRISMA statement template is used to outline the process for inclusion and exclusion of articles for the review. This helps the researcher to provide a clear and comprehensive report of the review. The review is limited to published literature and the PRISMA 2009 provides a visual representation of the entire process, as seen in Figure 1

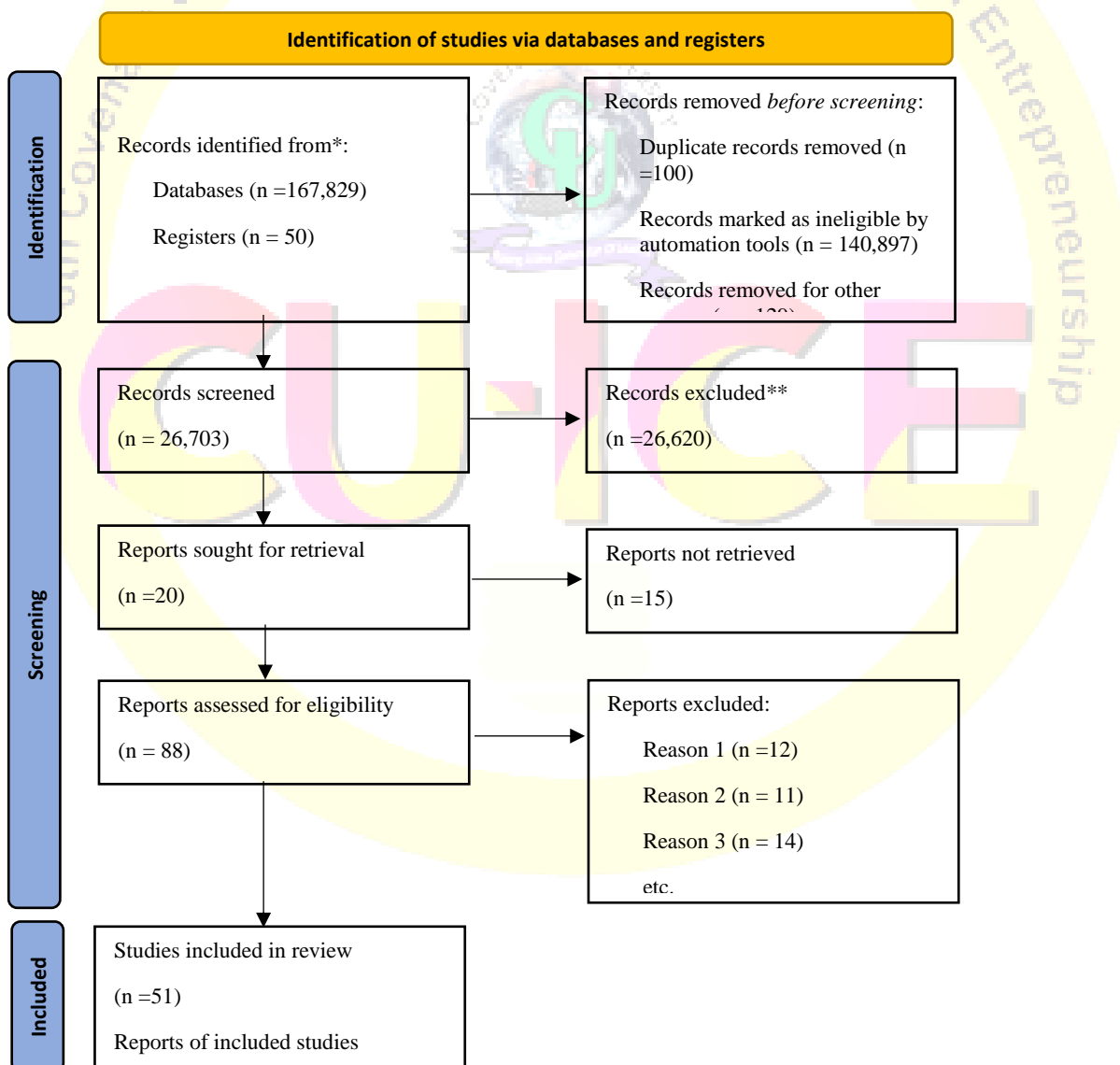


Fig. 1. PRISMA 2009 diagram

2.1 Quality assessment

The study conducted a systematic literature review (SLR) on accelerators for start-ups. The PRISMA statement was used to guide the selection of articles and to ensure transparent reporting of the review process. The review was limited to published articles and excluded conference papers and review papers. To maintain the quality of the review, duplicates were thoroughly checked and the abstracts and conclusions of the articles were carefully analyzed for purification.

2.2 Studies included in qualitative synthesis

The study conducts a systematic literature review (SLR) of past literature on accelerators for start-ups. The PRISMA statement template is used to guide the process of selecting articles for the review. The review only includes published literature, with articles and duplicates being thoroughly checked to maintain the quality of the review. The final selection of 46 studies were analyzed for the review, which covers research from 2014 to 2023. A graphical representation of the subject-wise research is also provided to show the number of included and excluded papers for the review.

2.3 Year base publications

This study conducted a systematic literature review (SLR) to gain a comprehensive understanding of the acceleration process and the workings of accelerators. The PRISMA statement was used to guide the selection process of articles, which were limited to only published literature, with conference papers and review papers excluded. The final 46 studies used for the analysis were selected based on the years 2014 to 2023, and the subject matter was analyzed and graphically presented. The year-wise publication record, according to the most cited paper, was also illustrated, with the highest number of 11 papers selected from 2021 and the second highest from 2020. The lowest number of papers was selected from 2015.

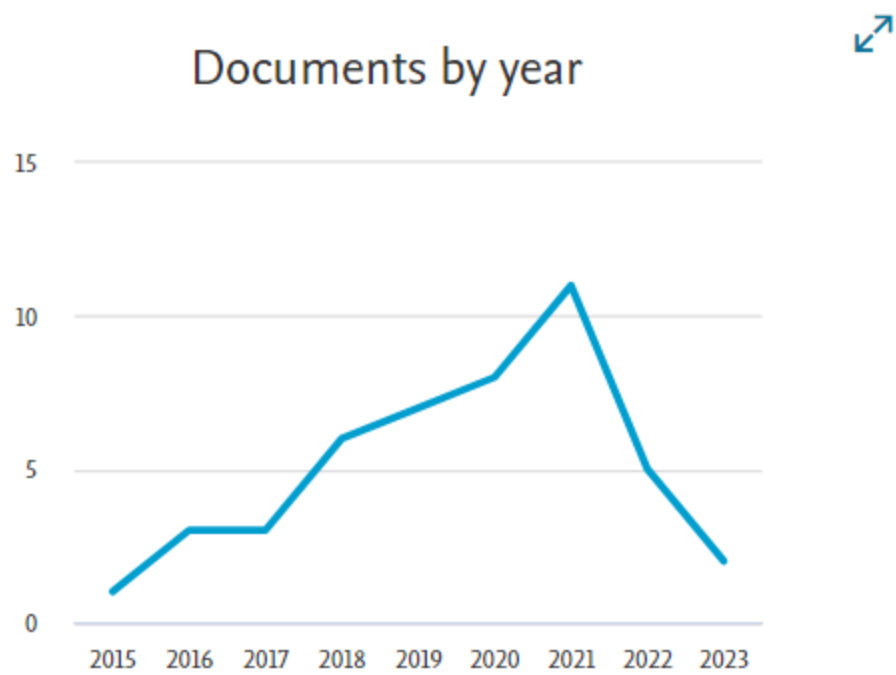


Fig. 2. Year wise publications

2.4 Subject base publications

Most of the papers selected from the business management and accounting area with 46 documents. The results are shown in figure 3 below.

Documents by subject area

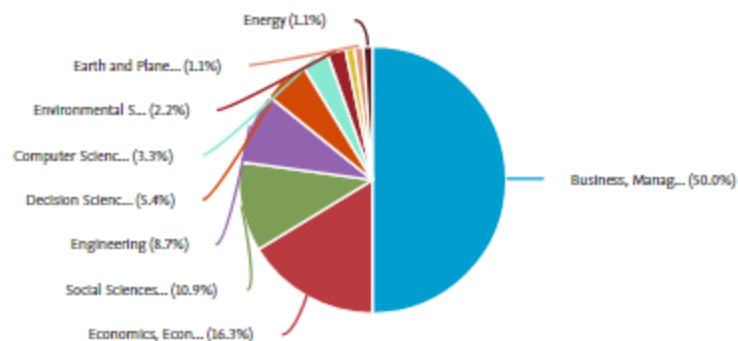


Fig. 3. Subject based publication

3.0 Introduction to Startup Accelerators

Growing a startup is a complex process for business owners. Early-stage business development frequently include networking with other startups, locating knowledgeable mentors and advisors, and establishing connections with funding sources. The chances of long-term success are increased by enrolling in a startup incubator or business accelerator program, which offers the perfect setting to make these crucial relationships possible.

Even massive organizations must be entrepreneurial in the age of innovation, (Dempwolf, Auer, & D'Ippolito, 2014). Although there is little doubt that established businesses and startups can benefit from one another, their past cooperation has not always been successful.

The role of accelerators in startup communities around the world is expanding. It is a business program that offers tools, money, and mentoring to companies so they can perform better and get better results. Startup accelerators are also referred to as seed accelerators. Seed accelerators are fixed cohort programs that involve mentoring, instruction, and a demo day.

3.1 Differences between Startup Incubators and Accelerators:

Although the terms "incubator" and "accelerator" are frequently used interchangeably, there are ways to tell them apart.

What is an Incubator? Startups can improve their business plans through incubator programs as they overcome obstacles from the idea stage to the growth stage. They frequently work with numerous early-stage entrepreneurs from a variety of disciplines. Incubators are sponsored through a combination of governmental funding and private subsidies, with a strong emphasis on regional economic development. A talent pipeline that supports innovation and regional prosperity can be further nurtured with the help of strong connections with regional stakeholders at universities and venture capital firms.

Despite the fact that after meeting key milestones, companies might leave an incubator, there is no predetermined time limit for participation. Numerous incubators also serve as non-profit organizations.

Benefits include:

1. Use a real business address rather than a home address or a post office box.
2. Desk space, co-working area access or startup studio access.
3. For meetings, reserve conference rooms.
4. Participating startups' cooperation and co-creation.
5. Structured assistance from mentors and business authorities.

What is an Accelerator? Accelerators are programs specifically created for start-up businesses whose stages of development sit between conception and expansion. Startups chosen to take part will have a minimal viable product (MVP), possibly a prototype, and possibly pre-seed investment. By offering professional levels of advancement, education, and funding that could normally take years to accomplish independently, accelerators serve as a catalyst for rapid growth among entrepreneurs.

Accelerators commonly have set beginning and ending dates, are limited in duration to one year, and usually run between three and six months. Through an application process, businesses may be admitted to the accelerator, during which the cohort advances through the curriculum concurrently. The economic emphasis is on expanding the portfolios of the businesses in each cohort and assisting them in scaling up more quickly. In order to provide guidance and establish cooperative relationships with other entrepreneurs, the majority of accelerators collaborate with angel investors, venture capitalists (VCs), seasoned founders, and industry experts. Startups are able to overcome typical obstacles more quickly with one-on-one mentoring.

Benefits include:

1. Take part in a program with a clear focus and strict discipline that is tailored to your area or company.

2. Realize significant milestones while receiving expert mentoring.
3. Become friends with other founders who are going through the same stage of their business journey.

3.2 How to choose between an Incubator and an Accelerator

The stage of your startup is the main factor in determining whether you should join an incubator or an accelerator. From early stage to development stage, incubators offer space and tools for the complete spectrum of entrepreneurs. For businesses in the early stage with a minimal viable product, accelerators are ideal (MVP). Furthermore, numerous accelerators have tough application procedures. An incubator could assist you in completing the prerequisites for the accelerator if you haven't done so already.

A different approach is to estimate the length of time you plan to use the facility. An incubator is the best option if you are searching for something long-term that can act as a collaborative workspace for your complete team. Numerous incubators offer a range of space options, from desks to suites, that can accommodate your business's demands as it develops.

And last, it is typical for a company to participate in both an incubator and an accelerator at the same time. Even some incubators have integrated accelerator programs.

3.3 How does an Accelerator Program work?

Mentors share the information they have learned over the years with startup accelerator participants through a variety of frameworks, including training sessions, seminars, and workshops. The most promising companies are chosen from a vast pool of applications and assembled in an area where investors and other businesses can find them.

These entrepreneurs are entrusted to a group of well-known mentors whose knowledge, skill, counsel and connections can greatly aid in their development. The companies are then organized into cohorts, much like a class, so that rather than receiving individual training, they receive group instruction to enable networking and interaction.

Accelerators are primarily funded by businesses, governments, and investors in order to find and nurture cutting-edge inventions, (Cohen, 2013). Startups make money through returns on investments, economic growth, and the creation of new technologies.

3.4 Processes involved in the Accelerator Program

1. Application/Acceptance:

Only one (1) to three (3) percent of applicants are chosen after applications are submitted. The startups can talk to the organizers and get to know them better during this time. Startups are not needed to sign any documentation before they can join or accept the program.

2. Get Funded:

Funding is one of the main reasons that founding teams and business owners select the accelerator route. Companies receive seed money from accelerators ranging from \$10,000 to \$120,000. Even if some have lately cut back on their donations, they still view funding as a significant roadblock to success since it might influence future fundraising efforts.

3. Focus:

The system's emphasis on entrepreneurs is a big asset. The Harvard Business Review claims that they are being dragged through the process for three to six months. Participants are under pressure during this tense time to concentrate and go on.

4. Learning:

Learning is a crucial part of the procedure. It offers mentorship opportunities, seminars and workshops on subjects like 'how to start a business', 'pitching' and the legal side of things'.

5. Networking:

Entrepreneurs have several opportunities to network with potential funders and other industry support companies during the acceleration period. These relationships might be quite useful.

6. Demo Day:

The startups in the cohort present and pitch during this time of graduation. This signifies the end of the acceleration program. Startups may now show what they have accomplished; thanks to the time and work they invested in the program. Startup entrepreneurs frequently include 15 to 20 slides in their presentation pitch desks.

3.5 How to Apply for a Startup Accelerator

Only 1% to 3% of the hundreds of entrepreneurs who apply to top accelerator programs each year get accepted. Making your application stand out by being exceedingly precise and succinct is the difficult part. In everything you say, emphasize the benefits your business offers. Do not list features of the product. Instead, present a stronger benefit.

Wrong: You can find websites and items online with Google Search. Using Google Maps can facilitate travel. You can find videos using Google Videos. You may find inexpensive flights with Google Flights.

Right: Google organizes information from around the globe to provide you with quick access to whatever knowledge you require.

Your objective while submitting an application to the accelerator is to first show a founder/market fit. Why your team is the best choice to expand and scale the business? Explain how the backgrounds and abilities of your team helped you arrive at a distinctive market insight.

The second step is to market this future as you see it. Share your ideas on why you decided to pursue the startup route despite the dangers involved since this possibility is so intriguing and exciting. Startup accelerators want to trust in you, just like all investors do, but they are simultaneously reviewing hundreds of applications. Maintain it brief to keep their attention.

Applications that are overly wordy or buzzword-heavy will be rejected due to their lack of clarity. Be concise. Keep your application concise and simple to understand. By doing this, you will advance to the accelerator investment board meeting, where you'll have another chance to show that you have a marketable product and a team that can make your proposal a reality.

3.6 What Accelerators look out for?

Strong Team: Who will steer your company toward success? Startup incubators want more than simply good product concepts. They are also searching for a strong, capable team that has the ability to succeed after the accelerator and has the ability to develop businesses. What about the backgrounds of your founding team offers them the distinctive perspective required to launch the business? And how does their background help them develop the abilities necessary to create a flourishing company in this field?

Concepts with value: What kind of value will your business produce? Although your product may not yet need to be ready for the market, you still need to show that the idea is one that people are interested in. Startup accelerators won't be very interested if not.

Competitive Advantage: What distinguishes your company? What makes you distinctive? Can you briefly summarize your value proposition and unique selling proposition in one or two sentences?

Coachability: Will you heed professional advice on your company, product, and expansion? This is crucial, and you can prove it to investors by soliciting their advice on your present problems and other useful criticism at investor meetings. Additionally, humility can be a valuable quality when creating a strong application.

Potential Market Size: Being a small business is acceptable. However, keep in mind that startup accelerators are searching for hyper growth in sizable industries. You must demonstrate to investors that your business is in a market with sufficient size to generate venture scale returns.

3.6 Mechanisms of Startup Accelerators

According to Bliemel, and Flores (2015), there is an exploration of startup rapid launch and clarification of accelerator mechanics

Survivability (starting up quickly is an issue of survival).

Resource network (starting up rapidly necessitates utilizing pre-existing networks).

Catching up (accelerators fill gaps to allow inexperienced entrepreneurs to start up quickly).

The three techniques organize scarcity management and expedite the launch process to inspire the senior management team. As a result of acceleration, the article suggests extending the minimal viable product concept to the minimum viable start-up. The development of an entrepreneurial mindset within the startup technology firm is linked to these three methods for accelerating the launch of creative ventures.

3.7 Three Elements that all great accelerators have:

It is no secret that accelerators are a popular resource for fledgling companies, especially those seeking strategic direction and a path to quicker growth. Recent studies have demonstrated how pervasive they have become.

Accelerator programs run for a focused period of time, typically between three and six months, as opposed to incubators, which offer support to entrepreneurs on a long-term basis. Mentorship, networking, and client development are frequently included in the curriculum, as well as some venture capital investment.

Done right, these initiatives can help some of our most promising organizations achieve their goals more swiftly and confidently, (Hallen, Cohen, & Bingham, 2020).

The best accelerators, however, differ significantly from the lesser-known ones. Top accelerators may give startups faster access to customers, venture money, and acquisition exits than other programs. They might also complete these stages faster than their colleagues who solely receive angel funding, (Hallen, Bingham, & Cohen, 2016).

Therefore, the three (3) elements that make for a successful acceleration are:

1. **Mentors are essential:** A good accelerator will introduce you to mentors and give you opportunities to interact with them throughout the program.
2. **Problems become teachable moments:** The potential conflicts that can arise between mentors, company founders, and the companies themselves should be explicitly stated in programs. These disputes ought to serve as a catalyst for learning and development in themselves.
3. **Networking:** The accelerator should establish a network and culture that will endure throughout the existence of the businesses. Contrarily, less effective accelerators lack a clear vision, just imitate other accelerators, or fail to set goals for what can be accomplished.

3.8 Purpose of a Startup Accelerator

Are Startup Accelerators worth it? An accelerator for startups is designed to do just that—accelerate the growth of your firm. It is a mentor-based program that offers focused direction, assistance, and structure for a predetermined amount of time, usually three months. You should have more than just an idea when

you apply to a startup accelerator program; ideally, you should have a working prototype or finished product. You will get to know a variety of consultants and seasoned businesspeople who can assist you in creating your product, fine-tuning your business strategy, and most importantly, making connections with investors. The ultimate goal is "demo day," when you'll showcase your concept to potential backers, as well as the press and other interested parties.

The vast majority of the time, yes; especially for startups. First-time startups typically require a lot of assistance, and an accelerator can help by:

a. **Startup accelerators can provide critical connections:** Well-known accelerators collaborate closely with venture capital firms and angel investors seeking to invest in innovative business concepts. An accelerator may introduce you to a ton of individuals very quickly. This is especially helpful if you are new to the field. He adds that being a part of this insider network also offers you credibility, which will assist with both hiring and fundraising. "By connecting you to a lot of advisers, you quickly become part of the culture and construct a network in a year that would otherwise take 10 years to create,

b. **Startup accelerators can offer priceless management and business coaching:** They can pair novice founders with the best management group to aid in the realization of ideas.

c. **They create an Environment:** They can compete with an inexperienced founder Startup accelerators offer informal comments and direction on the technology or business concept you're pursuing, whether virtually or physically. Engineers and innovative problem-solvers can help you change your mind about a tired notion or dissect a brilliant idea and reassemble it into something even better in these collaborative workspaces, or "hackerspaces." s with the ideal management group to support the realization of ideas. Numerous startup accelerators concentrate on particular industries, such as consumer services, social media, or healthcare technology, and develop a wealth of expertise within their accelerator.

d. **You have access to the community that physical space offers:** More entrepreneurs are now utilizing available co-working spaces, offices, conference rooms, workbenches, and other amenities, whereas during the pandemic this was not possible. You can benefit from the emotional support that comes from being near other team members from various projects in addition to just having the room.

Everyone is dealing with issues that are quite similar, so you may support one another by exchanging ideas and talking to CEOs and graduates.

Additionally, accelerators can connect you with experts in the field who can help you identify a suitable product/market match or even develop a strategy for reaching your target market.

4.0 future accelerators research agenda

Based on the examination of accelerator research conducted, we identify the limitations in the recent understanding of accelerators by analyzing their definitions, formulate a research plan for enhancing

knowledge about their operations using CIMO analysis, and identify some of the limitations in current research methods and propose solutions for them in future studies.

4.1 Accelerators: shortcomings and future research

Definitions show how researchers have viewed accelerators over time, from incubation to organizational form to emphasizing the contrasts across accelerator types. Accelerators have been defined by their services compared to incubators and, more recently, by their organizational setting, such as corporate vs. academic. This has helped define accelerators as a separate entity and show their diversity, but it doesn't explain what they are. Accelerators are not incubators, and distinguishing between different types of accelerators does not explain the acceleration process. Qin et al. 2019. A full understanding of the acceleration process is not provided by the existing way of defining accelerators based on their services and locations. This makes it more difficult for researchers to comprehend why the same accelerators provide varied results. Our proposed definition tries to fill this vacuum and provides a framework for understanding how accelerators with various mechanisms produce various outcomes in various settings. It is based on the mechanisms behind accelerators and the relationship between context, interventions, and outcomes. As interest in defining the acceleration process expands along with the existing support ecosystem for entrepreneurial enterprises, this new viewpoint on accelerators and their underlying mechanisms opens the door for additional research in this area. (Korreck and Hausberg 2018). Accelerators offer numerous options for additional research as a recently created organizational form in a new industry. For instance, nothing is known about how accelerators, a form of intermediary for innovation, have developed and grown (Kim and Wagman 2014), Research might also look on the trends of professionalization in the accelerator industry. For instance, it would be intriguing to investigate the methods and techniques accelerators employed to establish their legitimacy as actors. Additionally, there is a paucity of knowledge regarding the existence and traits of specialists in the accelerator industry. Investigating the business models used by accelerators to add value to the greater entrepreneurial environment might also be beneficial (Cohen et al. 2019; Gliedt et al. 2018; Yang et al. 2018), Examining the connection between the accelerators' business models and their underlying mechanisms would also be beneficial. The competition between accelerators and other intermediate organizations for entrepreneurs' attention in a crowded entrepreneurial assistance ecosystem is another crucial field of research (Dempwolf et al. 2014). Understanding the evolution, value creation, and escalating competitiveness in the sector would require research into these subjects.

4.2 Understanding what accelerators do: shortcomings and future research

By evaluating the setting in which they function, the services they offer, and the outcomes they produce, the study sheds insight on the purposes of accelerators (their mechanisms). Our findings highlight the paucity of study in each of the four domains and suggest possible avenues of inquiry. The many

organizational contexts where accelerators operate (such as the government, business, academic, or community contexts) and the propensity to utilize these contexts to define accelerators' actions are of great importance (Pauwels et al. 2016). Our research demonstrates that some settings, like business and government, frequently receive more focus in research while others, like social, are understudied or even ignored (Prexl et al. 2018; Selig et al. 2018). Examining more contexts, such as social circumstances, is a significant trend in current research (Roberts and Lall 2018). In the foreseeable future, it is anticipated that this trend will persist and gain momentum. Future study on subjects like the management of accelerators in certain corporate environments is promising (Vandeweghe and Fu, 2018). The strategies and culture of accelerators are other topics that haven't gotten much attention in recent study. For instance, there is a dearth of knowledge in the current literature on how to set up and manage a corporate accelerator (Connolly et al. 2018). It is also challenging to decide which best practices may be used across contexts because there is little data comparing accelerators working in them (Clarysse et al. 2015). This recommends that research should broaden its attention to include less-researched environments and industries, like those in emerging or low-income countries and sectors that prioritize environmental sustainability (Gliedt et al. 2018). More research is required to examine how institutional and cultural issues outside of the western world affect how accelerators operate in various nations. This could entail looking at the accelerator process in nations like Africa and researching how the institutional environment and national culture influence their functioning. A deeper knowledge of the function accelerators play in the greater entrepreneurial ecosystem can be attained by connecting their research with the larger sectoral, regional, and national environment. Given that numerous recent studies indicate that the role of accelerators in the ecosystem has not yet been thoroughly addressed, this would be an important subject of future research (Cohen et al. 2019; Yang et al. 2018). Our analysis of the interventions provided by accelerators revealed that there has been a noticeable expansion in the range of services offered. These interventions now include new and expanded approaches, such as lean startup training (Mansoori 2017; Uhm et al. 2018), and design thinking, in addition to more traditional offerings (Glinik 2019). According to our data, accelerators are providing start-up businesses with a wide range of innovative services that go beyond their standard offerings, such as lean startup training. These services are frequently provided in novel and creative ways, such as by utilizing open innovation and lab methodologies (Gutstein and Brem 2018). (Haukipuro et al. 2019). Changes have been made to how certain services are delivered, such as the availability of a basic package or customization (Breznitz and Zhang 2019). The effects of changes in how accelerator services are delivered, whether as part of a standard package or through customization, on the business operations of accelerators and the customers they assist, are not well understood. To ascertain the value that various service levels provide to accelerators and start-up clients, more investigation is required (Choi and Kim 2018). Exploring related

ideas on entrepreneurial development and education can also help us better grasp the theoretical foundation of these services. For instance, additional research may be done to examine how accelerators' services for their members affect the learning possibilities they give (Cohen et al. 2019). The use of market positioning and resource-based view theoretical frameworks could be advantageous for the analysis of acceleration tactics. These frameworks can aid in understanding how accelerators make use of their assets and alter their services to differentiate themselves from competitors, for as by providing customisable alternatives. The study of the results revealed a propensity to confuse the two concepts, particularly when assessing performance at the accelerator level. Additionally, there was a significant preference for positive outcomes and a concentration on hard (economic) rather than soft (non-economic) outcomes, especially at the ecosystem and accelerator levels. This helps to explain some of the discrepancies in the findings of earlier studies on accelerator performance (Choi and Kim 2018; Hochberg 2016; Miller and Bound 2011).). The lack of a theoretical approach is the fundamental problem in the study of accelerator results. The majority of research only summarize the results without elaborating on their causes. Additionally, outcomes are frequently taken into account as a whole rather than focusing on various stakeholder groups. Our application of the CIMO paradigm provides a starting point for a more theoretical analysis of accelerator outcomes, but additional investigation is required to strengthen the theoretical underpinnings of this area of inquiry. For instance, institutional logics could be used to comprehend how various actors interact with and value accelerators in different ways based on their motivations. Stakeholder mapping and cognitive framing may offer additional perspectives on variations in results. In order to better grasp the relationship between hard and soft outcomes, it is also crucial to distinguish between short-term and long-term results. This will assist to distinguish between outputs (instant results from acceleration) and outcomes (long-term results associated to performance). Different study techniques, such longitudinal studies, would be needed for this. Examining the procedure and elements that contribute to the conversion of soft results into hard outcomes is an important field for future research, especially considering the vast range of soft outcomes seen at the starting level. A more comprehensive appraisal of outcomes is also required, one that takes into account both benefits and drawbacks (Drover et al. 2017). We suggest a more thorough research design with a wider range of participants and a longer time horizon to analyze long-term effects in order to better comprehend accelerator programs and their results. Future study can benefit from our discovery of the four accelerator functioning mechanisms. For instance, little is known about what is taught in accelerator programs and how well they work to speed up the learning process (Seet et al. 2018). To further understand how accelerators support the entrepreneurial learning process and to identify the best strategies and environments, more study is required. There is little study on the long-term effects of accelerators that use the other three mechanisms, validation, access & growth, and innovation. More research is needed, in particular, on the effects of

innovative accelerators on technology transfer, the most complex mechanism we were able to identify, according to Battistella et al. (2017).

4.3 Shortcomings: Methodological

Our analysis of accelerator research found that, as expected for a new phenomenon, majority of the research is preliminary and utilizes qualitative methods such as case studies (Colombo et al. 2018). There are few studies that use quantitative or mixed methods. Suggestions for future research in this field recommend a shift towards larger, quantitative studies to better test theories and assess the impact of different contexts and interventions on performance (Brown et al. 2019). Some researchers argue that studying a larger number of accelerators from various regions and business models would lead to more insightful record (Miller and Bound 2011; Wise and Valliere 2014). Meanwhile, the importance of large-scale quantitative studies is acknowledged, this review also highlights the need to better understand and improve the accelerator phenomenon, including exploring dissimilar groups of participants, contexts, and time frame, using more nuanced qualitative methods beyond just case studies and interviews. In addition, we recommend more comparative studies of accelerators to understand the effectiveness and value added by these programs in different ecosystems and regions, and in comparison to other innovation intermediaries (Clarysse et al. 2015).

According to Breznitz and Zhang (2019), to better understand the outcomes of acceleration, there should be a comparing the performance of businesses that have gone through an accelerator program versus those that haven't, taking into account different levels of experience among the participants. (Drover et al. 2017). The authors argue for more longitudinal studies of accelerators to avoid retrospective bias and provide a better understanding of the long-term effects of acceleration (Breznitz and Zhang, 2019). These studies should examine the interaction between startups and accelerator programs and the evolution of the accelerator organization over time (Breznitz and Zhang, 2019) Studying the impact of accelerators over a longer period of time, through the use of case studies, would help to differentiate between short-term and long-term results. This would also clarify the distinction between outcomes (long-term results related to performance) and outputs (immediate results from the acceleration process), and provide insight into the relationship between soft and hard outcomes.. (Breznitz and Zhang, 2019). According to Qin et al. (2019), "before-during-after" studies, with a focus on shorter time frames, would give a clearer understanding of how accelerator programs impact startups in varying contexts and interventions. (Breznitz and Zhang, 2019). The authors also suggest more inclusive studies that capture the views of different actors involved in the acceleration process, including a wider range of participants and sources, to better understand the views,

perceptions, and experiences of stakeholders and uncover the frames guiding and logics that may affect their involvement with the acceleration phenomenon (Jackson and Richter, 2017).

5. Conclusion

The research on accelerators has rapidly grown in the past 15 years, and these organizations have established themselves as important intermediaries for supporting startups (Coste and Gatzke 2017; Prexl et al. 2018). The aim of this review is to clarify the definition, operation, and role of accelerators in supporting startups and shaping the innovation landscape. The study endeavors to shed light on the "black box" of accelerators and provide a framework for future research on the ways in which different mechanisms influence the interventions and outcomes of different accelerators (Coste and Gatzke 2017; Prexl et al. 2018). Future research should focus on the evolution of the field, internal management and coordination, and the impact of future innovations on accelerators. The findings provide valuable insights for accelerators, entrepreneurs, investors, and policymakers, highlighting the importance of understanding the relationship between context, instruments, mechanisms, and outcomes (Coste and Gatzke 2017; Prexl et al. 2018). Accelerators are recognized as having a crucial role in fostering entrepreneurial ecosystems and revitalizing industries and regions (Coste and Gatzke 2017; Prexl et al. 2018). However, managing and implementing accelerator programs is challenging due to the lack of theory and best practices, which this study aims to address.

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CARBON (CO₂) FOOTPRINT: AN EMPIRICAL STUDY OF FAMILIES IN THE NIGER DELTA OF NIGERIA

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ABSTRACT

Human activities have increased the emission of CO₂ over the years; this study seeks to determine the carbon footprint of families in Warri based on the consumption of Energy and additional factors, which contributes to increased emission, and recommend ways to reduce the emission of CO₂ to the environment. The data gathering technique is the quantitative research method. Two hundred (200) questionnaires were distributed and oral interviews were conducted, 150 feedbacks were received representing a fraction of about 70% of different Local Government areas in Delta State, which includes Agbargho (Ughelli North), Uvwie Local Government, Warri South, Udu Local Government. These households have family sizes mostly ranging from four to six although we had family sizes of 11 and above from the questionnaires adding to a comprehensive demographic mix. Data gathering were from the alternative power supply, transport, household equipment & devices, fuel consumption per day, car mileage of each household, power consumption, and carbon soot deposit provided by household in different local government within Delta State. It is evident that an average family in Delta State emits about 14.193 tons of CO₂ emissions. Moreover, deliberate actions taken by families in the Niger Delta and government policies can reduce this value and thereby make a significant impact on climate change. The subject of CO₂ emission reduction is everyone's responsibility, good for the environment, excellent for the economy, and good for the family budget.

1.0 INTRODUCTION

Nigeria's Economy fully depends on fossil fuels for energy generation, national revenue with about 86% of its internally generated revenue (Dunne, 2020), and manufacturing, which accounts for carbon emissions in the country. According to UNDP (2010), Climate change is a major challenge that needs to be addressed speedily, as energy is an integral part of human development, it is also imperative to eradicate poverty, improve human welfare and raise living standards. Adeyemi et al (2019) agree that carbon dioxide (gas released from burning fossil fuels) is a primary element responsible for global warming. Alimi et al (2016) suggest that fossil fuels, which are sources of Green House Gases, are a threat to the environment and a continuous rise in GHG is associated with lower water supplies and a rise in temperatures, which in turn increases the risk of drought, causing plants and crops to wither and die. It is also important to note that a continuous threat to climate may lead to famine and invariably loss of lives.

However, Gershon et al (2019) suggest that the Combustion of hydrocarbon fuel, which emits greenhouse gases like CO₂ and other human activities, results in the greenhouse effect. The mixture of GHGs naturally in the atmosphere causes radiations of short waves from the sun to permeate and absorb energy from the surface of the earth. Jeremiah et al (2018) recommends that Nigeria must minimize its dependency on fossil fuel although it might be difficult to eradicate its consumption if we want to reduce environmental pollution arising from the use of fossil fuels. It is a known fact that carbon dioxide (gas released from burning fossil fuels) is a primary element

responsible for global warming. The earth's temperature will continue to increase we do nothing about this, which is the aim of this Research work, to identify areas for improvement with regards emission of CO₂ to the environment. It is important for developed countries to minimize consumption and use of fossil Energy which is responsible for GHG emission by 1 % and for the rich and poor, the energy productivity should be minimized by 4% to 5%,. If everyone reduced productivity to 2.5%, global energy consumption will reduce from 1.1% to 0.65% annually (Rezai et al, 2012).

However, Jenny & Sara (2016) agrees that there is a positive relationship between per capita GDP per capita, and carbon dioxide emissions, which suggests growing per capita GDP leads to increased carbon dioxide emissions. It supports the claim that says there is no turning point from which emissions start to decrease when GDP is optimum, as some theories claim. Market economy mechanisms are according to the result not enough to lower the emissions and thus the need for legal regulation to avoid further environmental degradation. Environmental degradation can change the entire ecosystem if reduced. According to a report by IPCC (2014), GHG emission growth has increased over the last decades despite a growing number of mitigation policies. Green energy gases have a direct relationship with temperature rise, which means that the temperature of the earth will continue to increase as the Green Energy Gases increase.

A report by Intergovernmental Panel on Climate Change (2014) suggests Ocean's Uptake of CO₂ has resulted in the acidification of the ocean, which is a result of CO₂ emission impact since the beginning of the industrial era. This has resulted in a decrease in P.H. of the Ocean surface by 0.1(high confidence), equivalent 26% rise in acidity, measured as hydrogen ion concentration. Adeyemi et al (2019) claimed that the major constituent of air pollution originates from fossil fuel combustion, which also combines with other industrial processes, agricultural practices, wildfires, dust storms, etc. In addition, it was responsible for 4.2 million premature deaths in 2016; of these, almost 300,000 were children under the age of 5 years. In supporting this report Pieprzyk, et al (2009) provided similar evidence of exposure to emission substances like Nitrogen dioxide (NO₂) and Sulphur dioxide (SO₂) resulting in worsening effects on the environment and human health. These exposures could cause chronic respiratory ailments in humans, as already witnessed among children in the Niger Delta region. The chemicals can also worsen asthma, leukemia, blood disorders, and chronic bronchitis.

Consequently, humans carry out actions that generate GHG (Carbon dioxide, CO₂ and Methane CH₄), the total amount of GHG generated because of this action is Carbon footprint. In the United States, The average carbon Footprint per person is 16 tons (The Nature Conservancy, 2021) which is one of the highest rates in the world. The average globally is closer to 4 tons, which needs to drop to under 2 tons by 2050. As suggested by IPCC (2014) one way to achieve this is to avoid a 2°C rise in global temperatures.

2.0 LITERATURE REVIEW

It is clear, according to the IPCC report that anthropogenic emission of GHG is the highest in history because of human influence on the climate system. Sea level has risen, ice and snow have diminished, the atmosphere and oceans have warmed, and the surface of the earth has become warmer than any preceding decade since 1850. The activities that result in a net increase in emissions include the following but are not limited to the burning of fossil fuels, deforestation, land use changes, fertilization, livestock, etc.

Susan et al (2019) investigated the effect of the extraction of natural resources, considering the economic performance of the Niger Delta Region in Nigeria, and found that extractive activities influence positively the total state-level revenue in the form of production-based derivation funds from oil-producing states, which affects their GDP positively. During these extraction activities, GHG emitted aligns with the positive relationship between the increase in GDP and the emission of GHG. Gershon & Patricia, (2019) Investigated and analyzed how much GHG is emitted by families in Port Harcourt as a result of energy consumption and other sources of greenhouse gases. Data gathering using the input-output approach and questionnaire, revealed an emission of 5.21 tons of CO₂ on average by families in Port Harcourt. The study revealed that each family creating slight changes in their regular routines could make a significant impact in reducing greenhouse gas emissions. They opined that the cumulative effect of individual small savings would cause climate change.

Yung, et al (2018) investigated into Carbon Footprint Study of Personal Electronic Product-Induction products and highlighted that the Product Carbon Footprint (PCF) of small electronic devices are assumed to create less emission because of their size, he, however, opined that it should not be so and therefore investigated the amount of carbon emission emitted by personal Electronic Products. His result showed that Printed circuit boards contributed the most carbon emission of which the raw material extraction stage also contributed to the emission of carbon. The research also showed that sensitivity analysis performed during the material extraction and manufacturing phases, showed they contributed the maximum amount of carbon emissions.

Using a GMM model on a panel dataset comprising 168 countries and 24 years of testing Balogh & Jambor, (2017) sort to find out the link between CO₂ and its several reasons by employing a complex model involving economic growth, energy use, industry structure, tourist arrivals, foreign direct investment, trade, and agriculture globally. Their Results confirmed the standard environment Kuznets curve hypotheses with Nuclear energy and renewable energy playing a positive role in decreasing CO₂ emissions while energy from coal Increased pollution to the environment. Their result also showed financial development reduces air pollution.

A study on CO₂ emission and environmental implications in Nigeria, by Adeyemi et al (2019) using secondary data ranging from 1970 to 2017 from World Development Index (WDI) and the Johansen co-integration analysis revealed that 80% of carbon emissions in Nigeria are from fossil fuel combustion. Further recommendation is an urgent design of sustainable energy framework enlightening the dangers of using dirty fuel. Nigeria is one of the countries with the highest energy poverty index in the world, a term coined because of the inability of millions of people living in the country to access electricity. Climate change, which is having a large impact in Nigeria, has increased the temperature of the region coupled with the inability of people to access neither air conditioning nor electricity. Dunne (2020) said, "The government of Nigeria has pledged to reduce its greenhouse gas emission by 20% by 2030 when compared to "business-as-usual" levels. Also pledged to increase this commitment by 45% if the nation gets international support. However, while investigating the relationship between climate change and agricultural production in Nigeria, Gershon & Mbajekwe (2020) found that there exists a long-run relationship between climate change and crop production while no long-run relationship exists between climate change and livestock production. It was recommended that government use policies to meet its sustainable goals.

The extent of which carbon emissions influence population growth among the magnum cum Oil-producing Africa countries was studied by Daramola et el (2021) which revealed that a negative relation and also significant. Moreover, it is important to note that there is a nexus between

renewable Energy consumption, economic growth and CO₂ emission. This studies carried out by Ezenwa et al (2020) showed a bi-directional causality between renewable energy consumption (REC) and Economic growth, while REC positively affects GDP in both Short-run and long run, the adverse effect of REC is felt on the short–run. Gershon et al (2022) asserts that decarbonizing Africa reduces the burden of diseases and other environmental challenges. However, Decarbonizing Africa cities would require appropriate policy and government framework for each city in a carbon-constrained world (Azubuike, et al 2022).

In addition, a study by Romanus et al (2019) to find out the implication of oil price shocks on net oil-importing countries, which showed that oil price increase temporarily, increases GDP per Capita in the short run, which contributes to carbon emission and aligns to the positive relationship between CO₂ and increase in GDP. Gasoline also known as Premium motor spirit (PMS) known to emit volatile organic compounds (VOC) which adversely contribute to ground–level ozone formation with health implications. A study by Obindah et al (2020) showed that the higher the evaporative quality of the gasoline, the greater the VOCs emitted into the environment and therefore recommended a reduction in vapor quality with efficient recovery and control regulations to reduce the equivalent gasoline loss by 97.67% and VOC emission.

3.0 METHODOLOGY

This study originated from the need to reduce carbon foot front in the Niger Delta by finding out the reason behind the increased emission of CO₂ into the environment and recommend measures to ensure the United Nations Conference on Climate change international agreement to keep the rise in global average temperature well below 2°C and also aim to limit the increase to 1.5°C is kept (UN, 2015). A number of factors like Transport, Food, Energy use, waste management, Electronic devices, and daily household activities make up the carbon footprint of the household and generally contribute to the carbon footprint in Warri.

In other to achieve this, the input-output approach and questionnaire were used as a source of primary data collection on factors, which were most evident in the literature review as an obvious emitter of GHG in households. These factors include:

3.0.1 Electricity Supply to household : Get invest investigates that only 40% - 45% of Nigerian have access to electricity as of 2014 (Get. invest, 2021). The average power supplied in 2015 averaged 3.1GW, which is estimated to be only a third of the country's minimum demand, with many consumers forced to rely on privately owned generators" which is a major source of GHG. A Questionnaire was sent to households resident in Warri to find out the following:

- a) How often they enjoy Power supply from BEDC
- b) What alternative they use to generate power supply as an alternative to insufficient or no power supply?
- c) How many electricity power generators they have, if their alternative is an electric power generator?
- d) How often they use these power generators and how many liters they use on weekly basis ?

3.0.1 Transportation : The transport sector is one of the Largest contributors to anthropogenic greenhouse gases within households as people prefer to drive from the comfort of their homes. Burning fossil fuel like gasoline and diesel which are required by these vehicles releases CO₂. The build-up of CO₂ and other gases causes the atmosphere to

warm up, and cause climate change. According to EPA (2021) transportation accounts for about 28% of U.S. greenhouse gases emission. Center for Sustainable Systems (2020) opines that the average passenger car emits 0.78 pounds of CO₂ per mile driven. We would explore the use of questionnaires to find out:

- a. How many cars each household uses in Warri
- b. How often these cars are used
- c. To estimate the milage these cars are used

3.0.2 House hold Electronics and Gadgets

An investigation by the Center for sustainable Systems (2020) showed that 44% of energy in U.S consumed in homes are from residential space heating and cooling , while residential electricity accounts for 10% of U.S total emission of CO₂. They also reported that for each kilowatt hour generated an average of 0.953 pounds CO₂ is released at the power plant.washing machines also accounts for 26mmt CO₂ in the U.S each year. We would also explore the use of questionnaires and verbal conversation to find out:

- a. How many refrigerators does your household curenly use?
- b. How many cookers (gas or electric) are in a household ?
- c. How many microwave ovens does each house use
- d. How many water (or other) heaters does each household use
- e. How many washing machines (Plates and cloths) does each household use

3.0.3 Industries Located around Commercial areas

Niger Delta is surrounded by industries burning fossil fuels for energy within residential areas which emits green house gases, According to EPA, (2021) 23% of 2019 greenhouse gas emissions came from industries. We would also explore the use of questionnaires and verbal conversation to find out:

- a) If households experience carbon soot (black soot) deposits in their area

3.1 APPLICABLE EQUATION

Emissions were viewed from different 4 different perspective for the purpose of this research, Using the questionairs, some data and parameters such as: Average car mileage-per-gallon, Energy sources,average driving rate, Energy consumption rate,family size of which all of them have considerable impact on carbon emission.

3.1.1 TRANSPORTATION :

Agencies like the EPA use the following average carbon content values to estimate CO₂ emissions:

CO₂ emission from a gallon of gasoline: 8,887 grams CO₂/Gallon

CO₂ emission from a gallon of diesel: 10,180 grams CO₂/Gallon

Although U. S. Environmental Protection Agency, (2014) opines that diesel creates 15% more CO₂ per gallon but however Vehicles that use diesel fuel achive higher economy than similar vehicles that use gasoline ,which generally offsets the higher carbon content of diesel fuels . Most vehicles in Niger Delta uses gasoline and average about 4.8 km (3 miles) while driving from a residentail area like Energhe to Airport Road (Commercial area) while some move from Agbarho (Residential area) to Jakpa (Comercial and residential area) which covers about 20km (12.4 miles).

According to U. S. Environmental Protection Agency, (2014) a gallon of gasoline is burnt every 21.6 mile. Therefore an average vehicle burns

CO₂ emission per mile = $\frac{8,887}{21.6} = 411\text{g}$ Per CO₂ per mile = 0.000411 metric ton

A gallon of Gasoline = 3.7 liters

Therefore it is assumed that an average vehicle uses an estimate of 3.7 - 5 liters per mile depending on vehicle/ personnel fuel economy.

Therefore for household per vehicles in a year = *CO₂ emission per mile x total mileage in a year x emission factor*

3.1.2

ELECTRIC SUPPLY, HOUSEHOLD ELECTRONICS AND GADGET

According to (Gershon O. a., 2019) emission from Electricity consumptions can be calculated as

- MAIN:
- HOUSHOLD GENERATORS:

$$\begin{aligned}
 GHGe &= \frac{12 \text{ months} \times \frac{\text{liter}}{\text{month}} \times \text{Energy density} \times \text{Emission factor}}{\text{Number of Households Occupants}} \\
 &= \frac{12 \text{ months} \times \frac{L}{\text{month}} \times \frac{MJ}{L} \times \text{tons} \frac{CO_2}{MJ}}{\text{Number of Households Occupants}} \\
 GHGem &= \frac{12 \text{ months} \times \frac{\text{cents CO}_2}{\text{month}} \times \text{Emission factor}}{\text{Number of Household Occupant}} \\
 &= \frac{12 \text{ months} \times \frac{\$}{\text{month}} \times \frac{KWH \text{ tons} \times \frac{CO_2e}{KWH}}{\$}}{\text{Number of Household Occupants}} \\
 &= \frac{12 \times \frac{CO_2e}{\text{Month}}}{\text{Number of Occupants}}
 \end{aligned}$$

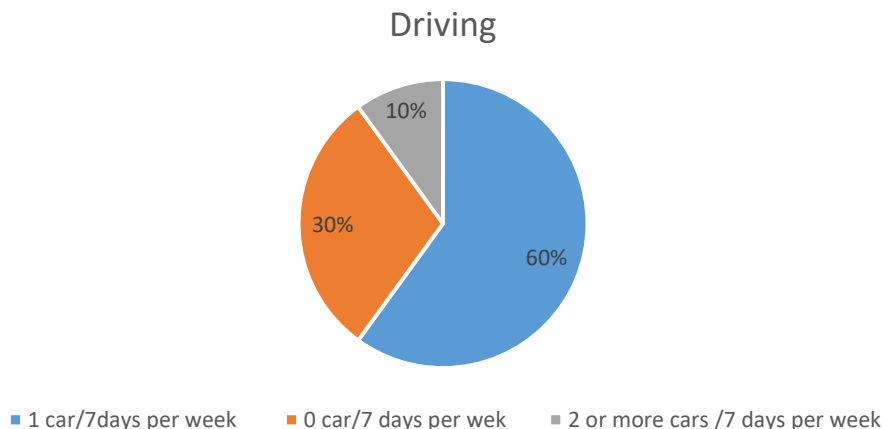
Industries and Commercial areas Located with residential areas: Depots, refineries, airports and commercial areas release CO₂ as result burning fossil fuels. Carbon Black Particles (Soot) reduces the quality of air within the environment.

3.3 ANALYSIS AND RESULT

Two hundred (200) questionnaires were given out and only 150 feedback were received or collected, representing a fraction of about 70% of selected areas in Delta State which includes Agbargho (Ughelli North), Uvwie Local Government, Warri South, Udu Local Government. The questions seek to answer how much CO₂ does an average family in these area emit per year? The carbon foot print for the average family in these area was gathered using primary data gathering method and through the aforementioned tool:

3.3.1 Driving

From Data Gathered, about 60% indicated that their household currently uses 1 personal car everyday of the week, 30% indicated their household uses 0 personal car but uses public transport for their movement, 10% indicated the use 2 or more personal cars everyday of the week.



Those who use 0 car for 7 days per week use public transport for their movement.

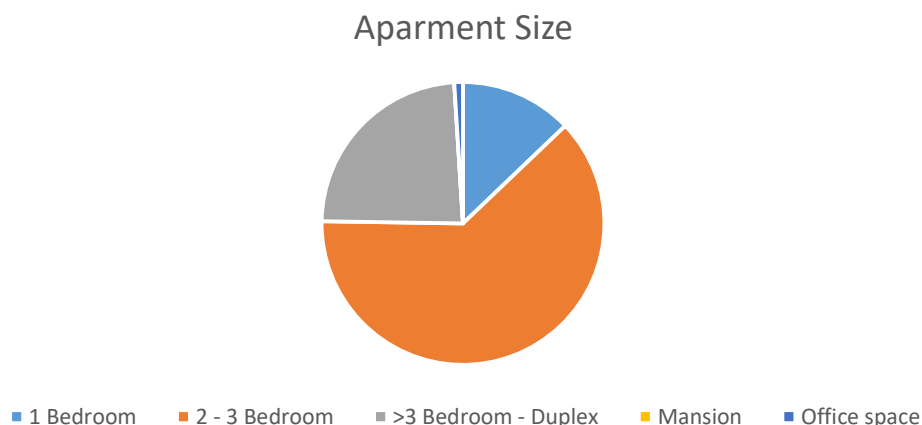
a. CO2 emission from Driving per mile in a year CO2 Emission per mile is 411g
Per CO2 per mile = 0.000411 metric ton

An estimated average distance covered by vehicles in warri per day = $(12.4+3.4)/2 = 7.7$ mile

CO2 emission per day = $0.000411 * 7.7 * 365 = 1.15$ metric ton CO2 per average car per year

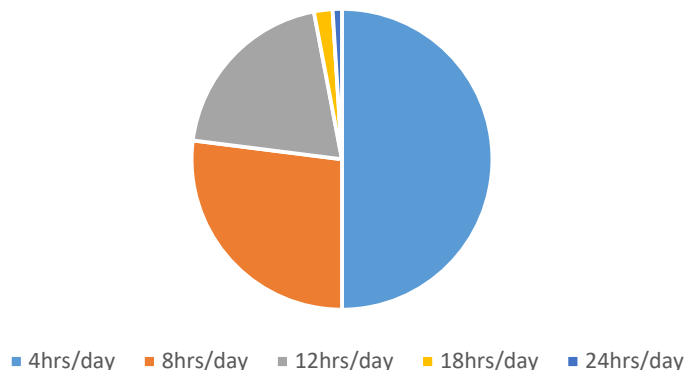
3.3.2 Home Electricity

About 62% of the feedback indicated that their household currently live in a 2 – 3 bedroom apartment, 13% indicated the live in a 1 bedroom apartment, while 24% indicated that their household lives in an apartment above 3 bedroom flat and Duplexes, while 1% lives in an office space.



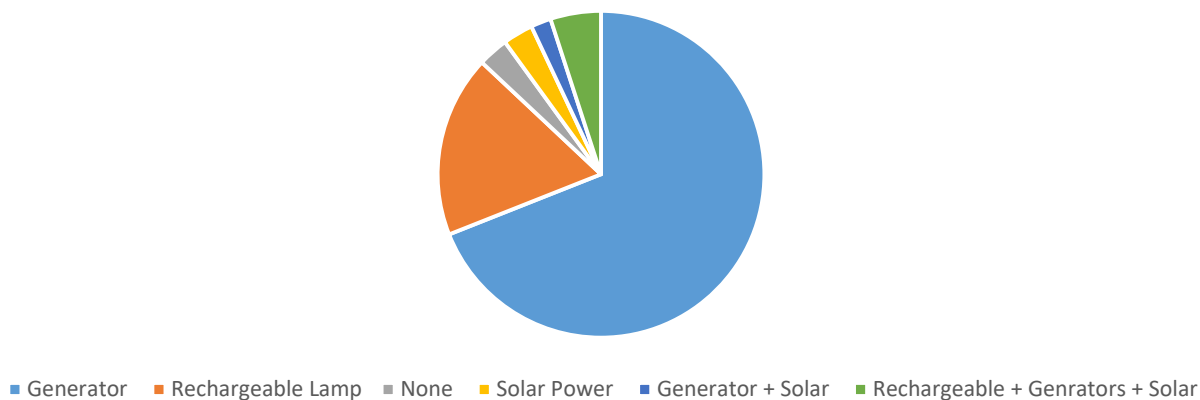
According to data gathered, 50% of the household in warri on enjoys power supply from BEDC for 4hrs/day, 27% enjoys power supply for 8 hrs/day, 20% enjoys power supply for 12 hrs/day, 2% enjoys power supply for 18hrs/day while 1% enjoys power supply for 24 hrs/day

Power Supply

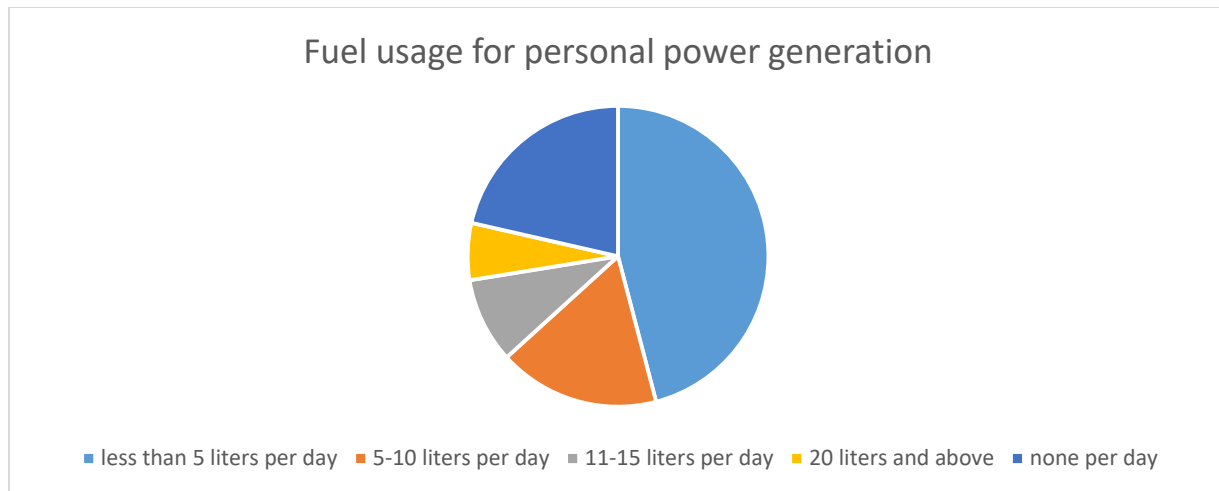


An average of 69% uses personal generator as an alternative to DISCO(BEDC) power supply, 18% uses rechargeable lamp when there is power failure, 3% indicated that they stay without any source of light during power interruption, 3% uses solar panel as an alternative to generate power supply, 2% uses both solar panel, rechargeable lamp and generator, while 5% uses rechargeable lamp and Generator during power interruption by the disco (BEDC)

Alternative to Disco (BEDC) Power Supply



Fuel Usage Per day per house hold;
 45% indicated 5-10 liters of gasoline per day
 17% indicated 11- 15 liters per day
 9% indicated less than 5 liters per day
 6% indicated 20 liters and above per day
 21% indicated none, from verbal interview, some people in this category stopped using their personal generators because they lacked sufficient funds to maintain and refill their fuel tanks



b. CO₂ emission from Generator Usage per year : Recall that 1 gallon of gasoline = 3.7 liters of gasoline = 8,887 tons of CO₂

1 Liter = $8887/3.7 = 2,401$ g of CO₂

An average family uses 7 liters per day of gasoline = $7 \times 2401 \times 365 = 6,134,555$ g per year = 6.13 ton of CO₂ per year of using personal generators using gasoline as fuel

c. CO₂ from Power Supply (DISCO-BEDC)

According to Gershon et al (2019) who studied CO₂ foot print of families in Port Harcourt, he wrote that “ Around 1.216lbs(0.55kg) of CO₂ I sproduced per kilowatt-hour for electricity at is source and 1.307lbs CO₂e (0.59kg CO₂) per Kilowatt-hour delivered electricity (at home)”.

An average household in warri uses

1. Television (32 inch) – 70 watts
2. Iron – 800watts
3. Fan – 100 watts
4. Fridge – 800 watts
5. Microwave (20%)- 800 watts
6. Water heater (60%)- 3000 watts
7. Washing machine (30%) - 2200
8. Bulbs – 200 watts
9. Aircondition (40%) – 1,500 watts

Total = 9,470 watts

A combined estimated average of 4735watts per hour = 4.735kWh considering the percentage not using microwave, washing machine, Air condition and water heater.

Assume an average of 4 hours per day= $4.735\text{kWh} \times 4 \text{ hrs} \times 365\text{days} = 6,913.1\text{Wh}$ per Year= 6.913kWhr/ year

i.e $6.913 \times 0.59 = 4.09$ ton CO₂ per household from electricity use.

d. Cooking : All household indicated the use of cooking gas (LPG) in their household which is the cleanest form of fosiil fuel and contains little or no emission (EIA, 2021).

Therefore, the average family in warri emits about $1.15+6.13+6.913 = 14.193$ tons of CO₂ form the above source alone.

4.0 CONCLUSION AND RECOMMENDATIONS

It is evidence from research conducted by Jenny & Sara (2016) that there exist a positive correlation between CO₂ and GDP which means an increase in the emission of CO₂ invariably has an after effect of increasing the GDP of any nation, mechanisms from market economy are not enough to lower the emissions and therefore conscious effort by the government, private individuals and cooperations are needed to avoid further environmental degradation.

Recommendations – Carbon Foot Print Reduction: some intentional measures when applied can reduce the level of CO₂ emissions to the environment. These measures may require government policies, personal contribution, public enlightenment campaigns and introduction and induction of habits to children in schools and within our environment. These measures Include:

1. **GROW A TREE CAMPEIGN:** CO₂ consumed by Trees and plants helps purify the air, compensating for a portion of carbon emissions. Reports show that a fully-grown tree can absorb considerably 48 pounds of CO₂ per year (American Forest , 2021) which reduces household heating and cooling costs by providing shade and insulation. Every household should consider and also enlighten others to plant at least 2 trees per 540sqm. I would also recommend a “Go-Green campaign “ which can be organized per estate or community. Government policies and regulations can play a big role in making this possible.
2. **REPLACE GASOLINE VEHICLES AND DIESEL TRUCKS WITH COMPRESSED NATURAL GAS VEHICLES/TRUCKS:**

According to Consumer report (2021) the use of CNG can reduce carbon-monoxide emissions to the range of 90 to 95% and Nitrogen –oxide emissions by 35 to 60% compared to gasoline and also pegs fuel savings at about 30% less than gasoline on average although it suggests nearly 40% recently.

A report from Reuter (2021) during an interview with the Petroleum Products Pricing Agency “There is no price increase. The current (gasoline) price is being maintained while consultations are being concluded,” On Thursday, the regulator posted an online notice listing the “guiding price” for “ex-depot”, or wholesale, gasoline at 206.42 naira per liter - well above the previous pump prices of around 167 naira.”

Nigeria's government can convert the subsidy funds for gasoline to subsidizing a one-time purchase of CNG-powered vehicles which will in turn save money for the citizens, diversify fossil consumption, decrease emission and save money from gasoline subsidies for the country.

In other words, the same principle can be applied to electric vehicles, but the issue would be the power supply.

3. **ENERGY USE:** A lot of households from data collected and oral interviews do not use high energy-efficient household equipment and devices that consume a lot of power and emit CO₂. E.g a household that uses a refrigerator 800w might decide to buy a 50w refrigerator of the same capacity and volume to replace the 800w refrigerator. The W.H.O. (2008) Suggest that Placing a refrigerator of a Fridge next to a cooker or boiler consumes much more energy than if they were standing alone. Households are also encouraged to use CFL or LED light in place of incandescent bulbs and also switch off lights when the don't need them. Another recommendation for the WHO (2008) is switching off five lights along the hallway could save costs and avoid about 400kg of CO₂ emission per year.
4. **ELECTRICITY GENERATION THROUGH SOLID WASTE:**

Waste disposal contributes to high CO₂ emissions to the environment, Power Supply which is a major challenge in Warri and Nigeria can be mitigated through the Waste-To-Energy Technology. According to AKHATOR,et al (2016) “with about 14 million tonnes of

combustible waste available in Nigeria, about 4.4TWh of electricity could be generated annually if WTE development in the country receives similar support from the Nigerian government”. This will help keep the environment clean at the same time save provide electricity at same time saving the environment from CO₂ emission.

5. **WASTE MANAGEMENT** : The principle of Reuse, Reduce and Recycle should be applied as often as possible. This should include:
 - i. Reduce the use of bottled water and much as possible use reusable water cans for daily operations.
 - ii. Reuse shopping bags and as much as possible use product that offer refill services.
6. **TRANSPORT** :

CO₂ emission will reduce when households are driverless, explore alternative transport options like bicycles for shorter distances, and use a single car for daily activities throughout the week. According to data collected, some families use 2 to 3 cars simultaneously every day of the week, which increases carbon emissions per year per household. The Government can also encourage, develop the public transport system, and make it safer, more convenient, and affordable for all to use. The WHO (2008) also suggests that Speeding uses more petrol and emits more CO₂, therefore households should be encouraged and enlighten on how speeding emits CO₂. Also driving faster than 12km per hour increases fuel consumption by 30% compared with driving 80km per hour and higher gears (4th, 5th, and 6th) are the most economical in terms of fuel consumption.

In Summary, actions based on CO₂ emission reduction are also beneficial to health; CO₂ emitted by industries in residential areas can be reduced using Carbon taxes. Yue, et al, (2020) affirms that CO₂ emission will be significantly reduced reaching the peak value during 2030-2040 in china’s power industry, with the use of medium Tax level (TAX-2) which the employed in their research. This can meet the requirements of both CO₂ emission reduction effect and cost in the power industry, which will on the long run impact on their economy, because of this effective economic policy tool.

The subject of CO₂ emission reduction is everyone's responsibility, good for the environment, excellent for the economy, and good for the family budget.

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THE POTENTIAL USE OF SORGHUM HUSK ASH AS A POZZOLANA IN CONCRETE

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Abstract

This study evaluates the potential of sorghum husk ash as a pozzolana in concrete. The chemical analysis of the SHA produced was carried out using atomic absorption and flame spectrometer. The ash was used to produce concrete cubes with percentage replacement of cement at 0%, 5%, 15% and 20%. The setting time of the pozzolana was obtained. The slump and density tests were examined on the concrete produced. The concrete cubes produced were cured for 7, 14, 21 and 28 days which were subsequently tested for their respective compressive strength. The chemical analysis result indicated that SHA contained 77.27% silica. The result of the tests done on the concrete produced indicated 15-20mm slump value, density; 2226 – 2520 kg/m³ and compressive strength 11.20 – 27.47 N/mm². From the result of this study, it can be concluded that SHA is a good pozzolana material. The maximum compressive strength of 25.80 N/mm² was achieved at 5% replacement, 28 days curing age. There is percentage reduction of compressive strength for 5%, 10% and 20% replacement of cement with SHA compared with control. Therefore, SHA concrete can be used as light weight concrete. The study recommends SHA can be used as partial replacement for cement in concrete production at a percentage up to 20%.

Introduction

This research or study is about the use of sorghum husk ash as a pozzolana in concrete. This study will investigate the possibility of using the above named ash to replace cement. Sorghum husk ash is a by-product of the combustion of refuse after harvest of the sorghum grains. Simply put, sorghum husk is a by-product or waste product of sorghum plant. Sorghum husk ash can be a very good pozzolana because of its readily availability and affordability in areas in Nigeria. It is a very common known cereal. It belongs to the same family as rice husk ash, sugarcane bagasse ash, palm oil fuel ash, etc. However, the production of cement, which is a major material in the construction industry, is known to contribute to the greenhouse effect due to the emission of greenhouse gases like CO₂ gas during the clinker manufacturing process. The volume of CO₂ emissions is related to the clinker to cement ratio, technology, and energy consumption in the cost of cement production process (Price et al., 1999). In 2010, the worldwide cement demand was estimated to reach 2.8 billion tons and about 2.07 billion tons of CO₂ emissions was to be released into the atmosphere, which was expected to lead to climate change (global warming) (Damtoft et al., 2008). Climate change is attributed to the rise in the average temperature of earth's atmosphere and oceans about 0.8 degrees Celsius (1.4 degrees Fahrenheit), with about two-thirds of the increase occurring since 1980 (Damtoft et al., 2008). The warming of the climate system has been proven and 90% certain by scientist that it is primarily caused by concentrations of greenhouse gases caused by human activities such as advancement in industrial processes which generate harmful waste in to the environment, the burning of fossil fuels such as in cement production, which has led to increased coastal flooding, reduction in water supplies, increased malnutrition due to drought and increased health impact (Mehta, 2009). The increasing cost of conventional building materials and problem associated with climate changes from emission of greenhouse gases has made it impossible to meet the shelter provision requirements of the teeming population of a country such as Nigeria, due to the poor economic standard of living of people. This setback has led to inward sourcing of some material (wastes) as alternatives to conventional materials in the construction industry that are more environmentally friendly. Therefore, the need for a

mitigation of climate change through the use of economical, less polluting, energy efficient materials and methods of reducing the emission and the use of abundant materials in the environment, providing or finding alternative materials, which are relatively cheap, economical, accessible, and also available in the immediate environment such as agro-waste and industrial waste (Mindess, 2003 and Sabir, 2001).

Incinerated agro waste such as Sorghum husk ash, Rice husk ash, Baggash ash at control temperature usually possess cementitious properties. The high cost of cement remains a big challenge to affordable housing for many. The benefits of Sorghum include:

- prevents cancer,
- controls diabetes and
- improves digestive health.
- Sorghum Husk Ash is also known as a binder.

Sorghum husk ash is a by-product of the combustion of refuse after harvest of the sorghum grains. Sorghum is a cereal crop in Nigeria and the most important food crop in the savanna areas, which stand at 8million tons and 61.69million metric tons global annual production (Agrostats, 2009; USAID, 2008)

The high cost of cement remains a big challenge to affordable housing for many. The Nigerian government recently launched a mortgage refinance scheme to produce ten thousand houses for its citizens. A way out is replacing a proportion of cement in concrete with cheap and available pozzolanic materials from agro wastes. The Guinea Corn Husk Ash (GCHA) chemical constituent qualified it as a pozzolana. Pozzolanas are “siliceous or siliceous and aluminous material which in themselves have little or no cementitious properties but in finely divided form and in the presence of moisture they can react with calcium hydroxide (CaO) which is liberated during the hydration of OPC at ordinary temperatures to form compounds possessing cementitious properties”. Lea further reported thus: “Pozzolana have the characteristics of combining with the free lime liberated during the hydration process of OPC to produce stable, insoluble calcium silicates thus reducing the process of mortar and concrete attacks from sulphates, salts and chlorides. Pozzolana can be divided into two groups: natural pozzolana such as volcanic ash and diatomic and artificial pozzolana such as calcite clay, pulverized fuel ash and ash from burnt agricultural wastes such as rice husk, guinea corn husk and locust bean husk. The addition of pozzolana in either a lime or OPC based product has a number of advantages: the costs of pozzolanas are usually low and certainly well below that of lime or OPC. Also, pozzolanas like fly ash, rice husk ash and ground granulated blast furnace slags contribute to improvement of concrete performance.

Cement is an important constituent in the concrete composite. However, its cost is relatively very high. This has impacted in the cost of concrete production and by extension on the cost of housing delivery in Nigeria. An option available in mitigating this challenge is in replacing a proportion of cement with cheap and available pozzolanic materials from agro wastes. Results of a report on the comparative cost analysis of pozzolana in concrete from agro-wastes showed that rice husk ash best satisfied the cost requirement at a price equivalent of cement of #1015.00 using the 50kg bag size. The market price of cement at the time of the research hereby reported hovered around #2000.00 for the same bag size. However, this experiment is meant to establish that of sorghum husk ash.

Sorghum is a major cereal in Nigeria. In the United States, South America and Australia, grain Sorghum has traditionally been used for livestock feed. It is also a genus of flowering plants in the

grass family poaceae. Seventeen of the 25 species are native to Australia, with the range of some extending to Africa, Asia, Mesoamerica and certain islands in the Indian and Pacific Oceans. It is among the most efficient crops in conversion of solar energy and use of water and is known as a high energy, drought tolerant crop that is environmentally friendly. One species is grown for grain while many others are used as fodder plants, either cultivated in warm climates worldwide or naturalized in pasture lands. It is of the kingdom Plantae, family Poaceae. Sorghum is drought tolerant and resistant to water logging and grows in various soil conditions. Sorghum husk is the outer most layer of sorghum grain, also called sorghum hull. Burning of sorghum husk produced sorghum husk ash (SHA). Sorghum husk is an agricultural waste material obtained from threshing of the sorghum grain and constitutes about 15% of 500 million tons of sorghum grain produced annually in the world.

Sorghum husk predominantly contains hemicelluloses (approx. 26.4%), and cellulose (approx. 29.8%). The lignocelluloses biomass is hydrolyzed to convert hemicellulose and cellulose into sugar. The species native to Africa is *Sorghum bicolor*. *Sorghum bicolor* is commonly called Sorghum and also known as great millet, durra, jowari or milo. It is used as food, animal fodder, alcoholic beverages and biofuels. It's the fifth most important cereal crop grown in the world. Sorghum originated from Africa and is now cultivated widely in tropical and subtropical regions. It's the world's fifth most important cereal crop after rice, wheat, maize and barley.

The leading producers of *S. bicolor* in 2011 were Nigeria (12.6%), India (11.2%), Mexico (11.2%) and the United States (10%). Sorghum grows in a wide range of temperatures, high altitudes and toxic soils and can recover growth after some drought. It has four features that make it one of the most drought-resistant crops:

- It has a very large root to leaf surface area ratio
- In times of drought, it rolls its leaves to lessen water loss by transpiration
- If drought continues, it goes into dormancy rather than dying and
- Its leaves are protected by a waxy cuticle

Its roots decompose into a good fertilizer and also help to break up the soil while not exhausting the subsoil. Sorghum can also be used to make ethanol fuel. The benefits of sorghum include:

However, the sorghum husk ash (SHA) is a husk before being incinerated at 700 degrees Celsius to become an ash called sorghum husk ash (SHA). Before sorghum husk ash can be effectively utilized for structural applications in housing or building construction in general, some basic design parameters describing its performance characteristics have to be developed which is the motivator to this research. The properties to be studied include those related to strength, serviceability and durability among others.

Sorghum is a cereal grain used for food in some countries, but in the United States it is commonly used as livestock feed and turned into ethanol. Sorghum is also a major source for making liquor. The husks contain a dark natural color that can be used as a colorant.

Sorghum husk moreover is also known to contain some nutrients that can enhance microbial growth and also adsorb heavy metals. Red sorghum husk is a rich source of anthocyanins which are plant pigments known to increase microbial activity. It is low in protein and ash content but rich in fibrous materials.

Sorghum is a cereal crop in Nigeria and the most important food crop in the savanna areas which stand at 8 million tons and 61.69 million metric tons global annual production (Agrostats 2009; USAID, 2008).

Before sorghum husk ash can be effectively utilized for structural applications in housing or building construction in general, some basic design parameters describing its performance characteristics have to be developed which is the motivator to this research. The properties to be studied include those related to strength, serviceability and durability among others.

Sorghum bicolor is the fifth most important cereal after rice, wheat, maize and barley. It constitutes the main food grain over 750 million people who live in the semi-arid tropics of Africa, Asia, and Latin America. The largest group of producers are small-scale subsistence farmers with minimal access to production inputs such as fertilizers, pesticides, improved seeds, good soil and water and improved credit facilities for their purchase. Sorghums have a structure which is broadly similar to that of other cereals (Figure 1). The major components of the grain are the pericarp (outer covering), the testa between pericarp and endosperm, the endosperm and the embryo.

Within many semi-arid areas of developing countries, typical temperatures range from 20-38 degrees Celsius with annual rainfall ranging from 300-750mm. In the USA, hybrid grain sorghums are grown where annual rainfall ranges from 380-640mm. The growing season is longer than 130 days.

To obtain optimum yields in conditions of good soil fertility, a short growth cycle variety needs between 500-600mm of well distributed rainfall; 650-800mm for an average growth cycle variety; 950-1100mm for a long growth cycle variety. Since sorghum is predominantly a rain-fed crop grown by subsistence farmers, yields largely depend on the capacity for drought resistance of the variety used. Sorghums can tolerate a wide range of soil pH and textures.

Aim and Objectives

Aim

The aim of this study is to evaluate the potential of sorghum husk ash in partially replacing cement in the production of concrete in Nigeria as pozzolanic material.

Objectives

The above aim was achieved by the following objectives:

- Partial replacement of cement with varying percentage of sorghum husk ash,
- determine the physical properties of sorghum husk ash
- determine the compressive strength of the sorghum husk ash concrete produced

Justification

A success in this research work will determine the cost of the binder so produced if it is more costly than cement or vice versa. Also, above all, this research can also contribute to knowledge.

Limitation of the Study

This study was designed to examine the partial replacement of cement in concrete with 0%, 5%, 10% and 20% cement replacement with sorghum husk ash. The tests carried out were limited to fresh concrete weight determination, setting time, slump and compressive strength tests.

Literature Review

Burning of Agricultural wastes as a means of disposal contributes to environmental degradation and can be reduced by utilizing the materials for other purposes such as construction materials. A research in the past was carried out to study the cementitious properties of Palm Oil Fuel Ash (POFA) as partial cement replacement material in concrete. POFA was prepared and chemical properties of the ash produced were analysed. Then, concrete cubes were cast and tested at curing ages of 7, 21 and 28 days using 0, 10, 20 and 30 percent replacement levels. The slump test result showed that the workability of the concrete decreased as the POFA content increased. Results also showed that the compressive strength of POFA-concrete increased with curing age but decreased with increasing percentage of POFA compared to the compressive strength of the control.

The density of the concrete produced was reducing as the percentage replacement was increasing thereby leading to the production of a lightweight concrete. For the control with 0% POFA, the compressive strength of 25.77N/mm² was obtained at 28 days and can be used for reinforced concrete with lightweight aggregate and reinforced concrete with normal aggregate.

The optimum compressive strength of 23.77N/mm² was obtained for 10% replacement at 28 days of age with percentage strength to the control of 92.24%. While 20% and 30% replacement of cement with POFA yielded compressive strength of 20.67N/mm² and 15.36N/mm² respectively. The research showed that POFA has the potential of being used as a partial replacement of cement to produce lightweight, durable and cheap concrete. It also makes it possible to consume the waste produced as a result of palm oil production and thereby contributing to sustainability of our environment by reducing environmental pollution.

However, in year 2013, Nigeria produced a total of 930 metric ton of palm oil at a growth rate of 2.20% per annum (USDA, 2014). Its major products are palm fruits processed to obtain three commercial products which include palm oil, palm kernel oil and palm kernel cake. Empty fruit bunch, palm kernel and palm fruit fiber are solid by-products from the production of palm oil. These are usually used as a fuel for boilers in palm oil mills, blacksmith factories and as substitute or supplements for firewood in cooking locally. The aforementioned activities produce large amounts of ash annually as wastes called Palm Oil Fuel Ash (POFA). In many developing nations, waste management poses a great challenge and threat to survival of both fauna and flora and also cause environmental degradation. A good solution to these problems was recycling agro-industrial residues by burning them in a controlled environment and using the ashes generated for more noble means (Ghavami et al., 1999).

Utilization of such wastes as cement replacement materials may reduce the cost of concrete production and also minimize the negative environmental effects with disposal of these wastes (Abdulkadir et al., 2014). According to Sirirat and Supaporn (2010), the calcium hydroxide (unfavorable product from cement hydration) released during the hydration of ordinary Portland Cement (OPC) reacted with silica present in the pozzolans and water to form additional calcium silicate hydrate which is responsible for the compressive strength in concrete.

In previous studies, efforts have been made to increase the use of pozzolans to partially replace cement. Some of the pozzolans investigated are sugarcane bagasse ash, rice husk ash, palm kernel husk ash, fly ash, ground blast furnace slag, silica fume, etc. now, no one has attempted to utilize sorghum husk ash which is really the essence of this study.

Concrete

Concrete is one of the most extensively used construction materials in the world. Each year, the concrete industry produces approximately 12 billion tonnes of concrete and uses about 1.6 billion tonnes of PC worldwide. Indeed, with the manufacture of one tonne of cement approximately 0.94 tonnes of CO₂ are launched into the atmosphere. Not only CO₂ releases from cement manufacture but also SO₂ and NO_x which can cause the greenhouse effect and acid rain.

These cause serious environmental impact. In addition to consuming considerable amounts of virgin materials (limestone and sand) and energy (energy demand of about 1700-1800 MJ/tonne clinker), producing each tonne of PC of which about 1.5 tonnes of raw material is needed. To reduce the environmental impact of cement industries, MK and other cementitious materials are used to replace part of cement or as a source of new cementless materials.

A research in the past was carried out to study the cementitious properties of Palm Oil Fuel Ash (POFA) as partial cement replacement material in concrete. Results also showed that the compressive strength of POFA-concrete increased with curing age but decreased with increasing percentage of POFA compared to the compressive strength of the control.

Pozollana Materials

Palm Kernel Shell Ash (PKSA)

Palm Kernel Shell Ash (PKSA) did not improve the strength of concrete.

Guinea Corn Husk Ash (GCHA)

In the case of Guinea Corn Husk Ash (GCHA), it was conveniently concluded in a report that after 28 days curing period the optimum strength of 26.27 N/mm² was at 5% replacement level while plain concrete had a value of 25.50 N/mm².

Fly ash

Fly ash is used as a supplementary cementitious material (SCM) in the production of Portland cement concrete. A supplementary cementitious material, when used in conjunction with Portland cement, contributes to the properties of the hardened concrete through hydraulic or pozzolanic activity, or both. As such, SCM's include both pozzolans and hydraulic materials.

Answer: the gap in knowledge was that no one ever talked about sorghum and no one ever used 0%, 5%, 10% and 20% as replacement levels

World Sorghum Production

Sorghum, apart from being a subsistence crop, is an important commercial and export crop for the United States of America, Australia and Argentina. The major areas of sorghum production are listed in table 2a and b (FAO, 1995).

Table 2a: World sorghum production by area per hectare and tonnage per region

Sorghum Production Area				
(Million ha)				
	1989-91	1993	1994	1995
World	43.4	43.2	44.8	43.8
Africa	18.5	20.6	23.3	22.0
North America	6.1	5.2	5.2	5.2
South America	1.4	1.3	1.3	1.0
Asia	16.6	15.4	14.2	14.8
Europe	0.2	0.2	0.1	0.1
Oceania	0.5	0.4	0.5	0.5

Table 2b: World sorghum production by yield per hectare and tonnage per region

Sorghum Production Yield				
(MT/ha)				
	1989-91	1993	1994	1995
World	1.31	1.37	1.36	1.24
Africa	0.76	0.81	0.78	0.79
North America	3.38	3.5	3.91	3.18
South America	3.71	3.76	4.53	3.51
Asia	1.02	1.19	1.19	1.06
Europe	4.07	4.34	4.34	4.32
Oceania	1.15	1.90	1.90	2.02

The trade in sorghum is small compared with the major grains such as wheat, maize, barley and rice.

METHODOLOGY

Materials

The materials used for this study include fine aggregate, coarse aggregate, cement and sorghum, husk ash. Fine aggregate (sand) and coarse aggregate (granite) were sourced from a construction site in Adeleke university premises. The sorghum husk was obtained from a local market situated in Osogbo, Osun State and interior village of Osun state in a dry state and also sourced from the Fulani herdsmen in Ede, Osun state. The Sorghum husk was burnt at a temperature of 700°C using a furnace for about 3 hours. The burning was done at the foundry workshop of Mechanical Engineering Department, Adeleke University, Ede, Nigeria. The burnt ash was grinded using mortar and pestle and sieved using 0.09mm and 300mm sieve. The ordinary Portland cement used for control sample production was Dangote Brand which is locally manufactured cement and it conforms to ASTM Type I Portland cement and BS EN 197. Water used for purpose of concrete mixing and curing was obtained from borehole water within Adeleke University.

Sample Preparation

The sorghum husk collected was sun dried and burnt in a furnace to obtain the ash. This resulting powder was grinded and sieved with 75µm sieve. This was named sorghum husk ash (SHA) and used as pozzolana in the concrete produced.

Chemical Analysis of SHA

Chemical analysis was carried out on the SHA in the central laboratory, institute of agricultural research and training (IART), Federal University of Technology, Minna, Nigeria; via Atomic Absorption Spectrophotometer and Flame Spectrophotometer. These tests were carried out in order to determine its suitability as a pozzolana

Mix proportion, casting and testing

SHA was blended with cement at 5%SHA: 95% cement, 10%SHA: 90% cement and 20%SHA: 80% Cement respectively.

Compressive Strength Test

The compressive strength test was conducted in accordance with British Standards. The 1: 2.26: 4.4 mix ratio would be adopted. The ratio would be that of OPC (with levels of SHA), fine aggregate and coarse aggregate. The cubes would be cast for replacement levels of 0%, 5%, 10% and 20% and cured for 7days, 14days, 21days and 28days respectively

Density Test

At the end of each curing period, the mortar cubes were weighed using an electric weighing balance. Density was obtained as mass of concrete cube (kg) divided by the volume of the cube (m³).

Calculations of the quantity of material used for concrete production

Volume of concrete cube: 150mm x 150mm x 150mm: LBH
Mix ratio: 1:2.4 (Cement: sand: granite)
Volume or amount of cement in the concrete= $1/7 \times$ Volume of concrete
1 bag of cement= 50kg
Density of cement = 1500kg/m³
Mass of cement= Density of cement x Volume of cement
Quantity of Ash= Mass of cement x %replacement
2 cubes per replacement for 7, 14, 21, and 28days
8 cubes per replacement
32 cubes in total for 5%, 10%, 20%

The same process was repeated for calculating quantity of sand and granite
Density of Sand= 1368kg/m³
Density of granite= 1570kg/m³

RESULTS AND DISCUSSION

Physical Properties of Fine Aggregate used for the Study

The fine aggregate (sand) used for the casting of the concrete has a specific gravity of 2.5, bulk density of 1368kg/m³, moisture content of 6.9%, fineness modulus value of 3.03, coefficient of uniformity, Cu of 2.6 and Coefficient of curvature, Cc of 1.1. these results reflect that the sand samples are well graded and can be classified as sharp sand which is suitable for production of concrete. The granite sample has a specific gravity of 2.7, bulk density of 1570kg/m³, Cu of 1.5 and Cc of 1.2 reflecting a uniform sample

Chemical Properties of Sorghum Husk Ash

SHA has combined oxide (SiO₂ + Al₂O₃ + Fe₂O₃) of 36.40% with silica, 77.267% which was slightly above the minimum of 70% specified in ASTM C618 (ASTM C618, 2005). SHA has cementitious compounds like calcium oxide; alumina and iron oxide (total about 31.95%) this suggests that SHA is suitable as pozzolana in concrete. The silica will enable the concrete to have good strength and durability while the alumina will make the concrete to be corrosion resistant.

Concrete Density of Sorghum Husk Ash Concrete

The densities of the SHA concrete fell into the range of 2226-2520kg/m³ at 28th day curing. Lightweight concretes can be produced with an oven-dry density range of approximately 300 to a maximum of 2000kg/m³ and the density for a normal concrete is 2240 to 2400kg/m³. With the conditions stated above, the concrete can be classified as normal weight concrete. Also, as the percentage replacement of OPC with SHA is increasing, the weights of the concrete cubes were reducing leading to a reduction in their densities.

Mean Compressive Strength of Sorghum Husk Ash Concrete

The compressive strength of the SHA concrete produced at 7days curing age ranges from 11.20N/mm² to 21.80N/mm². At 21days and 28days, the strength ranges from 17.13N/mm²- 25.53N/mm² and 19.60N/mm²- 27.47N/mm² respectively.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study examined the potential of sorghum husk ash as a concrete pozzolana material. From the result of this study, it can be concluded that SHA is a pozzolanic material that has the potential to be used as partial cement replacement material.

The study was able to establish that the maximum compressive strength of 25.80N/mm² was achieved at 5% replacement, 28 days curing age. There is percentage reduction of compressive strength for 5%, 10% and 20% replacement of cement with SHA compared with control.

Recommendations

SHA is a pozzolana and it is recommended for use as partial replacement for cement in concrete production at a percentage up to 20%. For environmental sustainability of concrete materials, SHA can be utilized for the production of lightweight, durable and cheap concrete because of its availability in significant quantities across the country. Chemical and limited mechanical analysis had been carried out in this study, there is a need for extensive studies on mechanical properties; tensile strength of SHA concrete; freezing and thawing resistance; deicing salt scaling resistance, also the corrosion resistance and abrasion resistance of SHA concrete.

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ENTREPRENEURSHIP AND SUSTAINABLE DEVELOPMENT OF AGRICULTURE AS A STRATEGY OF RURAL DEVELOPMENT IN RURAL AREA

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Abstract

Rural area is the most vulnerable sector of the economy in terms of food insecurity , unemployment and poverty . However entrepreneurship has provided solution to some extent to the problem of rural area. Since agriculture is the main source of livelihood of the rural community, sustaining entrepreneurship is an emerging problem among the agricultural communities as they seek key answers to sustainable agricultural development in rural communities. This paper seeks to identify the challenges the farmers entrepreneurship faced and how they can be motivated to overcome them in Nigeria. The finding revealed major challenges to rural development to be: high illiteracy level , lack of human capacity development, lack of continuity of government programme, lack of unity and cooperative efforts and high level of corruption and crime . Therefore, this paper conclude that in order to ensure a sustainable entrepreneurship and rural development , there is a need to have effective human capital development , engagement of principle of continuity of successive government, a viable cooperative system in the rural area and engagement of corruption free leadership system. Therefore this paper recommend the China model of development of rural area. The Agricultural programs adopted in China's rural development include decentralization of agricultural production, green revolution, commodity-based production, and agricultural market liberalization.

Keywords: Entrepreneurship, Sustainable , Rural ,Development, Agriculture,

1. Introduction

The term “Rural” refers to areas with low population density, small size and relative isolation, where the major economic activities are found in agricultural occupation and where the people are relatively homogeneous in their value and behaviours. In Nigeria rural areas have been defined as areas with less than 5,000 in 1956, less than 10,000 in 1963 and less than 20,000 today (Ekong, 2010)

The development on the other hand has to do with improvement of the social, economic and environmental wellbeing of members of a social system. It is concerned with the transformation of the social system from a low level of social and economic wellbeing to a higher or more satisfying level of living. The issue of empowerment of the members of the social system to be able to take advantage of the improved situation is very paramount. This implies that having ample resource base, infrastructure and other social amenities in place is not the ultimate, but their functionality, accessibility, affordability and ability of all members of the social system to use them to satisfy their social, economic and environmental wellbeing connotes development (Adedoyin, 2011).

Agri-entrepreneurship refers to the capacity of farmers to change, to abandon old models and to enter a new agricultural phase. An agripreneur is defined “as a business owner who is self-employed and seeks to create wealth within the agricultural industry”. Agripreneur is a person who identifies viable business opportunities in agriculture, gathers resources, establishes and manages the resulting agricultural enterprise (Carr, 2016). To put it simply, he or she is an individual who owns an agricultural business (Nwibo, ., Mbam, and Biam, .2016) (agribusiness) (Bose, 2013;

The development of Agricultural sector is one of the way through which development can be realized

According to Obaniyi 2022, A typical farmer makes decision day in and out in their business thereby establishing their farming business and this make farmers to be referred to as an entrepreneur .

Therefore, this paper seeks to identify different challenges facing farmers as entrepreneur and ways by which sustainable development can be attained . This paper aim to identify the problems faced by farmers (entrepreneur) and proffers solution to the problem

On this note, this paper will be discussed under the following headings: Challenges faced by farmers’ entrepreneur; Agricultural enterprises diversification for sustainable rural development ; Entrepreneurship theories ; Approaches made toward rural development In Nigeria; Lessons from other developed countries. using “china” as a case study ; conclusions and recommendation

2. Challenges faced by farmers’ entrepreneur

1. Poverty

In today's Nigeria, one of the Major Problems of Food Production is Poverty. On the other hand, one of the Simplest and a Doubtless Truth that you can easily Know about Nigeria is the fact that over 75% of Her Rural Dwellers are Full-time Farmers. Nigeria's present inability to solve Her Own Problems of Food and Agriculture, is not as a result of Her Peoples' Laziness; or say a natter of the Nation being Naturally Unblessed. Nigerian

Farmers and Nigerians in general are really Hard-working and Industrious. Nigerians are not really lacking Food, what they really lack there is the money to buy the Food; the money to Produce the Food; and, or even the money to procure small Piece of Land to Grow the Food.

2. Ignorance

Nigeria of today is a country where agriculture is still greatly and relatively undermined; and or even Over-looked as a mere " Back-yard Business ". Some Nigerian Youths even regard Farming as: " An Odd Job that is meant only for the Illiterate Rural People ". In the eyes of some of Nigeria's Wealthy Class, Farming is, Ignorantly Underrated or Abhorred as: " Poor Peoples' Job ". The very worst is that the Governments in Nigeria Are, pretentiously doing very little or nothing in Terms of Solving the Nation's Food and Agricultural Problems.

3. Illiteracy

The greatest number of Dedicated Full-time Farmers in Nigeria can neither read nor write. The Local Farmers there are even as uninformed as they lack Modern Agricultural Education. The climax of illiteracy there, is Nigeria's total negligence and, or her non-usage of native languages in the Nation's Pursuits for Modern Education.

4. Use of Manual Farm Tools / Methods:

The Average Nigerian Farmer is still making use of only the same Out-dated Manual Farm Tools - like Cutlass and Hoe - as their Fore- fathers used since many Centuries ago. Instead of using some Affordable Modern Agricultural Techniques or Simple Machines; the Farmers in that part of the World farmers are still adhered to various old agricultural methods and practices that were Copied from their Ancestors. In short, their use of these kinds of Archaic and Out-dated Tools and Techniques, constitutes a very great set-back in the Country's Food and Agricultural Out-puts.

5. Lack of Road; Water; & Electricity: The Rural Farming Communities in Nigeria have neither Road nor Water nor Electricity. Some do not even have Hospitals or Schools around them. Can you then imagine the Pains and the Labours, and to what extents the Farmers from such-like Areas can Contribute in Food Production?.

6 Lack of food storage or processing facilities many delicious and juicy fruits, vegetables, and cash-crops are largely produced from Nigeria's local farming communities. Very great percentage of these delicious farm produce often get damaged and, or wasted before they reach their final consumers. In this kind of a situation, one of the major problems that is facing the helpless local farmers there, is lack of adequate food storage or processing facilities.

7. Lack of Modern Farm Machines / Techniques: Another major problem of Nigeria's food and agriculture is lack of modern farm machines or techniques. The Farmers in Nigeria are still making use of Ancient Agricultural Tools / Techniques; whereas there are Low-cost Modern Farm Machines / Techniques out there for Use as better Substitutes.

8. Lack of Scientific & Technological Know-how: In Nigeria, Scientific and Technological Know-how is relatively very low. Many Schools there in Nigeria do not even have Science Laboratories. Hence, a great Majority of Students there rather Theorize Sciences than Practicalize them. In fact, this Problem of Nigeria's Under-Development in Science and Technology often leave the Country

to Depend largely on Importation. And this equally, is part of the Major Problems and Challenges of the Country's Food and Agricultural Developments.

9. Disorganization, Unaccountability and disunity :

Organization and Accountability is one of the Basics of Better and Successful Management. But, till this age of modernization and civilization, Nigeria is still internally disorganized. In the same vein, a majority of farms there in Nigeria lacks organization or records and accountability. Some farmers there are merely planting without any sort or kind of a farm records or organization; or measurements or, at least; an account for an easier identification of the possible reasons behind their agricultural gains or loses.

10. Lack of Leadership: Corruption and crime

One of the major problems of food and agriculture in Nigeria is lack of leadership. Mismanagements; corruptions and embezzlements of public funds are very common within Nigeria's government officials. The selfish nature of our leaders have caused a lot of setback in agricultural sector. The fund that suppose to be used for subsidy to farmers have been diverted to the leaders pockets. Chemical such as herbicides and fertilizers that are meant for farming operation have been diverted to make money at central market

11. Lack of continuity of government programme :

This is one of the major setback in Nigeria economic set up as the change in the political sytem have causes a lot of stagnation in the farmers entrepreneurial business . Policy instability has caused bankruptcy in many famers business. For instance Obansanjo regimes proposed the inclusion of cassava in flour and in bread making but as soon as he left the office the policy folded up

12. Global Warming/ Climate Change:

Global Warming is also part of the Major Problems of Food and Agriculture in Nigeria. Forest Destructions and Over-grazing of Animals has really turned a lot of Nigeria's Farmlands into Deserts. Several lakes; rivers; streams and rain forests have disappeared. many Nigerian farming communities that only depends on rainfall, are now faced with severe droughts, erosions, landslides; deforestations and an excessive massive loss of crops and animals. All these are some of the Real Impacts of Global Warming on Nigeria's Agriculture and Food

13. Kidnapping and insecurity issue

This is the major concern of farmers' entrepreneur as Fulani herdsmen now focused attention on farmers in the remote area to perpetuate their evil deeds (Kayode Samuel Obaniyi et al 2020)

3. Agricultural enterprises diversification for sustainable rural development

The rural farmers can only contribute to rural development only if they diversified into different sectors of agriculture that can help boost their income. Some areas of agribusiness where investment can be made in agriculture in order to reduce unemployment and maximise profit in Nigeria as EADC model practicability are cassava production, soya bean and soya-related products, sorghum production, food processing and storage, fresh flowers production, vegetable production, hatchery, fish farming, dairy farming mushroom farming, quail egg farming, growing medicinal herbs, cactus farming, commercial corn farming, snail farming, aqua farming, spices production. (Obaniyi, 2022)

Others are pig farming, shrimps farming, cashew business, meat packaging, fruits productions, groundnut processing, flour milling business, botanical pesticide production, honey production, agricultural produce brokers, frozen chicken, sunflower production, livestock feed production, chick selling business, commercial growing of tea leaves, jatropha farming, goat production, sheep production business, cattle production, landscape expert, potatoes processing, fodders productions etc. In addition, we have horticulture, seed certification business, green house management, custard business, basket and broom production, soil testing, rabbit rearing, grass-cutter, worm farming, guinea pig farming, kolanut farming, cocoa production business, sugarcane farming, coconut farming, yam production farming, egg production business, citrus farming, avocado farming, citrus farming and coco yams farming. Furthermore, other agribusiness that will help to curb unemployment and poverty and thereby establishing sustainable economy include oil palm production business, bamboos business, rice production business, charcoal business, fruit exportation and vine yard production, cucumber and pumpkin production, agricultural consulting services and other value addition venture and business that can generate trillion of naira for the country. (Nwibo et al., 2016: Obaniyi, 2022

4. Entrepreneurship theories

- **Anthropological Entrepreneurship Theory:** Anthropology is the study of the origin, development, customs, and beliefs of a community. For someone to successfully initiate a venture the social and cultural contexts should be examined or considered. This is very applicable to this study because farmers must study the environment that he setting up his business in order to see that it is not contradictory to the belief and custom of people
 - **Economic Entrepreneurship Theories:** The economic entrepreneurship theory has deep roots in the classical and neoclassical theories of economics. It focuses on how farmers can make profit with the resources available at their disposal , This is relevant to this study because farming is a business and it will only take a prudent manager of limited resources for sustainability of the venture
 - **Opportunity-Based Entrepreneurship Theory:** This is based on research to determine the differences between entrepreneurial management and administrative management. He concludes that the hub of entrepreneurial management is the “pursuit of opportunity without regard to resources currently controlled”
- Resource- Based Entrepreneurship Theories:** The Resource-based theory of entrepreneurship argues that access to resources by founders is an important predictor of opportunity-based entrepreneurship and new venture growth (Alvarez & Busenitz, 2001). This theory stresses the importance of financial, social and human resources (Aldrich, 1999). Thus, access to resources enhances the individual’s ability to detect and act upon discovered opportunities (Davidson & Honing, 2003)
- **Psychological Entrepreneurship Theories:** These theories emphasize personal characteristics that define entrepreneurship. These are risk taking, innovativeness, and tolerance for ambiguity. All these are very relevant to farmers making profiting
 - **Sociological Entrepreneurship Theory:** Sociological enterprise focuses on the social contexts. The first one is social networks. Here, the focus is on building social relationships and bonds that promote trust and not opportunism. The second he called the life course stage context which involves analyzing the life situations and characteristic of individuals

who have decided to become entrepreneurs. The third context is ethnic identification. One's sociological background is one of the decisive "push" factors to become an entrepreneur. The idea is that environmental factors play an important role in the survival of businesses. The political system, government legislation, customers, employees and competition are some of the environmental factors that may have an impact on survival of new venture or the success of the entrepreneur.

- **Sustainability Theories**

- Theories of sustainability attempt to prioritize and integrate social responses to environmental and cultural problems. An economic model looks to sustain natural and financial capital; an ecological model looks to biological diversity and ecological integrity; a political model looks to social systems that realize human dignity. Religion has entered the debate with symbolic, critical, and motivational resources for cultural change

5. Approaches made toward rural development In Nigeria.

- Nigeria has adopted many programmes towards rural development in the past Individual, private organization, corporate bodies and international organization have also contributed to the rural development The various programs initiated and mostly targeted at the rural sector by government include the following: Rural Infrastructure Development Scheme (RIDS); Operation Feed the Nation (OFN); Agricultural Development Programs (ADP) ; Rural Banking Scheme (RBS) Better Life for Rural Dwellers (BETTER LIFE) Directorate for Food, Road and Rural Infrastructure (DFRFI)

A quick look at the introduction, establishment, execution and the ideas of majority of the above programs will reveal that they are mainly targeted at rural development in an effort to improve the lives of rural occupants, arouse and boost economic growth, as well as get the rural sector to contribute meaningfully to the national economic and social growth. Also, rural development has brought about improved access to resources, growth and diversity of agriculture, food security, promotion of non-farm activities, job creation, granting of micro-credit and soft credits for rural inhabitants, improved seedlings and fertilizers

Challenges of rural development

Rural development is faced with challenges which have made the effect of government's efforts at different levels, NGOs, private initiatives and international involvement not felt by the intended beneficiaries. Umehali and Akubailo (2006) list some of them to include:

- Poor infrastructure;
- High population density,
- High level of illiteracy
- Low social interaction and local politics
- Rural-urban migration
- Corruption
- Armed conflicts ranging from ethnic, religious and communal issues

To ensure improved and sustainable rural development

The following salient points need to be thoroughly followed and employed by government and investors:

- Tackling and curbing crime, violence and youth restiveness which could be through better policing and creation of recreational facilities in the rural areas.
- Effective human capital development in the form of educational services and capacity and skills development, most especially in the area of Agriculture
- Encouraging the principle of continuity whereby successive governments accept the feasible rural development programs introduced by their predecessors without any reservations and sentiment
- Encouraging and strengthening cooperative and community-based initiatives in the design and running of rural development programs

6. Lessons from other developed countries. using “china” as a case study

A serious analysis of the causal failure of Nigeria’s rural development programs in relation to the recorded successes in China shows that implementations of Nigeria’s rural development programs swung from the locus of the political-will that forms the strength of the recorded successes by China. Reconsidering the pattern of rural development in Nigeria clearly calls for modeling the country’s rural program implementations alongside the strength of the political-will adopted by China for attainment of the much-desired rural transformation and sustainable development in Nigeria. In view of the fact that agriculture constitutes the dominant economic base of the rural areas, rural development schemes and programs have been designed around the development of agriculture with the hope that such development would enhance productivity and translate to a better living condition arising from improved income generation from sales of increased agro-produce

Among the enacted agricultural programs by the Chinese rural development, policy include decentralization of agricultural production, green revolution, commodity-based production, and liberalization of the agricultural market. [Von Braun et al 2005]

China’s rural situation and the reform programs

- **Human development:** This reform agenda centered on human development and as such, the reform policies were designed to take care of the impoverished groups and ensure wealth creation for all. In the light of this, the reform guidelines call for integration of the urban, rural, regional and domestic development with openness to the outside world in order to bring about the system’s socio-economic and human development. In the light of this, key poverty-stricken counties were identified and reached out to with support services. In this regard, the poor farm families, or at least one person from a household, were trained on non-agricultural economies the State Council Leading Group Office of Poverty Alleviation. In view of this, about 90% of the trained peasant farmers found non-

agricultural employment as an alternative or additional means of livelihood is greatly supported

- **Social mobilization of stakeholders for reforms:** In an attempt to ensure a far-reaching effect of the human development programs, steps were taken to mobilize and organize people from all walks of life to join in the development and construction of the poverty alleviation programs. In this regard, provinces, prefectures, and counties were organized under the state, government organs, and large state firms to support the poor. In the same vein, private firms were encouraged to invest in impoverished areas and NGOs sponsor children in poor households on compulsory basic education; poor mothers were given support services by the Chinese Population Foundation, and the Women Federation worked at increasing women's income. In addition, the State Council Leading Group Office of Poverty certified up to 260 industrialized enterprises to participate in poverty reduction, and by this, about 3 million impoverished households and 12 million poor people were supported for economic growth.
- **Employed integrated development approach:** For the social and economic development of the rural system, the Chinese authority embarked on an integrated approach whereby poverty alleviation programs were integrated in science, education, health, and infrastructure for overall improvement of the impoverished people's capabilities. In the light of this, a National Poor Regions Compulsory Education Project was put in place to provide and universalize a nine-year compulsory education and illiteracy eradication among the middle-aged and young people. In the area of healthcare, medical reliefs were administered to the poor households to treat and prevent illnesses, and the poor households were educated and encouraged to decrease their births through family planning.
- **Oriented economic development:** Economic development of the rural system and the country as a whole strongly depends on agriculture, particularly food and industrial development. In view of this, the Chinese government explored and exploited the agricultural sector, not just for poverty alleviation of the rural system, but also for the industrial and economic growth of the country. This feat was achieved through the structural adjustment of agriculture to bring about agricultural diversification, under which the Chinese economy shifted from staple food production to high-value agricultural products such as fruits, vegetables, milk and milk product, meat, egg, and fish, to meet the human's changing consumption pattern and the rising demand for products at both the national and international level.
- **Leadership and governance:** For the attainment of sustained, healthy, and stable economic development, and prevention of marginalization of the impoverished people, the Chinese government strictly adhered to the concept of rapid economic development that is human oriented. Also established were poverty alleviation administrative structures at the national, provincial, prefecture, and county levels for the organization and coordination of the national and local poverty alleviation and development. For effective implementation and assured benefits of the poverty alleviation programs, the key poverty-stricken counties were identified and reached out to through the poverty administrative structures.

7. Conclusion and recommendations

This paper shows major challenges faced by farmers' entrepreneurs and the ways by which they can be overcome in order to bring a sustainable rural development to be: Some of the challenges include poverty, high illiteracy level, lack of good roads, poor farm implement, lack of human capacity development, lack of continuity of government programme, lack of unity and cooperative efforts and high level of corruption and crime. Moreover, different areas of diversification of entrepreneurship in the area of agriculture are also covered. Also, the paper concludes that in order to ensure a sustainable entrepreneurship and rural development, there is a need to have effective human capital development, engagement of principle of continuity of successive government, a viable cooperative system in the rural area and engagement of corruption free leadership system.

Finally, this paper recommends the China model of development of rural area. The Agricultural programs adopted in China's rural development which include decentralization of agricultural production, green revolution, commodity-based production, and agricultural market liberalization.

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IITA POLICY BRIEF AGRICULTURAL DEGREE PROGRAMME ENVIRONMENT AND STUDENTS' PREFERENCE FOR AGRIBUSINESS ENTREPRENEURSHIP IN NIGERIA

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In Nigeria, the agriculture provides livelihood for close to 70% of the people and contributes an average of 24% of Gross Domestic Product (GDP) in the last decades. This signals low productivity which is an outcome of inefficient use of production resources. Agricultural low productivity has been blamed on the increased greenhouse emission, declining food supply and increasing food prices with attendant effects on hunger and food insecurity. Evidence abound that incompetence to use modern equipment/tools and lack of cognitive skills to adopt innovations by the ageing farmers are the bane against optimising agricultural production. Regrettably, the situation is worsening off as the increasing rate of youth unemployment in the rural areas is forcing them to migrate to urban centres in search of opportunities. To address this challenge, the education policy was retooled to equip agricultural students with knowledge of production, projection, economics and guided discovery through field practical training. Despite this policy, agriculture and its allied courses are the least subscribed by university applicants in Nigeria. Students' perception of their educational environment was hypothesized as determinants of students' interest in agriculture. This policy brief presents the policy implications of agricultural college students' perceptions of their educational environment on agribusiness choice as a career.

INTRODUCTION

Experts have found that human capacity development with special focus on capability to develop new ideas and adapt these innovations to solve emerging challenges critical to economic growth and development in developing economies (Kuznetsova, 2019). Ndour (2017) posited that human capital is critical to the transformation of all other resources (technology capital, physical capital, natural resources) to new forms that are useful. Creating new ideas (innovations) and deploying these to solve critical economic puzzles are a function of degree of competence acquired through serial training and exposure, relevant cognitive skills and associated efficacy detailed in entrepreneurship pedagogy. This concepts, when narrowed to agriculture, is agribusiness entrepreneurship. Agribusiness (agricultural business) is one of the three pods of agriculture, others being the Art and Science of agriculture. It entails the advancement of knowledge on the business of agriculture and its related matters. On the other hand, entrepreneurship is the development of an idea or a practice with the utmost objective of creating a new product or enhance/improve/add value to an existing product. Entrepreneurship in agriculture is in the form of modern technique or more innovative ways of improving animal and crop breeds, their management (including feed formulation, vaccines, etc), or even develop new products for the purpose of growth and profits under the condition of risk and uncertainty. Some peculiarities may

not allow some business management tools to work for business of agriculture, therefore, agribusiness entrepreneurs must be able to explore these peculiarities along the value chains and develop business management tools that can help agribusiness folks optimise their production.

Escalante and Turvey (2006) describes agribusiness entrepreneurship as the managerial capacity to launch investment and run business either as farming or other rural income generating activities. Therefore, in the context of this study, agribusiness entrepreneurship is described as the managerial competence to deploy or adapt the most innovative technological capital (innovations) to minimise cost of production by choosing the best combinations of physical capital and agricultural resources which best optimise agricultural output without compromising the environment. The more participants in agricultural value chains have these competence the better it is for the agricultural sector and ultimately the economy to follow an upward trajectory. This is part of what accounts for the productivity of those countries whose agricultural productivity average is greater than the global average. Evidence in the literature suggests that there is a correlation between the level of adoption of entrepreneurial business concepts along all agricultural value chains and their productivity (Ghazy, Ghoneim and Lang, 2022; and Adusei, 2016). Nigeria, being endowed with fertile soil, diverse and favorable climatic conditions, agribusiness entrepreneurship offers high potential for economic growth (Regmi and Naharki, 2020).

However, economic activities of participants in the agriculture sector are generally characterized by low productivity compared to other economic sectors (Figure 1). This low productivity is can be a disincentive to participants and discouragement for intending investors in the agricultural sector. However, poor management of resources, inconsistent government policies and lack of entrepreneurial skills among farmers are some of the issues causing low productivity in the agricultural sector. According to Bjorlund, Bjorlund and Rooyen (2020), external influence manipulated stakeholders to pursue a disproportionate agricultural production system that lean towards export crops in lieu of household consumption. Experts have identified a systematic approach to evolve an organic agri-food system in Nigeria and other countries in sub-Saharan Africa. Barret et al. (2020) described it as an institutional approach. In other words, a highly technological driven and functional educational system has been used to achieve a sustainable agri-food system with a clear focus on achieving socioeconomic stability (Lu et al.,2022). Unfortunately, in Nigeria, there are conjectures that it is either the current Agribusiness pedagogy and/or lack of interest in agriculture by the technology savvy youth that are impeding the efforts geared towards addressing this complexity. According to Ikuemonisan et al. (2022), the prevalence of ageing farmers, illiterate and unskilled actors lacking sufficient self-efficacy to mobilize cognitive resources, and motivation to implement innovative agricultural and business practices successfully result in widespread poverty among the actors. Over many years, the persistence of this scenario created an inferior perception of a career in agriculture among graduates and students who enrolled in agricultural degree programmes in Nigeria.

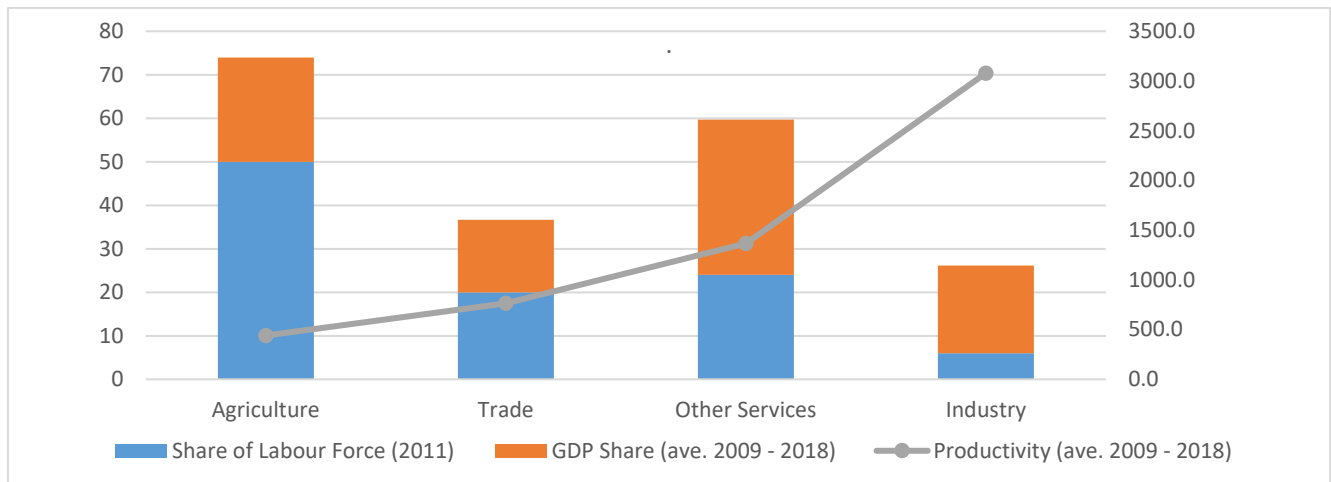


Fig 1: Distribution of Labour Force, GDP and Productivity (GDP per Capita) by Agriculture, Trade, Services & Industry

source: National Bureau of Statistics, Nigeria
<https://www.nigerianstat.gov.ng/>

Any food and agriculture business that must compete globally and sustainably grow would need to have an excellent business model, and constantly re-invent the system through consistent business model innovation. Thus, highly-skilled, productive and resourceful young people and entrepreneurs must be involved in this new strategy, considering that African food and agricultural market is expected to rise to \$1 trillion in 2030 representing an opportunity for graduates of agricultural degree programmes in Nigerian and for which policies have been enacted to facilitate. However, the lack of interest in Agriculture and its allied courses by many university students (Figure 2) is a major setback to the government's policy strategy.

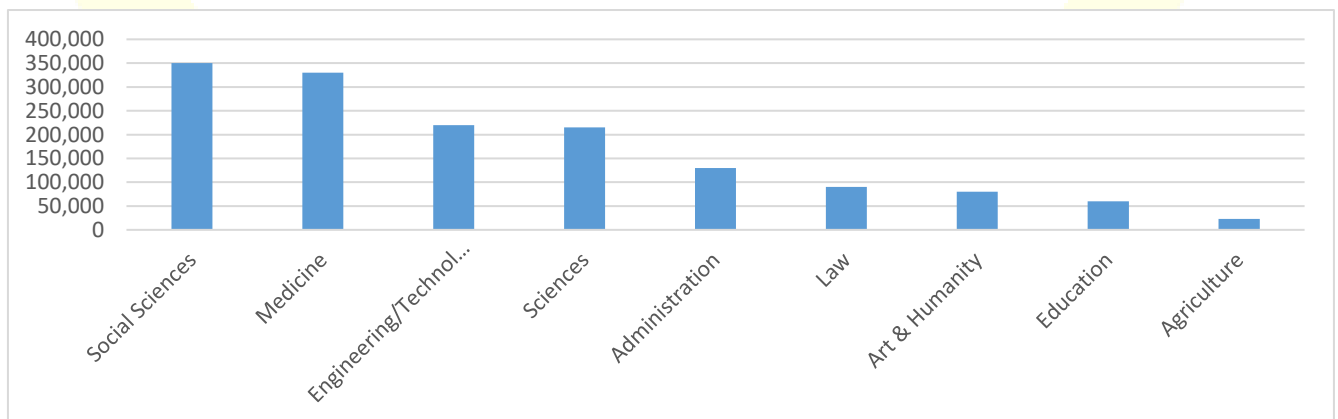


Table 2: Universities' Applicants by Faculties by Faculty 2015-2018
 Source: Joint Admission Matriculation Board

Regrettably, those who eventually got admitted are often unwilling to choose agribusiness as a career even after graduation.

This brief aims to explore the effect of undergraduate agriculture college students' perceptions on an intention to engage in agribusiness career.

Methodology

The study was carried out in Southwest Nigeria. A total of 571 respondents were drawn through a multistage sampling approach from among undergraduate students in the Faculties of Agriculture in six selected universities in the region comprising of three federal and three state government universities. Selection was restricted to only the final year students because of their relatively better exposure and experience in agricultural training (class, laboratories and farm activities) than others in lower class. After selecting 6 universities, 100 students were randomly selected from each school. However, one of the selected schools only had a total of 71 students at the final class. The questionnaires, prepared in google form, were sent to the selected respondents through their email, whatsapp, telegram based on the preference of the respondents. The enthusiasm to participate in the survey by the respondents accounted for part of the data collection. Dundee Ready Educational Environment Measure (DREEM) instrument was adapted to elicit information from the respondents. There are five sub scales of the DREEM instrument namely: Students' Perception of Learning (SPOL); Students' Perception of Teachers (SPOT); Students' Academic Self-Perception (SASP), Students' Perception of Academic Atmosphere (SPOA); and Students' Social Self-Perception (SSSP). Both descriptive and inferential statistics were used for the data analyses. In addition to the five DREEM sub scales, the effects of academic grade and age of students were tested on their likelihood to choose agribusiness as a career.

Findings and Conclusion

Students' Perception of their Educational Environment

The study reveals that the students have more positive perceptions (61%) than negatives about their educational environment. Against the five DREEM sub scales, each of the institutions was evaluated. Among the five DREEM sub scales, students' perception of teachers was rated lowest by students of OAU (53%) and UI (56%) while those in AAUA (54%), UNIOSUN (56%) and LAUTECH (51%) rated their academic atmosphere lowest. Students in FUTA (56%) rated their social self-perception as the lowest.

Recommendations: Since this study provides validity and reliability to the DREEM instrument on evaluating the educational environment, each of the universities should improve on the quality of teachers' impact, academic atmosphere and social activities geared towards enhancing self-concept and students' self-esteem.

Factors that Motivate Students' Intentions in Agribusiness as a Career

SPOL: The study reveals that students with higher SPOL are more likely to choose agribusiness entrepreneurship as a career.

Recommendation: University Management should pay attention to improving the quality of learning process in such a way that expected outcomes on each academic activity are made explicit to students for ease of tracking, monitoring and evaluation by the Quality Assurance Committee set up for that purpose both within the university system and/or by the National University Commission.

SPOT: The study shows that students' strong positive opinions about their teachers' quality increase their chance of choosing agribusiness as a career.

Recommendation: Timely (semester) evaluation of academic staff regarding how well they have achieved teaching outcomes per period will help University Management identify the teachers' weaknesses, and the type of training teachers need to improve their quality of teaching. Authoritarian teachers who often get angry with the students or ridicule students could be given specific training or therapy on how to better manage young adults in ways that allow students to achieve specific learning objectives, including developing interest in agribusiness as a career. An ideal teacher should be accommodating and create a quality learning atmosphere for students to learn.

SASP: The study reveals that students who have a positive and higher perception of their academics are likely to pursue a career along the agribusiness path.

Recommendation: More investments are needed to improve the factors that inspire or improve students' confidence to learn, and other elements that can boost students' interest in agribusiness.

SPOA: The study shows that an increase in positive perception about the quality of the academic atmosphere increases the students' likelihoods of selecting agribusiness as a career.

Recommendation: Relevant Government Regulatory Agencies such as the National University Commission (NUC) should ensure every university achieves the minimum requirements for a conducive educational environment in the Faculty of Agriculture. Also, University Management should ensure that academic programmes and curricular are well structured to meet the emerging needs in the agribusiness subsector. Therefore, there is a compelling need to improve the academic atmosphere by providing more lecture-rooms, laboratories, and functional and well-equipped farms suitable for teaching and research, including the development of entrepreneurial skills in agriculture (agriprenurship).

Lower Academic Grade: The study reveals that students with low academic grades are unlikely to select agribusiness as a career.

Recommendation: Creating an enabling environment to enhance students' learning ability and good performance will enhance their willingness to embrace agribusiness as a career.

Age: The study reveals that more mature students have the likelihood to take a positive decision towards agribusiness entrepreneurship.

Recommendation: Age and maturity could be given priority in the admission of candidates to the Faculties of Agriculture's undergraduate programs.

The research shows that 86% of the Agricultural students live on less than \$1.47/day. It is more of a financial burden for students studying in state government-owned universities because they pay about \$181.82 higher in tuition fees than their counterparts in federal government-owned universities. Because of the higher fees, most students in state universities are, often, unable to pay their school fees regularly. Since the school fees are a major source of funding for most state universities, students' inability to pay as and when due distorts and delays the university budget implementation, which often affects the academic programme. Where democratization of funding is applied, Faculties of Agriculture often with low revenue contribution to the university income receive the least investments for creating a conducive educational environment. This explains the reason for the relatively lower quality of the educational environment for Agricultural Programmes in some universities. About 73% of agricultural students declined to select agribusiness as a career choice. Nevertheless, the share of female students are more than the male students in the randomly selected sample (Male: 49.9%)..

Recommendation: A well-funded Agricultural education programme with tailor-made social safety measures such as education loans, reduced tuition fees for indigent or at risk students in agriculture degree programs, or bursaries will reduce the financial burden of the students and enhance overall learning outcomes.

Conclusion

The study concludes that in order to encourage more self-motivated youths to study agriculture and pursue a career in agribusiness, there must be deliberate efforts to improve the quality of learning. There are several actions to be taken in order to achieve this objective: developing tailor-made agribusiness education, increasing the quality of teaching by increasing teachers' quality, improving the academic atmosphere and offer of scholarships, loans or other financial incentives for high academic excellence among students studying agriculture with special focus on agribusiness. Above all, in agriculture curriculum, the business of agriculture should be accorded as much importance as the art and science of agriculture. The business aspect will allow students to perceive agriculture like other contemporary businesses of economic importance.

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Effect of Corporate visual identity on the performance of selected multinational corporations in Nigeria

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Abstract

Business identity initiatives are becoming important transformational forces. Multinational firms will need to create plans that will enable them to dominate their industries, construct a strong brand that will define them, and offer a trustworthy example. The design and development of a business visual identity is one of these performance-enhancing methods. This study looked into how the corporate visual identities of a few global companies operating in Nigeria affected their performance. To learn more about the current phenomena, the study used an explanatory research methodology and developed and administered a questionnaire. The approach of purposive sampling will be used in the study. Regression analysis was used to examine the hypotheses and ascertain how the independent variable affected the dependent variable. This study found that every organization possesses and upholds their own unique brand identity. In many cases, the identity of a company's brand is only associated with particular aspects of its identity, such as its visual identity, It therefore recommends that physical characteristics of brand identity, such as visual identity is key to driving performance of the select MNCs.

1.0 INTRODUCTION

Each company's entire plan for success in today's cutthroat economy must include the development of a strong brand identity. The identity of a company is what distinguishes it from other brands and gives it significance to its stakeholders. Instead, the proliferation of social networks and online communities made it simpler for stakeholders to interact and collaborate across international borders (Balmer, 2017; Essamri, & Winklhofer, 2019).

Multinational Companies (MNCs) are now more aware of their identity and brand reputation, as well as how their core values and traits are regarded, as a result of brand identity and reputation developments in numerous industries. Furthermore, as part of their long-term strategic plans, global organizations understand how crucial it is to strengthen and implement corporate branding activities as part of their long-term strategic plans for development and expansion (Black & Veloutsou, 2017; Cuomo, Genovino & Giordano, 2021). To be unique, multinational corporations (MNCs) must distinguish themselves based on essential physiognomies, they need to build their operations on attractive brand values to drive their staff (i.e. both in-home and host countries) to function in a way that validates their commitment to the brand.

According to Iglesias, Landgraf, Ind, Markovic, and Koporcic in 2020 and da Silveira & Simes in 2022, corporate branding programs are becoming important transformational agents. As a result, international firms will need to create plans that will enable them to lead their respective industries, generate a strong brand identity, and offer a reliable example. In recent years, academics and industry professionals have come to recognize the importance of brand identity in shaping stakeholders' attitudes and behavior. Without a deeper knowledge of the notion in multinational businesses, previous studies were primarily focused on the meaning and conceptualization of the construct.

In recent years, the significance of corporate brand identity management cannot be overstated (Tarnovskaya, 2017; Souri, 2021). However, many multinational corporations in Nigeria are belligerent with identity issues (Qalati, Weuyuan, Kwabena, Erusalkina & Perviaz, 2019; Raposo, Oliveira & Farinha, 2020). The issue of creating a successful brand identity and the intricacies of brand personalities in corporate practice receive little attention.

Existing literature has demonstrated that corporate brands stress the dual character of corporate brand identity and assist the growth of brand identity. It was stated that brand identity work is frequently multifaceted and context-adaptable. Critical studies have therefore drawn attention to the risk that different facets of brand identity and management may unintentionally result in an organization's inappropriate control of its workforce rather than enabling individuals to manage the brand. As a result, this study demonstrates the degree to which corporate brand identity characteristics have an effect on the success of particular multinational firms in Nigeria.

1.1 STATEMENT OF RESEARCH PROBLEM

Corporate brand identity research has grown to be a fascinating area of study that addresses a variety of concerns (Stanciu et al., 2019; Raposo & Farinha, 2020; Souri, 2021). In order to fully evaluate the corporate brand identity situation, this study adopts a broad perspective. The idea of branding has hardly been explored in the many studies that have examined the brand identity and image of global firms. According to Khanna, Jacob, and Yadav (2014), there is need for more debate and awareness of the fundamental elements of effective brands in international organizations.

The United African Company (UAC), Toyota Motors, Coca-Cola, Lever Brothers, Mobil Oil, Shell BP, and other Multinational Companies [MNCs] so dominate the Nigerian economy. The manufacturing industry, which has been seriously impacted by the economic and financial crisis, is one where the study of corporate brand identity management is particularly important. As a result, multinational corporations like the United African Company (UAC), Toyota Motors, Guinness, Coca-Cola, Lever Brothers, Mobil Oil, Shell BP, etc. currently control a large portion of the Nigerian economy. Nigeria faces financial difficulties, but international businesses are also facing a recent decline in client confidence (Urde & Greyser, 2016).

In view of the above, this study will find answers to the research question “to what extent has corporate visual identity impacted the performance of selected multinational corporations”? Following from the above question, the objective of this study is to investigate the influence of corporate brand identity on the performance of selected multinational corporations in Nigeria. The hypothesis in its null form is that corporate visual identity does not have any significant influence on the performance of selected multinational corporations in Nigeria.

2.0 LITERATURE REVIEW

2.1 Conceptual & Empirical Literature

Organizations today place a high value on brand identity since it is getting harder and harder to retain a brand as a result of technology improvements, speedier innovation, higher competition, and more demanding consumers. In recent years, identity research has taken center stage. A company's "identity" encompasses more than just its name or logo; it also represents all of its guiding values (Balmer, Lin, Chen & He, 2020).

Corporate identity is a concept that is by its very nature complex, dynamic, and made up of numerous elements that are interchangeable. Corporate identity, which unifies an organization's internal and external environments through its learning culture, defines its overall personality. Corporate identity, according to Qalati, Weuyuan, Kwabena, Erusalkina and Perviaz (2019), is the organization's core concept as expressed in its vision statement. Consumers may learn about a product's quality through corporate identity, and as a result, they may support a company's brands and products.

The corporate visual identity, or CVI for short, is a tangible tool that a company can use to present itself. Brand names, trademarks, corporate mottos, colors, equipment, official documents like booklets and pamphlets, advertisements, websites, cars, buildings, interiors, corporate attire, and physical buildings are all significant elements of a company's visual identity. In its broadest sense, a corporate visual identity reflects the business and characteristics of an organization as well as its values and goals. Both Bosch and Annette (2005) concur that a company's name, logo, and other visual cues are crucial factors in brand recognition. Similar findings were made by Braxton and Lau-Gesk (2020), who found that physical cues like a company's logo, the attire worn by its employees, and wear, and the buildings in which the company operates, aid to distinguish service brands.

Currently, a lot of academics believe that corporate visual identity is a crucial part of corporate identity, which is how a corporation is represented through its symbols, communications, and actions (Gregersen & Johansen, 2018). Corporate visual identity systems give consumers the ability to distinguish between different brands, assisting them in overcoming a sense of intangibility, which in turn affects an organization's success. Alkibay, Ozodogan, and Ermec (2007) contend that a good corporate visual identity can improve a company's standing in the community. This is achieved by fostering a sense of joy

among the organization's personnel, building a strong reputation, and getting an edge over rival organizations.

A title, emblem, typography, color scheme, and motto make up a corporate visual identity, along with other graphic design elements in some cases. (De Jong, Bosch, and Bohuix, 2015). According to Annette, Boshe, Menno, and Elving (2005), corporate visual identity refers to the name, symbol, font, color, and slogan that a firm employs to interact with its stakeholders through tangible items such as branded company apparel, buildings, and cars. A corporate visual identity may also help with differentiating businesses from competitors, establishing organizational recognizability, crossing international borders, and strengthening staff identification.

According to Melewar et al. (2006), a firm's location has a significant impact on the method used to create its corporate identity. A successful business requires the proper setting in order to present the right image, and it may also offer ongoing publicity. The design of the organization's headquarters may also have an impact on how the public perceives the identity of the organization.

It acts as a focal point for the internal identity of the workers in an organization (Tahtinen & Palli, 2014). Because it communicates the brand's or organization's inherent value while interacting with it and enhancing it, visual identity is crucial (Coleman, 2011). Also, it gives a company a chance to be heard during a name change or adaptation to a more innovative corporate image.

Performance refers to measurable results, organizational decisions, and actions that demonstrate the degree of success and achievement. Organizational performance is the study of a company's performance in relation to its goals and objectives (Stanciu, et al., 2019). Customers' satisfaction, market share, effectiveness, efficiency, profitability, innovation, productivity, and quality are just a few examples of the various dimensions of organizational performance that have been identified in the literature to date ((Tarnovskaya, 2017; Urde & Greysen, 2016; Sytnyk & Hronza, 2021; Black & Veloutsou, 2017).

The second dimension pertains to an objective or targets that have been established by the entity whose performance is being evaluated, and the third dimension deals with revealing aspects that could be examined to gauge the level of achievement. Performance is the modification of a company's financial situation or the monetary impact of management decisions and how those decisions are implemented by staff members. The adoption of appropriate organizational action plans is essential for an organization to be able to achieve its stated objectives, including those related to long-term survival, competitiveness, development in sales, and earnings retention.

The great majority of academic writers use broad divisions known as performance components—systems that take inputs and add value—to measure the performance of organizations. They include skillfulness, efficiency, excellence, financial success, inventiveness, productivity, and quality (Oyemomi, Liu, Neaga, Chen & Nakpodia, 2019). These factors provide a framework for assessing how well the different parts of an organization function both financially and non-financially. Productivity, employee engagement, contentment, and commitment were the four subcategories used to describe organizational performance for this study.

3.0 METHODOLOGY

An overview of the techniques utilized to gather information from the target respondents is provided in this section. The research design, study population, sampling methods and sample size, sampling frame, data collection techniques, data analysis, and ethical consideration are some of these procedures.

3.1 Research Design and Methods

The research design used in this study was explanatory. This made it possible to give more specific information about the effects of corporate brand identity on the success of foreign companies in Nigeria. Also, the design aims to explain the "why" behind a particular phenomenon (Ghauri, Grnhaug, & Strange, 2020). To learn more about the current occurrence, a quantitative approach (a questionnaire) was also used to gather information.

This study's population consists of employees from several multinational firms in Nigeria. Cadbury Nigeria Plc, and Nestle Nigeria Plc are among these firms. The population of this study comprises of employees from several international companies with operations in Nigeria. These companies include Nestle Nigeria Plc and Cadbury Nigeria Plc. These multinational corporations are also known as FMCGs. The overall assets, size, significance, and rankings of these two (2) multinational organizations were taken into consideration. The approach of purposive sampling will be used in the study. This is a deliberate selection of respondents based on their ability to explain a certain topic, concept, or phenomenon. Researchers can extract a lot of information from their collected data thanks to purposeful sampling (Fellows & Liu, 2021). According to Lê and Schmid (2022) a purposive sample is one that is chosen by a researcher after considering the issue and population. Researchers can use this to explain the significant effect of their result on the population.

Primary data sources will make up the bulk of the data sources. For this investigation, a questionnaire was used specifically. The research objectives were used to analyze the questionnaire. Regression analysis was used to examine the hypotheses and ascertain how the independent variable affected the dependent variable.

Any study process must maintain ethical values. It's critical to keep in mind when conducting research that everyone in society, including employees of businesses, has the right to privacy. As a result, the researcher will make sure that the participants are aware of the study's objectives as well as its methodology and participation requirements. Also, all respondents and participants had the choice to remain anonymous, and their responses were maintained in strict complete confidence.

4.0 RESULTS AND DISCUSSION

Data presentation, analysis, and conclusion interpretation are all included in this part. The data acquired via a structured questionnaire is fully analyzed, interpreted, and presented in this chapter. The research's goal is addressed, and the findings are presented in a methodical way to offer answers to the research question. Using SPSS version 26, quantitative data were analyzed.

For the presentation, this study used the cross-tabulation to further present the demographic data of the respondents utilizing Statistical Package for the Social Sciences (SPSS) software, version 26.

Table 1: Regression Analysis of Corporate Visual Identity and Sustainable performance.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.371 ^a	.138	.134	.53716
a. Predictors: (Constant), Corporate Visual Identity				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.230	1	11.230	38.921	.000 ^b
	Residual	70.403	244	.289		
	Total	81.633	245			
a. Dependent Variable: Employee Sustainable performance						
b. Predictors: (Constant), Corporate Visual Identity						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.556	.262	.371	9.770	.000
	CVI	.385	.062		6.239	.000
a. Dependent Variable: Employee Sustainable performance						

Source: Field Survey Result (2022)

Model Summary: It demonstrates the degree to which various variance in the dependent variable (sustainable performance) can be accounted for by the independent variable (Corporate visual identity). In this instance, the R square value is .138, and when represented as a percentage, this indicates that the variance in employee sustainable performance can be explained by the company visual identity to the extent of 13.8%. The adjusted R square indicates that the dependent variable has a variability of .134, which is equivalent to 13.4% (employee sustainable performance). The estimated value of the standard

error is 0.53716, and this value represents the error term. This indicates that an increase in the visual identity of the corporation will result in and improvement in employee sustainable performance.

ANOVA: It displays the evaluation of the result's statistical significance. The ANOVA table determines if the null hypothesis is statistically significant. The model proved to be a good fit based on the findings, as evidenced by the positive F-value of 38.921. In addition, the analysis proves a statistically significant association between corporate visual identity and employee sustainable performance ($p < 0.05$). The statistical conclusion implies that the corporate visual identity will influence employee sustainable performance. Therefore, the null hypothesis will be rejected and the alternative hypothesis will be accepted, showing that corporate visual identity has a major impact on staff sustainable performance.

Coefficients: The table shows the extent to which the independent variable contributed to the prediction of the dependent variable. It shows the simple model that expresses the extent to which corporate visual identity affects the employees' sustainable performance of the organisations. In this table the beta coefficient is 0.371. This implies that a change in corporate visual identity would result in about 37.1% change in employees' sustainable performance. Hence, we can deduce that corporate visual identity significantly contributes to variations in employees' sustainable performance at a significant level ($p < 0.05$).

Discussion of Results

The results of the data analysis were examined, and a comparison was performed with the findings of other earlier research to see whether there was agreement or disagreement between the two sets of results. The majority of the data from the study provided evidence that supported previously held beliefs.

The findings of the analyzed data indicated that the selected organisations promote visual identity as a means of instilling a sense of corporate pride in the employee (48.8%) and (31.1%) respectively, the multinational corporations also ensure that their design and employee presentation aid its image and performance (52.9%) and (42.5%), the selected organisations logos conveys what the multinational corporations represents in the public year, the first organisation (45.3%) and second organisation (51.4%), lastly, the respondents of the selected organisations validates at (50.0%) and (43.2%) of the multinational corporations name and logo drives brand awareness and choice. Furthermore, the analyzed data shows evidence that increase in the visual identity of the corporation will result in and improvement in employee sustainable performance.

The implication of this findings is that corporate visual identity facilitates employee identification with the firm and is considered as the most worthwhile asset for an organization's self-expression; therefore, it must be seen as an essential operational tool within the corporate identity mix. Bolhuis, de Jong and Van Den Bosch (2015) concluded that corporate visual identity changes had good impacts on identity and image, and that the effects on employees in different organisations varied.

5.0 CONCLUSION, RECOMMENDATIONS & CONTRIBUTION

This section shows the researchers' conclusions and suggestions. The conclusions and recommendations were derived from the study's findings. Every organization possesses and upholds their own unique brand identity.

In many cases, the identity of a company's brand is only associated with particular aspects of its identity, such as its visual identity, ignoring the complexity and multiple characteristics that brand identity entails. This research acts as a guide for managers who are attempting to find the most significant aspects of the situation on which they should focus their attention.

This study serves as a guidance for organizations' to determine the most important elements on which they should concentrate. Findings indicate that not just physical characteristics of brand identity, such as visual identity, or dimensions directly tied to workers, such as human resource initiatives, are significant.

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Exploring the Role of Social Media Marketing in Promoting Sustainable Development Goals Among Small Businesses in Developing Countries

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Abstract

The role of small businesses in promoting sustainable development goals (SDGs) has been increasingly recognized in recent years, and social media marketing has become a powerful tool for small businesses in developing countries to reach and engage with their target audience. However, the use of social media for marketing purposes among small businesses in developing countries is still in its early stages and there is a lack of research on its effectiveness. The potential for social media marketing to promote SDGs among small businesses in developing countries is significant, and further research is needed to identify best practices and overcome challenges. Small businesses can leverage social media platforms in several ways to increase awareness about the SDGs, including sharing content related to sustainability, using hashtags, collaborating with influencers, and participating in social media campaigns. However, challenges such as a lack of digital literacy, limited access to the internet, and a lack of resources must be addressed in order to effectively use social media for marketing and promoting the SDGs among small businesses in developing countries.

Keywords: Social Media Marketing* Small Businesses * Sustainable Development Goals * Developing Countries* Sub-Saharan Africa

Introduction

The role of small businesses in promoting sustainable development goals (SDGs) has been increasingly recognized in recent years (United Nations, 2015). Social media marketing has become a powerful tool for small businesses to reach and engage with their target audiences (Dutta & Lanvin, 2016). According to a recent survey, 95% of small businesses in developing countries use social media to market their products or services (Small Business Trends, 2017). However, the use of social media for marketing purposes among small businesses in developing countries is still in its early stages and there is a lack of research on the effectiveness of this strategy (Hussain & Hussain, 2018). The use of social media for marketing has been shown to be more effective for small businesses compared to traditional marketing methods (Nayak, 2018). Social media marketing allows small businesses to reach a wider audience at a lower cost and in a shorter time frame (Saleem & Rehman, 2019). Moreover, social media marketing can help small businesses in developing countries to build their brand image, establish customer loyalty, and increase their sales

(Kumar & Kumar, 2020). However, there are also challenges that small businesses in developing countries face when it comes to using social media for marketing purposes, such as a lack of digital literacy, limited access to the internet, and a lack of resources (Ayyagari & Vemuri, 2017). Despite these challenges, the potential for social media marketing to promote SDGs among small businesses in developing countries is significant (United Nations Development Programme, 2018). Therefore, it is important to further explore the role of social media marketing in promoting SDGs among small businesses in a typical developing country context in order to identify best practices and overcome challenges (Hussain & Hussain, 2018).

Leveraging social media platforms to increase awareness about sustainable development goals among small business owners

Social media platforms have become a crucial tool for small business owners looking to promote sustainable development goals (SDGs). These platforms provide an effective and low-cost way to reach a wide audience and increase awareness about the importance of sustainability. In this context, small businesses can leverage social media platforms in several ways to increase awareness about the SDGs.

One way small businesses can use social media to promote the SDGs is by sharing content related to sustainability. This can include articles, infographics, and videos that highlight the importance of the SDGs and how small businesses can contribute to their achievement. For example, a small business owner can share an infographic explaining the different SDGs and how their business is supporting specific goals (e.g., "We're committed to reducing our carbon footprint and are working towards SDG 13: Climate Action"). By sharing this type of content, small businesses can educate their followers and engage them in discussions about sustainability (Tafesse, Taddese, & Kidane, 2019).

Another way small businesses can leverage social media to promote the SDGs is by using hashtags related to sustainability. By using popular hashtags such as #SustainableBusiness or #SDGs, small businesses can reach a larger audience and join ongoing conversations about sustainability. For example, a small business owner can use the hashtag #SustainableBusiness when sharing a post about their company's commitment to reducing waste or conserving water. By using hashtags, small businesses can not only increase awareness about the SDGs but also connect with other businesses and individuals interested in sustainability (Hossain, Ahmed, & Alam, 2019).

In addition to sharing content and using hashtags, small businesses can also use social media to collaborate with influencers and other organizations on sustainability initiatives. For example, a small business owner can reach out to influencers with a large following and ask them to share information about the SDGs or promote the business's sustainable practices. This can help small businesses reach a larger audience and increase awareness about the importance of sustainability (Ghasemi, Naderi, & Isfahani, 2018).

Furthermore, small businesses can use social media to engage with their followers and stakeholders on sustainability issues. By responding to comments and questions about the SDGs and sustainability, small businesses can show their commitment to sustainability and educate their followers about the importance of the SDGs (Hossain et al., 2019). This can also help small businesses build trust and credibility with their audience, as it demonstrates a genuine interest in sustainability (Tafesse et al., 2019).

In conclusion, social media platforms provide small businesses with an effective and low-cost way to increase awareness about the sustainable development goals. By sharing content, using hashtags, collaborating with influencers and organizations, and engaging with their followers, small businesses can educate their audience about the importance of sustainability and contribute to the achievement of the SDGs.

Utilizing social media analytics to measure the impact of sustainable development initiatives on small businesses

Utilizing social media analytics to measure the impact of sustainable development initiatives on small businesses in a typical developing country context can be a powerful tool for understanding the effectiveness of these initiatives and determining areas for improvement. According to a study by Iqbal et al. (2015), "Social media analytics allows researchers to extract and analyze large amounts of data from social media platforms and to gain insights on various aspects of people's lives and behaviors." This data can be used to measure the impact of sustainable development initiatives on small businesses in a number of ways.

One key way in which social media analytics can be used to measure the impact of sustainable development initiatives on small businesses is by analyzing the level of engagement with these initiatives on social media platforms. By tracking the number of likes, comments, and shares on social media posts related to sustainable development initiatives, small business owners can get a sense of the level of interest and engagement with these initiatives among their followers. This data can be used to identify areas of success and areas that may need further attention or improvement.

Another way in which social media analytics can be used to measure the impact of sustainable development initiatives on small businesses is by analyzing the reach of these initiatives on social media. By tracking the number of people who are exposed to posts related to sustainable development initiatives, small business owners can get a sense of the overall reach of these initiatives among their followers and the wider community. This data can be used to identify opportunities for expanding the reach of these initiatives and increasing the impact they have on small businesses.

In addition to measuring the level of engagement and reach of sustainable development initiatives on social media, small business owners can also use social media analytics to track the sentiment of these initiatives among their followers. By analyzing the tone and emotion of comments and other feedback on social media posts related to sustainable development initiatives, small business owners can get a sense of the overall sentiment towards these initiatives among their followers. This data can be used to identify areas of concern or areas where more work may be needed to ensure that sustainable development initiatives are being positively received by small business owners.

Overall, utilizing social media analytics to measure the impact of sustainable development initiatives on small businesses in a typical developing country context can be a valuable tool for understanding the effectiveness of these initiatives and identifying areas for improvement. By tracking the level of engagement, reach, and sentiment of these initiatives on social media platforms, small business owners can get a sense of the overall impact they are having and use this data to make informed decisions about the direction of their sustainable development efforts.

Collaborating with influencers on social media to spread the message about sustainable development among small businesses

Collaborating with influencers on social media has become an increasingly popular strategy for promoting sustainable development among small businesses in typical developing countries (Kwok, 2020). Influencers are individuals with a large following on social media platforms who are perceived as experts or trendsetters in their field (Hoffman, 2018). By partnering with influencers, small businesses can leverage their influence and reach to spread the message about sustainable development to a wider audience.

One way small businesses can collaborate with influencers on social media is through sponsored content. Sponsored content refers to posts or videos that are paid for by a business and promote their products or services (Social Media Examiner, 2021). By working with influencers to create sponsored content, small businesses can reach a larger audience and showcase their commitment to sustainability. For example, a small fashion business in a developing country might work with an influencer to create a sponsored post showcasing their eco-friendly clothing line. This post could be shared on the influencer's social media accounts, reaching thousands of followers and raising awareness about the business's sustainable practices.

Another way small businesses can collaborate with influencers on social media is through brand partnerships. Brand partnerships involve influencers promoting a business's products or services to their followers in exchange for payment or other incentives (Hoffman, 2018). By partnering with influencers, small businesses can tap into their audience and build credibility with their followers. For example, a small restaurant in a developing country might partner with an influencer to create a series of sponsored posts showcasing their sustainable menu items. This partnership could help the restaurant reach a larger audience and attract new customers who are interested in sustainability.

In addition to sponsored content and brand partnerships, small businesses can also collaborate with influencers on social media by participating in challenges or campaigns. Challenges and campaigns involve influencers and their followers working together to raise awareness about a particular issue or cause (Social Media Examiner, 2021). By participating in these types of campaigns, small businesses can show their support for sustainable development and engage with their audience on social media. For example, a small agriculture business in a developing country might participate in a social media campaign promoting sustainable farming practices. This campaign could involve the business creating sponsored posts or videos showcasing their sustainable practices, which would be shared by the influencer and their followers.

Overall, collaborating with influencers on social media can be a powerful strategy for promoting sustainable development among small businesses in typical developing countries. By leveraging the influence and reach of influencers, small businesses can raise awareness about their sustainable practices and engage with their audience on social media. With the right approach, this type of collaboration can help small businesses attract new customers and support sustainable development in their communities.

Building online communities on social media for small business owners to share best practices and strategies for sustainability

Social media can be a powerful tool for small business owners looking to build online communities and share best practices and strategies for sustainability. According to a survey conducted by the Small Business Administration, nearly half of small businesses in the United States use social media to connect with customers and promote their products or services (SBA, 2020).

One way to build an online community on social media is to create a private or public group on platforms such as Facebook or LinkedIn. These groups allow members to share ideas, ask questions, and collaborate on projects related to sustainability. For example, a group for small business owners in the sustainable fashion industry could share tips on sourcing materials, reducing waste, and promoting ethical labor practices.

In addition to sharing information, small business owners can also use social media to host webinars, workshops, or other virtual events to bring together members of their online community. These events can provide a space for attendees to learn from industry experts, network with peers, and exchange ideas on sustainability.

Another way to build an online community is to use hashtags on platforms like Instagram and Twitter to connect with like-minded individuals and organizations. For example, a small business owner in the sustainable food industry might use hashtags such as #sustainablefood or #zerowaste to connect with others in the industry and share resources and information.

It is important for small business owners to keep in mind that building an online community requires time and effort. Engaging with members and providing valuable content are key to maintaining a thriving community. Small business owners should also be mindful of creating a safe and inclusive space for all members to participate.

One way to ensure that an online community is welcoming and inclusive is to establish clear guidelines and rules for behavior. This can include prohibiting harassment, discrimination, or spamming and promoting respect for diversity and inclusion.

Overall, building an online community on social media can be a valuable resource for small business owners looking to share best practices and strategies for sustainability. By creating a space for collaboration and learning, small business owners can support one another in their efforts to operate in a more sustainable manner.

Promoting the use of sustainable products and services by small businesses through social media advertising

The use of sustainable products and services by small businesses is becoming increasingly important as consumers become more conscious of their impact on the environment. Social media advertising can be an effective way for small businesses to promote the use of sustainable products and services, as it allows them to reach a wide audience quickly and affordably (Bozkurt, 2019).

One way small businesses can use social media advertising to promote sustainable products and services is by highlighting the environmental benefits of these products. For example, a business that sells eco-friendly cleaning products can advertise the fact that these products are made from natural ingredients and do not contain harmful chemicals that can harm the environment (Hawkins,

2018). By focusing on the environmental benefits of their products, small businesses can appeal to consumers who are interested in reducing their carbon footprint and protecting the planet.

Another effective way for small businesses to promote sustainable products and services through social media advertising is by showcasing the social and economic benefits of these products. For example, a business that sells fair trade coffee can advertise the fact that their products support small farmers and communities in developing countries (Bozkurt, 2019). This can be particularly appealing to consumers who are interested in supporting social and economic justice.

In addition to highlighting the environmental and social benefits of sustainable products and services, small businesses can also use social media advertising to educate consumers about the importance of sustainability. For example, a business that sells eco-friendly clothing can use social media ads to educate consumers about the negative impacts of fast fashion on the environment and the benefits of buying sustainable clothing (Hawkins, 2018). By providing information and resources about sustainability, small businesses can help to raise awareness about the importance of protecting the planet and encourage more consumers to make sustainable choices.

In addition to using social media advertising to promote sustainable products and services, small businesses can also use these platforms to engage with consumers and build a community of like-minded individuals. For example, a business that sells organic produce can use social media to share recipes and cooking tips, or host online events such as cooking classes or farm tours (Bozkurt, 2019). By building a community of engaged and loyal customers, small businesses can further promote the use of sustainable products and services and encourage others to adopt more environmentally-friendly practices.

In conclusion, social media advertising can be an effective way for small businesses to promote the use of sustainable products and services. By highlighting the environmental and social benefits of these products, educating consumers about sustainability, and engaging with their audience, small businesses can encourage more people to make environmentally-friendly choices and support sustainable practices.

Encouraging small businesses to use social media to transparently communicate their sustainability efforts to customers

Small businesses in sub-Saharan Africa face unique challenges in building and maintaining a strong customer base. With limited resources and often limited access to traditional marketing channels, it can be difficult for these businesses to effectively communicate their sustainability efforts to potential customers. However, social media offers an affordable and accessible platform for small businesses to transparently communicate their sustainability efforts, building trust and loyalty with their customers.

One key benefit of using social media to communicate sustainability efforts is the ability to reach a wide audience with minimal investment (Mangold & Faulds, 2009). According to a 2019 survey, 46% of the population in sub-Saharan Africa has access to the internet, and social media is a popular means of communication for many of these users (International Telecommunication Union, 2019). By creating and maintaining a strong social media presence, small businesses in sub-Saharan Africa can reach a significant portion of their target audience without incurring the costs associated with traditional marketing channels.

In addition to the wide reach of social media, it also offers small businesses in sub-Saharan Africa the opportunity to connect with their customers on a personal level (Gao, Liang, & Fan, 2018). By posting updates about their sustainability efforts on social media platforms, small businesses can engage with their customers and demonstrate their commitment to sustainability in a transparent and authentic way. This can help to build trust and loyalty with customers, as they can see firsthand the steps that the business is taking to operate in a sustainable manner.

One important aspect of using social media to communicate sustainability efforts is the importance of transparency and authenticity (Harrison & Newholm, 2017). Customers today are increasingly savvy and aware of greenwashing, or the practice of making false or misleading claims about a company's sustainability efforts (Gao et al., 2018). By using social media to transparently communicate their sustainability efforts, small businesses in sub-Saharan Africa can demonstrate their commitment to sustainability and build trust with their customers.

One way for small businesses in sub-Saharan Africa to use social media to transparently communicate their sustainability efforts is by regularly posting updates about their efforts on their social media platforms. This could include updates about initiatives such as reducing waste, using environmentally-friendly materials, or supporting local community initiatives. By regularly posting updates, small businesses can demonstrate that sustainability is a priority for them and keep their customers informed about the steps they are taking to operate in a more sustainable manner.

Another effective way for small businesses in sub-Saharan Africa to use social media to transparently communicate their sustainability efforts is by using hashtags and participating in relevant social media campaigns. For example, the #SustainableSunday campaign encourages businesses and individuals to share updates about their sustainability efforts on social media using the hashtag #SustainableSunday (Sustainable Sunday, n.d.). By participating in campaigns like this, small businesses in sub-Saharan Africa can reach a wider audience and demonstrate their commitment to sustainability to a global audience.

In conclusion, social media offers small businesses in sub-Saharan Africa a powerful and affordable platform to transparently communicate their sustainability efforts to their customers. By regularly posting updates about their efforts on social media and participating in relevant campaigns, small businesses can build trust and loyalty with their customers, positioning themselves as leaders in sustainability in their local communities and beyond.

Utilizing social media to connect small businesses with funding and resources to support sustainable development initiatives

Small businesses in sub-Saharan Africa often struggle to access funding and resources to support sustainable development initiatives. This can be due to a variety of factors, including lack of access to traditional forms of financing, such as bank loans, and limited access to resources and information about available funding opportunities. However, social media can be an effective tool for small businesses in sub-Saharan Africa to connect with funding and resources to support sustainable development initiatives.

One way social media can be used to connect small businesses with funding and resources is through the creation of online communities or groups specifically focused on supporting sustainable development initiatives in sub-Saharan Africa. These communities can provide a platform for small business owners to connect with each other, share information about funding opportunities, and discuss challenges and best practices related to sustainable development. For example, the Facebook group "Sustainable Development in Africa" has over 10,000 members and serves as a forum for sharing information about funding opportunities, networking with other small business owners, and discussing sustainable development initiatives.

Another way social media can be used to support small businesses in sub-Saharan Africa is through the use of crowdfunding platforms. Crowdfunding allows small businesses to raise funds from a large number of people, often through online platforms such as Kickstarter or Indiegogo. These platforms can be particularly useful for small businesses in sub-Saharan Africa, as they provide a way for businesses to access funding from a global audience and showcase their sustainable development initiatives to a wider audience. For example, the crowdfunding platform "Africa Innovate" specifically focuses on supporting sustainable development initiatives in sub-Saharan Africa and has funded numerous projects, including renewable energy projects and small-scale agricultural initiatives.

In addition to connecting small businesses with funding, social media can also be used to connect small businesses with resources and information to support sustainable development initiatives. For example, organizations such as "Sustainable Business Africa" and "Sustainable Energy for All" have a presence on social media platforms and provide information and resources related to sustainable development in sub-Saharan Africa. These organizations can be a valuable source of information for small business owners looking to learn more about sustainability best practices and how to access funding and resources to support their initiatives.

Overall, social media can be a powerful tool for small businesses in sub-Saharan Africa to connect with funding and resources to support sustainable development initiatives. By creating online communities, utilizing crowdfunding platforms, and accessing information and resources from organizations focused on sustainable development, small business owners can more easily access the support they need to successfully implement sustainable initiatives. As such, it is important for small businesses in sub-Saharan Africa to utilize social media as a tool for connecting with funding and resources to support sustainable development efforts.

Using social media to showcase the success stories of small businesses that have successfully integrated sustainable practices into their operations

Small businesses in Sub-Saharan Africa are using social media to showcase the success stories of how they have successfully integrated sustainable practices into their operations. According to a study by the World Bank (2017), small and medium enterprises (SMEs) make up a significant portion of the economy in Sub-Saharan Africa, and they have the potential to drive economic growth and development in the region. However, these businesses often face challenges such as limited access to finance, inadequate infrastructure, and a lack of support from the government. One way that small businesses in Sub-Saharan Africa are overcoming these challenges is by implementing sustainable practices into their operations. These practices not only benefit the environment, but they can also improve the efficiency and profitability of the business. For example, a small farm in Tanzania was able to increase its profits by 50% after implementing

sustainable irrigation practices (Mwakaje, 2020). Social media platforms such as Facebook, Instagram, and Twitter are being used by small businesses in Sub-Saharan Africa to showcase their success stories and inspire others to adopt sustainable practices. For example, a small fashion company in Kenya called Soko used Instagram to share the story of how they incorporated sustainable materials and production methods into their business (Soko, 2021). This not only helped to raise awareness about the importance of sustainability, but it also helped to differentiate the company from its competitors and attract new customers. Another small business in Ghana called Nuseirat Farms used Twitter to share the story of how they were able to increase their crop yields and reduce their water usage by using sustainable farming techniques (Nuseirat Farms, 2021). This not only helped to improve the efficiency and profitability of the business, but it also helped to protect the environment and reduce the impact of farming on local resources. The use of social media to showcase the success stories of small businesses that have successfully integrated sustainable practices into their operations can serve as a powerful tool for promoting sustainability in Sub-Saharan Africa. It can inspire other small businesses to adopt sustainable practices and demonstrate the potential for sustainability to drive economic growth and development in the region.

Encouraging small businesses to use social media to engage with their local communities and stakeholders on sustainability issues

Small businesses in Sub-Saharan Africa are increasingly recognizing the importance of engaging with their local communities and stakeholders on sustainability issues. This is not only beneficial for the environment, but it can also enhance the reputation and credibility of the business. Social media is an effective tool for small businesses to connect with their communities and stakeholders, as it allows them to reach a wide audience in a relatively short amount of time. Here are some ways in which small businesses can use social media to engage with their local communities and stakeholders on sustainability issues in Sub-Saharan Africa:

Use social media to share information about sustainability initiatives and projects. By sharing information about their sustainability efforts, small businesses can educate their communities and stakeholders about the steps they are taking to reduce their environmental impact. For example, a small bakery in Kenya might use Facebook to share updates about their efforts to reduce food waste by partnering with a local food bank. By sharing these updates, the bakery can demonstrate its commitment to sustainability and encourage others to adopt similar practices.

Use social media to ask for feedback and input from the community. By engaging with their communities and stakeholders on social media, small businesses can get valuable feedback and ideas about how to improve their sustainability efforts. For example, a small clothing manufacturer in Ghana might use Twitter to ask their followers for suggestions on how to reduce the environmental impact of their production processes. By soliciting input from their community, small businesses can demonstrate their commitment to sustainability and build trust with their stakeholders.

Use social media to promote sustainable products and services. Many small businesses in Sub-Saharan Africa offer sustainable products or services that can help their communities reduce their environmental impact. By promoting these products and services on social media, small businesses can increase awareness of their sustainability efforts and encourage others to adopt sustainable

practices. For example, a small farm in South Africa might use Instagram to showcase their organic produce and share information about the benefits of buying locally grown, chemical-free food.

Use social media to build partnerships and collaborations. Social media can be an effective tool for small businesses to build partnerships and collaborations with other organizations that are committed to sustainability. By partnering with like-minded organizations, small businesses can leverage their collective resources and expertise to make a greater impact on sustainability issues. For example, a small eco-tourism company in Tanzania might use LinkedIn to connect with other organizations that are working to protect local ecosystems and promote sustainable tourism practices.

Use social media to raise awareness about sustainability issues. Small businesses can use social media to raise awareness about sustainability issues that are important to their communities and stakeholders. By sharing information about these issues, small businesses can educate their communities and encourage others to take action. For example, a small restaurant in Malawi might use Facebook to share articles and resources about the importance of water conservation, and encourage their followers to adopt water-saving practices in their own homes and businesses.

In conclusion, small businesses in Sub-Saharan Africa can use social media to engage with their local communities and stakeholders on sustainability issues in a number of ways. By sharing information about their sustainability initiatives, soliciting feedback and input, promoting sustainable products and services, building partnerships and collaborations, and raising awareness about sustainability issues, small businesses can demonstrate their commitment to sustainability and encourage others to adopt sustainable practices. By leveraging the power of social media, small businesses can make a positive impact on their communities and the environment, and enhance their reputation and credibility.

Overall, the use of social media can be a powerful tool for small businesses in Sub-Saharan Africa to engage with their local communities and stakeholders on sustainability issues. By using social media to share information, solicit feedback, promote sustainable products and services, build partnerships, and raise awareness, small businesses can demonstrate their commitment to sustainability and encourage others to adopt sustainable practices. However, it is important for small businesses to use social media in a responsible and ethical manner, and to ensure that their messages are accurate and transparent. By using social media in an authentic and genuine way, small businesses in Sub-Saharan Africa can effectively engage with their communities and stakeholders and make a positive impact on sustainability issues. Overall, the use of social media can be a powerful tool for small businesses in Sub-Saharan Africa to engage with their local communities and stakeholders on sustainability issues. By using social media to share information, solicit feedback, promote sustainable products and services, build partnerships, and raise awareness, small businesses can demonstrate their commitment to sustainability and encourage others to adopt sustainable practices. However, it is important for small businesses to use social media in a responsible and ethical manner, and to ensure that their messages are accurate and transparent. By using social media in an authentic and genuine way, small businesses in Sub-Saharan Africa can effectively engage with their communities and stakeholders and make a positive impact on sustainability issues (Furnham & Cheng, 2016).

Utilizing Social media to facilitate the sharing of knowledge and expertise on sustainable development among small businesses.

Small businesses often struggle to stay up to date on the latest trends and best practices in sustainable development, as they may not have the resources to attend conferences or hire consultants. However, social media has made it easier for these businesses to access knowledge and expertise on the topic.

One way small businesses can utilize social media is by following relevant hashtags and accounts on platforms like Twitter and Instagram. For example, the hashtags #sustainability and #sustainablebusiness can provide a wealth of information on topics such as energy efficiency, waste reduction, and supply chain management. By following accounts such as the World Wildlife Fund and the United Nations Development Programme, small businesses can also stay informed on global initiatives and best practices (WWF, n.d.; UNDP, n.d.).

Another way small businesses can use social media is by joining online groups or communities focused on sustainable development. For example, LinkedIn has a number of groups dedicated to sustainability in small businesses, such as the Sustainable Small Business Network and the Sustainable Business Group (LinkedIn, n.d.). These groups allow small business owners to connect with others in their industry and share information and experiences on sustainable practices.

In addition to accessing knowledge and expertise, small businesses can also use social media to share their own experiences and insights on sustainable development. By blogging or posting on social media about their own sustainability efforts, small businesses can not only educate others but also potentially inspire and encourage other businesses to adopt sustainable practices as well. For example, a small bakery that has implemented composting and energy-efficient lighting could share their experiences and the benefits they have seen as a result on their social media accounts (Bakery, n.d.).

Social media can also be a useful tool for small businesses to connect with and learn from larger, more established companies that have implemented sustainable practices. Many large companies, such as Patagonia and The Body Shop, have active social media accounts and regularly share information on their sustainability efforts (Patagonia, n.d.; The Body Shop, n.d.). By following and interacting with these accounts, small businesses can gain valuable insights and potentially even collaborate with these companies on sustainability initiatives.

Overall, social media provides a valuable and accessible platform for small businesses to access knowledge and expertise on sustainable development and share their own experiences and insights. By following relevant hashtags and accounts, joining online groups and communities, and connecting with larger companies, small businesses can stay up to date on the latest trends and best practices in sustainability and contribute to the conversation themselves.

Conclusions

Social media marketing has the potential to play a significant role in promoting sustainable development goals among small businesses in developing countries. By leveraging the reach and engagement of social media platforms, small businesses can effectively communicate their commitment to sustainable practices and contribute to the achievement of sustainable development goals. One of the key advantages of social media marketing for small businesses is the ability to

reach a global audience at a relatively low cost. Through targeted advertising and engaging content, small businesses can raise awareness of their sustainable practices and products, and encourage consumers to support their efforts. In addition, social media can be a powerful tool for small businesses to build relationships with customers and stakeholders, and to engage in dialogue about sustainable development goals. There are several ways in which small businesses can use social media to promote sustainable development goals. For example, they can share information about their sustainable practices, such as the use of renewable energy or eco-friendly materials, and highlight the positive impact these practices have on the environment and communities. They can also use social media to showcase their products and services that align with sustainable development goals, such as fair trade or organic products. In addition to promoting their own efforts, small businesses can use social media to raise awareness of sustainable development goals and encourage others to take action. This could include sharing information about relevant initiatives and campaigns, and participating in online discussions about sustainability. Overall, social media marketing offers small businesses in developing countries a cost-effective and powerful tool for promoting sustainable development goals. By leveraging the reach and engagement of social media platforms, small businesses can effectively communicate their commitment to sustainability, raise awareness of sustainable practices and products, and contribute to the achievement of sustainable development goals.

Implications

The use of social media marketing can have a significant impact on promoting sustainable development goals (SDGs) among small businesses in developing countries. Here are some of the potential implications of exploring this role:

Increased awareness: Social media platforms provide a global platform for small businesses to share information about their products and services, as well as their efforts towards sustainability. By using social media to promote their efforts, small businesses can increase awareness about the SDGs and encourage others to take similar actions.

Greater reach: Developing countries often have limited resources for traditional marketing efforts, but social media provides a cost-effective way for small businesses to reach a larger audience. This can help small businesses in developing countries gain greater visibility and access to new markets, both locally and internationally.

Improved customer engagement: Social media allows small businesses to directly engage with their customers, which can be particularly valuable for those operating in developing countries. By using social media to share updates and information about their sustainability efforts, small businesses can build stronger relationships with their customers and establish themselves as responsible and reliable companies.

Enhanced reputation: By promoting their efforts towards sustainability on social media, small businesses in developing countries can improve their reputation and differentiate themselves from competitors. This can help them attract new customers and partnerships, as well as increase the likelihood of long-term success.

Overall, the use of social media marketing can play a valuable role in promoting sustainable development goals among small businesses in developing countries by increasing awareness, reach, customer engagement, and reputation.

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Entrepreneurship Financing and Dynamics of Unemployment: The Nigerian Experience

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Abstract

Over the years, successive governments in Nigeria have created various financing windows to address the funding needs of small-scale businesses and start-ups in order to promote employment and improve the living conditions of the citizens. However, in spite of available palliatives from the government and financial institutions, social indicators of economic performance continue to grow at sub-optimal rates, with adverse implications for national security and performance of macroeconomic fundamentals. This research investigates the extent to which entrepreneurial finance provided by commercial and microfinance banks in Nigeria contributes to unemployment reduction in the country for the period 1992 to 2021. The study employs secondary data sourced from the Central Bank of Nigeria Statistical Bulletin and World Development Indicators as published by World Bank. The analysis using the Auto Regressive Distributed Lag model reveals that increase in funding of small business firms did not spur job creation in Nigeria. However, the Granger causality estimates show transmission of causality from financial sector credit to unemployment. Thus, we recommend the need for stakeholders in the economy especially the government to monitor banks' credits to small-scale business firms to ensure proper deployment for expansion of job-creating activities. While it is important for banks to enhance credit to small scale businesses, the government should also ensure adequate infrastructure to support economic activities.

Keywords: Entrepreneurship, Unemployment, Inflation, Investment, Budgetary Practices

1. Introduction

Full achievement of the United Nations Sustainable Development Goal 1 (SDG-1) in Nigeria by 2030, which is centered on eradication of 'poverty in all its forms everywhere' requires a concerted attention to entrepreneurship financing by all stakeholders. This is due to the fact that entrepreneurship development remains an important strategy to accelerate poverty reduction in the economy. Rapid unemployment growth has remained a subject of great concern not only to Nigeria, but many other developing and emerging nations across the globe in view of its pervasive implications for the social and economic health of citizens and society. Unemployment refers to a situation where members of a society with ability and willingness to work cannot find work to do, often as a result of the labour force growing faster than demand for it. It is largely the result of population growth leading the growth of productive resources. Unemployment creates social tension because it contributes to insecurity in the society (Sabri et al., 2021). Issues of militancy and insurgency especially in developing countries are clear fall-outs of rising unemployment in those jurisdictions. It is often said that the idle mind is the devil's workshop, so when hands are not productively engaged, they easily engage in destructive and clandestine activities. Unemployment also has demand-shock implications owing to non-regular income stream for citizens, which lowers aggregate demand, production, and investment, thereby reducing economic growth (Yuksel & Adah, 2017).

Unemployment contributes to migration of human capital in search of greener pastures. Migration of human capital across international boundaries enormously affects growth and poverty in both home and destination areas (Nasfi, 2020). It is on record that over 247 million people migrated to countries and regions outside of their places of origin in 2013 alone (World Bank 2019). In addition, the United Nations Department for Economic and Social Affairs (UNDESA) puts the number of international migrants (refugees inclusive) to about 258 million in 2017 (UNDESA, 2017). Also, the Nigeria Medical Association (NMA) reports that less than 60 percent of medical doctors that graduate in Nigeria are retained in the country, noting that the most skilled among the graduates leave to contribute their expertise to foreign economies (NMA, 2020).

Attainment of the twin objectives of price stability and full employment of resources constitutes a major policy challenge to governments in developing nations, particularly sub-Saharan African countries where high inflation and unemployment rates (stagflation) co-exist. Inflation and unemployment are intricately linked and, as Phillips (1958) observes, they are inversely related in the short-run but unrelated in the long-run. However, there is substantial evidence in the literature that both concepts affect economic performance in diverse ways. Macroeconomic managers often have to contend with the dilemma of maintaining a balance between inflation and unemployment. As Vermeulen (2017) notes, central banks that seek to keep inflation at low levels through inflation targeting are often criticised for promoting unemployment.

To mitigate the growth of unemployment, governments design and implement various interventionist programmes to empower the financially vulnerable but economically active poor members of the society to engage their hands in productive activities so that they do not only create jobs for themselves but also become employers of labour, and in the process reducing unemployment. However, Ndem et al. (2018) and Ayoade and Agwu (2016) observe that some of these interventions have not successfully resolved the unemployment situation in the country. The relationship between entrepreneurship and unemployment is demonstrated in studies like Audretsch et al. (2002), Kum and Karacaoglu (2012), Dilanchiev (2014), Dvoulety and Mares (2016), among others.

Finance is critical to the transformation of innovative ideas into products and thereby advances the development of entrepreneurship (Rahim.R, Reskillah. A, Nasfi, 2020). The execution of innovative projects in the early years of industrial revolution in Europe only became possible when financial institutions attained capacity to meet their funding requirements (Adegbite, 2015). In response to the growth of entrepreneurial activity, business enterprises employ more labour to occupy positions created, depopulating the job market in the process. Entrepreneurial profits enable increased scope of business operations which in turn makes demand on labour to support resultant increase in activity (Antoni, Aimon, H, Nasfi et al., 2019). Evidence of financial sector contribution to real sector development is aptly captured in financial economics literature (see for example, Bagehot, 1893; Schumpeter, 1912; McKinnon, 1973; and Shaw, 1973). However, Nigeria presents a different paradigm. In spite of various interventions from the government and relevant financial institutions, economic activities continue in downward trajectory.

Empirical evidence on the nexus between entrepreneurship financing and unemployment is rather inconsistent, hence the imperative for further inquiry. In addition, extant literature shows that this relationship has largely been explored from the perspective of commercial bank credit to the private sector. Little, if anything at all, is known of the role of microfinance bank lending in reducing unemployment. This study not only incorporates microfinance bank lending but also takes account of gross fixed capital and fiscal deficits as possible predictors of unemployment as they have not been significantly captured in literature. This study therefore investigates how business financing by financial institutions contributes to the mitigation of unemployment in Nigeria. The role of commercial and microfinance banks in this regard is the major focus of this research while gross fixed capital and fiscal deficits are introduced as secondary explanatory variables.

2. Theoretical and Empirical Literature Review

The study reviews literature on the nexus between unemployment and selected variables (financial sector development, gross fixed capital, inflation, economic growth, fiscal deficits, and entrepreneurship) within the context of the finance-led growth hypothesis and the Schumpeter effect and Refugee effect hypotheses of the unemployment-entrepreneurship relationship. The finance-led hypothesis links the growth of economic activities and financial system development. Finance-led theorists like Bagehot (1893) and Schumpeter (1912) argue that financial sector development initiates, drives, and supports expansion of economic activities. They contend that the sector mobilizes and deploys capital to promote enterprise development (Antoni, Ridzuan Masri, A Ahmad, B, M, Irwan Muslim, Nasfi, Sabri, 2019).

With regard to the relationship between unemployment and entrepreneurship, two distinct views in the literature are relevant to this study: the Schumpeter effect and the Refugee effect. The Schumpeter effect describes a situation whereby an increase in the level of entrepreneurial activities lead to a decrease in unemployment rate (Audretsch & Fritsch 1994; Garofoli, 1994; Audretsch et al., 2002). On the other hand, the Refugee effect describes a direct relationship between unemployment and entrepreneurship, which suggests that high rate of unemployment correlates with high level of entrepreneurial activities (Evans & Jovanovic, 1989; Evans & Leighton, 1990; Blanchflower & Meyer, 1994)

Empirical evidence on the relationship between unemployment and the selected variables is organized in this work according to the thematic style in order to show commonality of ideas according to relevant sub-headings.

2.1 Financial Development and Unemployment

The role financial development in the growth of real activities is established in the scholarly works of Bagehot (1873), Schumpeter (1912), McKinnon (1973) and Shaw (1973). These studies support the supply-leading hypothesis that efficient financial systems stimulate technological innovations by identifying and funding entrepreneurs that demonstrate capacity to transform innovative ideas into marketable products. Thus, successful entrepreneurship creates jobs and reduces unemployment.

Omofa (2017) examined the applicability of the supply-leading hypothesis of finance in Nigeria by evaluating the response of economic growth and unemployment to financial sector development using 3-Stage Least Square (3SLS) method. The result indicates that though interest rate and exchange rate strongly influence unemployment, only exchange rate substantially affected growth.

Using data from 16 emerging economies for 2001-2014, Bayar (2016) conducted a panel study on the interaction among financial development, unemployment and domestic investment. The panel result indicates that financial development did not significantly correlate with unemployment. Country level results however show that the proxies exhibit substantial impact on unemployment for some of the countries in the sample but not for others. The study also reveals robust causal impact of financial sector development on unemployment. The author used Durbin-Hausman co-integration test developed by Westerlund (2008), and Dumitrescu and Hurlin (2012) causality test to analyze the data.

Studies like Hassan et al. (2011), Caporale et al. (2015) and Cojocaru et al. (2016) show that financial sector development facilitates employment generation (reduce unemployment) by catalysing the flow of funds to entrepreneurs thereby raising growth. The authors posit that developed financial markets promote access to cheap money for productive investment, a major driver of long-run growth.

Yuksel and Adah (2017) employed quarterly data between 2003 and 2016 to examine major determinants of unemployment in Turkey based on the method of Multivariate Adaptive Regression Splines (MARS) developed by Friedman (1991). The study shows that interest rate exerts strong positive influence on unemployment. The positive influence of interest rate on unemployment suggests that as funds become more expensive, borrowing for productive activities contracts, leading to increase in unemployment. Based

on a study of selected OECD countries, Baccaro and Rei (2007) report high rate of unemployment *vis-à-vis* interest rate increase.

Gatti and Vaubourg (2009) conducted a panel study of selected OECD countries between 1980 and 2004 to ascertain the connection between financial sector development and unemployment. The panel regression result suggests that interaction between the financial and labour markets, in the context of unemployment reduction, depends on the strength of regulation of the labour market. It specifically indicates that unemployment is heightened by increased credit supply in countries that present weakly regulated and coordinated labour market conditions, and vice versa. On the other hand, high stock market capitalization and low banking concentration reduce unemployment in countries with weak labour market regulation, union density and coordination in wage bargaining but not vice versa. The work of Shabbir et al. (2012) also observes that stock market capitalization contributed significantly to unemployment in Pakistan between 1973 and 2007, and causality runs from financial sector development to unemployment. The research used ARDL and Granger causality tests to estimate the nexus between financial development and unemployment. On the other hand, Iloh (2015) did not establish substantial relationship between unemployment and capital market development during the 1986-2012 period.

In a related study, Kanberoglu (2014) explored the link between financial development and unemployment in Turkey during 1985-2010 and observes that though broad money supply has strong positive effect on unemployment, financial development shows significant negative effect on unemployment during the period. The work of Ogbeide et al. (2015) presents robust evidence of positive relationship between Nigeria's unemployment status and banking sector development. The study by Eke et al. (2018) examined causal transmission among entrepreneurship, human capital development and financial deepening in selected African economies between 1995 and 2014 but did not show evidence of causality between financial development and entrepreneurship.

Akande (2019) investigated the extent to which financial development affects unemployment in Nigeria using the ARDL method. The study reveals that while financial system deposit to GDP substantially reduced unemployment in both short and long-run periods, credit to private sector, financial liquidity, financial efficiency and financial stability only mitigate unemployment in the short-run. Using the framework of vector autoregressive (VAR), Essien et al. (2016) observe that positive shock to policy rate contributes significantly to unemployment in Nigeria based on quarterly data between 1983(Q1) and 2014 (Q1). This outcome suggests that increase in interest rate promotes unemployment.

2.2 Unemployment and Gross Fixed Capital

Infrastructure deficit is a major challenge to entrepreneurial activities due to its impact on the efficiency and productivity of labour. Lack of public infrastructure implies that entrepreneurs provide their own infrastructure thereby raising cost of doing business with adverse implications for capacity utilization and output competitiveness (Uche, 2000). This often leads to cessation of operations and loss of employment. On the other hand, high savings rate promotes capital accumulation through increased investment in physical and human capital development, thereby raising the level of economic activity and reducing unemployment.

Studies by Uneze (2013) and Ongo & Vukenkeng (2014) reveal strong positive impact of gross fixed capital formation on economic growth, an indication that increased investment capital may contribute to employment generation and thereby raise growth. Using gross fixed capital formation as proxy for domestic investment, Bayar (2016) observes a decline in unemployment rate as investment is ramped up. In a research work on entrepreneurship, human capital development and financial deepening, Eke et al. (2018) report one-directional causal flow from entrepreneurship to human capital development.

2.3 Unemployment and Inflation

The work of Phillips (1958) aptly described the relationship between inflation and unemployment. Phillips presents negative correlation between inflation and unemployment by deploying a single equation model in analysing United Kingdom data over the period 1862-1957. According to Phillips, expansion of economic activities generates inflation, which stimulates job creation and reduces unemployment. On the other hand, Okoye et al. (2019) argue that inflation erodes the purchasing power and economic well-being of citizens, perpetuates poverty and retards economic growth. This implies that inflation can substantially contribute to unemployment by contracting the scale of economic activities.

Research by Manuet et al. (2018) examined the extent to which the Phillips curve hypothesis applies in Nigeria during the period 1961-2015 using the ARDL bound testing method but did not establish that inflation is a major determinant of unemployment in Nigeria. Kasseh (2018) explored the link between inflation and unemployment in the Gambia based on annual data for 1991-2015. Using the new Keynesian curve model, the study shows strong evidence that inflation contributes significantly to unemployment. Esu and Atang (2017) used data from twenty-nine sub-Saharan African (SSA) countries to examine the validity of Phillips curve hypothesis in the SSA region based on annual data from 1991 to 2015, observe no panel support for the hypothesis.

Vermeulen (2017) investigated the connection between inflation and unemployment to ascertain the validity of Phillips curve hypothesis in South Africa based on data for the period 2000-2015. The result indicates no empirical support for robust short-run relationship between inflation and unemployment but reveals that inflation impairs capacity to create employment in the long-run. However, estimating the link between employment and inflation, the study shows robust positive short-run relation between inflation and employment. Applying Granger causality test, the study shows bi-directional causal flow between the variables. The work of Yuksel and Adah (2017) reveals that inflation adversely affects the rate of unemployment.

Nurudeen (2019) examined the inflation the inflation-unemployment trade-off in Nigeria during the 1980-2016 period using the ARDL method and affirm the validity of the Phillips curve, which hypothesizes a negative association between inflation and unemployment rate. The study further reveals causation from inflation to unemployment based on Granger causality and Toda Yamamoto estimates.

2.4 Unemployment and Economic Growth

Growth of real activities implies an increase in the output of the agricultural, industrial, commercial and services sectors (Adegbite, 2015). Following from the landmark study of Phillips (1958), economic growth drives inflation, spurs employment generation and reduces unemployment. Growth-induced inflation may also create demand shocks and thereby contract economic activities lead to redundancy and loss of employment (Okoye et al. 2019).

The research study by Mucuk et al. (2017) reveals negative association between economic growth and unemployment in Turkey based on the method of vector error correction model (VECM). The result indicates that high economic growth rate reduces unemployment rate, implying that expansion of economic activities engage idle hands thereby reducing unemployment. Zagler (2003) also used VECM to examine the relationship between economic growth and unemployment in France, Germany, Italy and the United Kingdom and observes also that unemployment correlates negatively with economic growth. Yuksel and Adah (2017) present further for negative impact of economic activities on unemployment rate.

Chowdhury and Hussain (2014) also report that economic growth substantially reduces unemployment in Bangladesh. In addition, Senturk and Akbas (2014) observe that economic growth significantly lowers the rate of unemployment in Turkey using Toda Yamamoto causality analysis. In another research study on Turkey, Aydiner et al. (2010) also report that high economic growth rate lowers unemployment rate. Arslan

and Zaman (2015) also observe negative impact of foreign direct investment (FDI) and GDP growth on unemployment rate in Pakistan while Irpan et al. (2016) reveal that high output growth rate reduces unemployment in Malaysia. However, Kyei and Gyekye (2011) reports non-significant effect of economic growth on unemployment in South Africa. With regard to causality, Alhdiy et al. (2015) report that GDP growth has no causal effect on unemployment in Egypt.

2.5 Unemployment and Fiscal deficits

Governments employ deficit financing when they plan to spend more than they receive in revenue. This budgetary practice aims at increasing the level of economic activity, thereby creating more jobs and raising the national output (Okoye et al., 2019). Governments engage expansionary fiscal policies in the development of social and critical infrastructure needed to boost productivity.

Evaluating the relationship between deficit financing and fiscal operation in Nigeria between 1980 and 1994, Eyiuche (2000) observes substantial negative relationship between unemployment and deficit budgetary practice, an indication that policies that target reduction in unemployment raise the level of fiscal deficits.

2.6 Unemployment and Entrepreneurship

In view of increased socio-economic crises and the imperative to achieve broad-based or inclusive growth, policy makers across the globe, but particularly in developing economies, now emphasize entrepreneurship as the pathway to rapid growth and development (Eke et al., 2018). The authors sustain the argument that entrepreneurship development can create and deepen financial markets, creativity and innovativeness, enhance output growth, and in the process reduce unemployment. Akinyemi et al. (2018) lend credence to the growth-propelling capacity of entrepreneurship in Nigeria based on data for the period 1981-2011.

Makinde (2013) provides strong positive correlation between unemployment and entrepreneurial development based on a survey of 220 respondents drawn from Kogi State, Nigeria. Ezeanokwasa and Nwachukwu (2014) also report that acquisition of entrepreneurship skills is critical to the reduction of unemployment in Nigeria based on a study sample of 810 respondents selected from Onitsha, Anambra State. Omonijo et al. (2018) conducted a study on the business mentoring practice (Nwa Boy) among the Igbo-speaking people of South-Eastern Nigeria to ascertain its contribution to reduction of youth unemployment. From extant literature, the authors argue that the practice effectively promotes self-employment among youths in the region and has substantially contributed to the development of entrepreneurial activities not just in the region but across Nigeria. They assert that this unique business mentoring practice can significantly mitigate youth unemployment in the country if supported by government at all levels.

Based on a panel study of 23 OECD countries, Audretsch et al. (2002) show support for both positive and negative interactions between unemployment and entrepreneurship. They observe that high rate of unemployment leads to increase in entrepreneurship (refugee effect) and that high level of entrepreneurial activities reduce unemployment (Schumpeter effect). By conducting a panel analysis of data obtained from 4 Visegrad countries (Czech Republic, Poland, Hungary and Slovakia) from 1998 to 2014, Dvoulety and Mares (2016) observe that high unemployment rate leads to increased level of entrepreneurial activity. They also discover negative association between entrepreneurship and unemployment. The study therefore confirms both Refugee and Schumpeter effects.

The work of Kum and Karacaoglu (2012) which used fully modified OLS (FMOLS) and dynamic OLS (DOLS) methods to analyze the link between entrepreneurship (proxied as self-employment) and unemployment in Turkey between 1985 and 2009 also reports negative relationship between unemployment rate and entrepreneurial activities. Using a bivariate model, Dilanchiev (2014) examined the connection between entrepreneurship and unemployment in Georgia over the period 2003-2013. The result further

confirms the existence of Schumpeter effect. However, it did not support significant effect of unemployment on entrepreneurship. The research study by Apaydin (2018) reports robust negative relationship between unemployment and entrepreneurship, and further flow of causality from entrepreneurship to unemployment (Schumpeter effect).

Ndem et al. (2018) examined the extent to which entrepreneurial development schemes in Nigeria have contributed to employment generation in Cross River State, Nigeria. The study which focused on the activities of the National Directorate of Employment reveals that the scheme has not significantly contributed to employment generation. Using the survey research design, Okafor (2019) investigated the link between entrepreneurship development and unemployment reduction in Anambra State, Nigeria, with study sample drawn from Awka, Onitsha and Nnewi. The study reveals that cost of doing business adversely affects entrepreneurship development in Nigeria. This implies inability of small businesses to reduce unemployment. Ayoade and Agwu (2016) examined the effectiveness of interventionist programmes of government in mitigating the incidence of unemployment in Nigeria and observe that the programmes did not stimulate employment generation due to issues of corruption, bureaucracy, policy inconsistency, political instability and absence of entrepreneurial skills.

The review of preceding studies reveals that empirical dependence of unemployment reduction on entrepreneurship financing is varied and imprecise, especially for Nigeria. The divergence of these findings could be due to different sample periods and the diverse sets of econometric methodologies used such as single equation (OLS), vector autoregressive (VAR) model and many others. As good as these methodologies appear to be, they are not without their shortcomings. It is therefore needful to re-examine the interaction between unemployment and entrepreneurship financing within a different analytical framework.

3. Methodology

This study examines the effect of entrepreneurship financing on unemployment reduction in Nigeria. The study employs secondary data sourced from Central Bank of Nigeria (CBN, 2021) Statistical Bulletin and World Development Indicators (WDI) as published by World Bank (2021), for the period 1992 to 2021. To avoid issues of variable bias and minimize errors of mis-specification, the study adopts a multivariate framework. The variables of interest are unemployment rate (UNEM), which is the dependent variable, and small-scale credit to total credit (SSCT), microfinance loans and advances to total deposits (MFLA), government budgetary practice (BGPR), investment in infrastructure (INFR) and inflation rate (INFL) as independent variables. Using time series dataset, the study applies unit root test to ascertain the stationarity status. This satisfies the condition that the series have a predictable trend and thereby reduce the possibility of spurious estimates. The outcome of the unit root test informs the choice of the appropriate technique of estimation used in the study.

3.1 Model specification

The functional form of the relationship between the dependent and independent variables is stated as:

$$UNEM = F(SSCT, MFLA, BGPR, INFR, INFL) \quad (1)$$

Where:

UNEM = Unemployment Rate

SSCT =Small-scale credit to total credit

MFLA =Microfinance loans and advances to total deposits

BGPR =Budgetary practices

INFR =Investment in infrastructure

INFL = Inflation rate

The explicit form of the above relationship is specified in the following equation:

$$UNEM_t = \alpha_0 + \alpha_1 SSCT_t + \alpha_2 MFLA_t + \alpha_3 BGPR_t + \alpha_4 INFR_t + \alpha_5 INFL_t + \mu_t \quad (2)$$

Where:

α_0 = Intercept Term

$\alpha_1 - \alpha_5$ = parameters to be estimated

μ_t = stochastic error term. This represents other variables affecting the dependent variable but not taken into account by the above model.

3.2 Technique of Estimation

Following the outcome of the unit root test, this study adopts the method of autoregressive distributed lag (ARDL) model. The ARDL model framework developed by Pesaran and Shin (1998) and further amplified in Pesaran et al. (2001) is considered suitable for this research given its unique advantages over other estimation techniques which, among others, include its suitability for small and finite samples, ability to produce unbiased long-run estimates of the model's parameters. ARDL modeling also applies regardless of whether the variables are integrated of order zero, one, or mixed but not at two (Okoye et al., 2022; Okoye, et al, 2019; Adeleye et al., 2020). The ARDL representation of the relationship between entrepreneurship financing and unemployment reduction is presented in Equation (3) as follows:

$$\begin{aligned} \Delta UNEM_t = & \lambda_0 + \sum_{i=1}^m \lambda_1 \Delta UNEM_{t-i} + \sum_{j=0}^n \lambda_2 \Delta SSCT_{t-j} + \sum_{k=0}^o \lambda_3 \Delta MFLA_{t-k} + \sum_{l=0}^p \lambda_4 \Delta BGPR_{t-l} \\ & + \sum_{m=0}^q \lambda_5 \Delta INFR_{t-m} + \sum_{n=0}^r \lambda_6 \Delta INFL_{t-n} + \lambda_7 UNEM_{t-i} + \lambda_8 SSCT_{t-j} \\ & + \lambda_9 MFLA_{t-k} + \lambda_{10} BGPR_{t-l} + \lambda_{11} INFR_{t-m} + \lambda_{12} INFL_{t-n} \\ & + \mu_t \dots \dots \dots (3) \end{aligned}$$

From equation (3), Δ is the first-difference operator the following parameters $\lambda_1, \lambda_2, \lambda_3, \lambda_4, \lambda_5$ and λ_6 are $\lambda_1, \lambda_2, \lambda_3, \lambda_4, \lambda_5$ and λ_6 are the long run coefficients, while $\lambda_7, \lambda_8, \lambda_9, \lambda_{10}, \lambda_{11}$ and λ_{12} are the short run coefficients and the error term is represented with μ_t .

3.4 Wald F-Test

To establish the long run relationship amongst the variables of interest, the Wald test is applied on equation (3), where:

$$H_1: \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = \lambda_6 = \lambda_7 = \lambda_8 = \lambda_9 = \lambda_{10} = \lambda_{11} = \lambda_{12}$$

$$H_0: \lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq \lambda_5 \neq \lambda_6 \neq \lambda_7 \neq \lambda_8 \neq \lambda_9 \neq \lambda_{10} \neq \lambda_{11} \neq \lambda_{12} \neq 0$$

The null (H_0) hypothesis argues that there is no co-integration among the variables, while the alternative (H_1) represents the hypothesis of co-integration. If the calculated F-statistic exceeds the upper critical bounds value, then the H_0 is rejected. If the F-statistic falls within the bounds then the test is inconclusive. Lastly, if the F-statistic falls below the lower critical bounds value; it implies that there is no co-integration.

3.5 Error Correction Term

The short-run error correction coefficient measures the discrepancy between the actual values and the estimated values. It additionally shows the speed of adjustment from the short-run dynamics to the long-run equilibrium value. For the coefficient of the error correction term to be significant and reliable, it must be negatively signed and within the magnitude of zero and 1. Therefore, the error correction of the ARDL model is specified as follows:

$$\Delta UNEM_t = \lambda_0 + \sum_{i=1}^m \lambda_1 \Delta UNEM_{t-i} + \sum_{j=0}^n \lambda_2 \Delta SSCT_{t-j} + \sum_{k=0}^o \lambda_3 \Delta MFLA_{t-k} + \sum_{l=0}^p \lambda_4 \Delta BGPR_{t-l}$$

$$+ \sum_{l=0}^p \lambda_5 \Delta INFR_{t-m} + \sum_{l=0}^p \lambda_6 \Delta INFR_{t-n} + \eta ECM_{t-1}$$

$$+ \mu_t \dots \dots \dots (4)$$

long-run co-integrating relationship from the specified ARDL model (3). In equation (4), η is the estimated value of the adjustment speed of ECM. And, it is expected to exhibit a negative and significant sign for co-integrating relation to exist in the long run.

4. Analysis of Findings

4.1 Test for Stationarity

The Augmented Dickey- Fuller (ADF) test was conducted to investigate existence of unit root in the series, a condition that may determine the reliability of the research outcome. A stationary or integrated series is one that time-invariant (a change in time does not distort the shape of the distribution).

4.2 Unit Root Test

The result of the ADF stationary test which is a necessary condition for adopting a suitable estimation technique is presented in Table 1. It shows that only one of the variables- UNEM is stationary at level, while the remaining variables: SSCT, MFLA, BGPR, INFR and INFL are differenced once to achieve stationary status of the series at intercept and trend specification. This justifies the application of the Autoregressive Distributive Lag (ARDL) as advanced by Pesaran *et al.* (2001) in estimating the parameters of the model.

Table 1: Unit root test

Variables	ADF @ levels	5% critical value	ADF @ 1 st diff	5% critical value	Remarks
<i>UNEM</i>	-2.101065	-3.004861	2.525276	-1.958088	<i>I</i> (1)
<i>SSCT</i>	-4.046304	-2.986225	N/A	N/A	<i>I</i> (0)
<i>MFLA</i>	-6.178791	-2.991878	N/A	N/A	<i>I</i> (0)
<i>BGPR</i>	-3.133388	-2.986225	N/A	N/A	<i>I</i> (0)
<i>INFR</i>	-4.925213	-2.991878	N/A	N/A	<i>I</i> (0)
<i>INFL</i>	-4.792386	-2.991878	N/A	N/A	<i>I</i> (0)

Source: Authors' Computation with (2022). Note: N/A = Not Applicable

4.3 ARDL Bounds Cointegration Test

The F-bounds test shown in Table 2 indicates evidence of co-integrating relationship among the variables captured in the model which suggests that they do not exhibit a tendency to drift over the long-run. This is evidenced by the observed F-value (8.569929) being greater than the lower (2.39) and upper (3.38) critical bounds at 5 percent level of significance.

Table 2: Bound test result

<i>F</i> -bounds test		Null hypothesis: No levels relationship		
Test statistic	Value	Significance level	<i>I</i> (0)	<i>I</i> (1)
<i>F</i> -statistic	8.569929	10%	2.08	3.00
<i>K</i>	5	5%	2.39	3.38
		2.5%	2.70	3.73
		1%	3.06	4.15

Source: Authors' computation (2022).

4.4 Long-run Result and Implication of Findings

After establishing the co-integrating relationship among the variables, from the dynamic long-run ARDL estimation, it is observed that present rate of unemployment is greatly determined by its previous or lagged values (delayed effect). The result indicates that the condition of unemployment in the past two periods (lag 2) sustains an increase in the current state of unemployment. The study further reveals positive effect of commercial bank credit to the private sector on unemployment, though this is only significant at 10 percent. This is an indication of possible misapplication or diversion of credit away from employment-generating activities. It is also observed that previous credit facilities granted to small-scale business firms reduce unemployment rate, but not to a significant extent. This result suggests that the use of these facilities have the potential to enable the engagement of idle resources and expansion of existing business facilities if properly channeled, thereby creating additional jobs.

Similarly, with regard to microfinance loans and advances to small businesses, the result shows robust positive effect of present and past credit facilities on the real economy. This result implies that an increase in microfinance lending to small business firms does not lead to job creation, and therefore rather than mitigate the level of unemployment, it exacerbates it. The observed positive effect of financial sector development on unemployment is consistent with the findings of Yuksel and Adah (2017); Baccaro and Rei (2007); Gatti and Voubourg (2009); Shabbir et al. (2012); Essien et al. (2016); Ogbeide et al. (2015), among others. However, it counters the negative result reported in Gatti and Voubourg (2009); Hassan *et al.* (2011); Coporale *et al.* (2015); Cojocaru *et al.* (2016); Akande (2019); Kanberoglu (2014), etc.

Evidence from the study further demonstrates that the dominant practice of deficit budgeting does not support government policy on unemployment reduction. Though a major policy objective of deficit financing is the imperative broaden of the productive capacity of the economy through expansion of human and physical capital, our finding suggests otherwise. Not many studies are available on the relationship between fiscal deficit and unemployment against which this result can be bench-marked, but it contradicts the observed negative outcome in Eyiuche (2000).

The study also reveals negative effect of government investment in domestic infrastructure. The implication is that an increase in infrastructural spending reduces unemployment rate. This aligns with the finding of Bayar (2016). It tends to agree also with the result of Uneze (2013) and Ongo and Vukenkeng (2014) which indicates that investment in domestic capital leads to expansion of economic activities. Studies by Mucuk *et al.* (2017); Yuksel and Adah (2017); Chowdhury and Hussain (2014); Zagler (2003); Senturk and Akbas (2014); Arslan and Zaman (2015); Irpan *et al.* (2016); Ayidiner *et al.* (2010) produce evidence that GDP growth curbs unemployment.

Finally, it is observed that inflation did not substantially affect unemployment during the study period. This confirms the findings of Manu *et al.* (2018) but contradicts the negative relationship in Phillips (1958); Vermeulen (2017); Yuksel and Adah (2017), etc. as well as the positive effect reported in Kasseh (2018); Esu and Atang (2017).

The R-squared (0.914632) and Adjusted R-squared (0.859752) show that the explanatory variables jointly explain about 92 percent and 86 percent, respectively, of variations in unemployment rate in Nigeria and the Prob.(F-statistic) of 0.000005 indicates high level of significance. The Durbin-Watson statistic (2.142776) suggests absence of serial auto-correlation of errors in the model.

Table 3: Long-run results

Variable	Coefficient	Std. error	t-statistic	Prob.*
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<i>UNEM(-1)</i>	0.139531	0.170817	0.816844	0.4277
<i>UNEM(-2)*</i>	1.652530	0.362109	4.563629	0.0004
<i>SSCT***</i>	0.108572	0.060049	1.808052	0.0921
<i>SSCT(-1)</i>	-0.080457	0.056172	-1.432337	0.1740
<i>MFLA***</i>	0.023277	0.005163	4.508037	0.0005
<i>MFLA(-1)***</i>	0.023236	0.007371	3.152478	0.0071
<i>BGPR**</i>	0.108086	0.045444	2.378466	0.0322
<i>INFR***</i>	-0.042269	0.019957	-2.117963	0.0526
<i>INFL</i>	0.000223	0.006273	0.035542	0.9721
<i>C</i>	-5.545703	1.431403	-3.874313	0.0017
<i>R-squared</i>	0.914632			
<i>Adjusted R-squared</i>	0.859752			
<i>F-statistic</i>	16.66612	<i>Durbin-Watson stat</i>		2.142776
<i>Prob(F-statistic)</i>	0.000005			

Source: Authors' computation (2022). Note: *, **, *** 1%, 5%, 10% significance level.

4.5 Error Correction Model (ECM) Results

The short-run results presented in Table 4 shows strong negative effect of lagged values of unemployment rate on its current values. The negative outcome implies that high rate of employment in the previous period may have prompted increased participation in entrepreneurial activities (refugee effect) and the resultant increase in entrepreneurship reduces the current level of unemployment (Schumpeter effect).

The result further robust positive effect of entrepreneurship financing on unemployment in Nigeria. This implies that an increase in funding of small-scale businesses by commercial and microfinance banks does not support expected increase in job creation, an indication of sub-optimal deployment of facilities supplied by the financial institutions.

The adjustment or error correction mechanism, with a coefficient of 0.792061, indicates that about 79.2 percent of past errors are corrected in the current period. This implies a high speed of convergence from short-run to long-run equilibrium condition.

Table 4: Short-run estimates

Variable	Coefficient	Std. error	<i>t</i> -statistic	Prob.
D(<i>UNEM(-1)</i>)	-1.652530	0.199119	-8.299188	0.0000
D(<i>SSCT</i>)	0.108572	0.034917	3.109412	0.0077
D(<i>MFLA</i>)	0.023277	0.003829	6.078624	0.0000
<i>CointEq(-1)*</i>	0.792061	0.085560	9.257391	0.0000

R-squared	0.840894
Adjusted R-squared	0.817029
Durbin-Watson stat	2.142776

Source: Authors' computation (2022). Note: *, **, *** 1%, 5%, 10% significance level.

4.6 Granger Causality Estimates

Having established the extent to which entrepreneurial finance provided by commercial and microfinance banks in Nigeria contributes to unemployment reduction in Nigeria using ARDL, the study goes further to access the causal between entrepreneurial financing and unemployment. This is necessary because ARDL is deficient to achieve this objective. Therefore, Table 5 shows evidence of causality between entrepreneurial financing and unemployment in Nigeria. In terms of specifics, the result shows unidirectional causal flow from commercial bank credits (to small private businesses), represented as SSCT, to unemployment, and from microfinance bank loans and advances (MFLA) to unemployment. These results indicate that a change in the financing pattern from these sources induces a change in unemployment rate. This finding aligns with the finance-led hypothesis that finance stimulates expansion of economic activities. The observed transmission of causality from financial sector development to unemployment aligns with the finding of Bayar (2016); Shabbir *et al.* (2012) but does not support the outcome of Eke *et al.* (2018) which did not establish causation between financial development and unemployment.

Table 5: Granger causality test

Null Hypothesis	Observations	F-Statistics	Probability
SSCT does not Granger Cause UNEM**	24	3.84352	0.0397
UNEM does not Granger Cause SSCT	24	0.33475	0.7197
MFLA does not Granger Cause UNEM*	24	8.06143	0.0029
UNEM does not Granger Cause MFLA	24	0.39900	0.6765
BGPR does not Granger Cause UNEM	24	0.42253	0.6614
UNEM does not Granger Cause BGPR	24	1.23847	0.3122
INFR does not Granger Cause UNEM	24	0.66600	0.5254
UNEM does not Granger Cause INFR	24	0.86564	0.4367
INFL does not Granger Cause UNEM	24	0.52674	0.5989
UNEM does not Granger Cause INFL	24	0.68654	0.5154

Source: Authors' computation (2022). Note: *, **, *** 1%, 5%, 10% significance level.

4.7 Diagnostics

The goodness of fit characteristic of the ARDL model was examined using the Breusch-Godfrey LM test, Breusch-Pagan-Godfrey, and Jarque-Bera test. The results indicate no higher order autocorrelation, no heteroskedasticity, and evidence of normality. The results suggest the estimates obtained from the analysis are suitable for policy decisions.

Table 6: Diagnostic tests

Test	F-statistic	P-value	Chi(X ²)/T-statistic	P-value
Serial correlation test: Breusch-Godfrey LM test	0.163661	0.6924	0.298387	0.5849
Heteroskedasticity test: Breusch-Pagan-Godfrey	1.263410	0.3352	10.75637	0.2928
Normality: Jarque-Bera test	–	–	1.716654	0.423871

Source: Authors' computation (2022)

5. Conclusion

Unemployment constitutes social and economic challenge to individual and national well-being and has received the attention of various stakeholders, including the governments and researchers across the globe. However, in spite of considerable attention it has received over the years, unemployment remains a major societal problem which could alter smooth economic progress and increase poverty in an economy. This is not in tandem with the global focus of SDG-1 which is centered on to 'end poverty in all its form everywhere'. Consequently, this study extends knowledge frontiers by investigating the extent to which entrepreneurial finance from commercial and microfinance banks contributes to unemployment reduction in Nigeria. The ARDL result shows previous values of unemployment as significant predictors of its current value (lag effect). In addition, against *a priori* expectation, the study reveals a robust positive effect of credit from commercial and microfinance banks on unemployment. The observed positive effect of bank financing on unemployment suggests that borrowed funds are either diverted away from real sector development (moral hazard problem) or sourced at exorbitant cost which makes entrepreneurial engagement unprofitable. This may further worsen unemployment situation as it encourages divestments from employment-generating activities.

Finally, it is observed that investment in domestic infrastructure reduced unemployment during the period. This further justifies the critical role played by domestic infrastructural development in boosting economic activities through investments by all other sectors in Nigeria. Although there is an improved effort by the government in recent time to address this, the huge deficit overtime in that sector shows that all stakeholders must now prioritise infrastructural development if we are to achieve SDG 1 by 2030. With regard to causality, the study demonstrates causal transmission from finance to unemployment, and thereby aligns with the finance-led hypothesis. This aligns with the finding of Bayar (2016). It tends to agree also with the result of Uneze (2013) and Ongo and Vukenkeng (2014) which indicates that investment in domestic capital leads to expansion of economic activities. Studies by Mucuk *et al.* (2017); Yuksel and Adah (2017); Chowdhury and Hussain (2014); Zagler (2003); Senturk and Akbas (2014); Arslan and Zaman (2015); Irpan *et al.* (2016); Ayidiner *et al.* (2010) produce evidence that GDP growth curbs unemployment. This finding further explains that finance stimulates expansion of economic activities which leads to reduction of unemployment. Therefore, consistent policy review by government to suit better performance of entrepreneurs would definitely reduce unemployment and ultimately reduce poverty in Nigeria.

Given the results of this study, it is recommended that the government should consciously target the attainment of investor-friendly business environment through formulation of policies that lower the cost of doing business and raise profitability. For the fund providers, it is imperative to mitigate moral hazard problem through strengthening of monitoring of loan utilization to ensure effective and profitable deployment of credit facilities. Business profitability is both a condition for expansion and an inducement for others to engage in entrepreneurial activities, leading to job creation and by extension unemployment

reduction. Government should further intensify infrastructural investment as a conscious strategy to deepen entrepreneurship so as to achieve private-sector driven job-creation initiatives.

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Green supply chain management: A systematic review

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Abstract

The goal of the work is to systematically review the prevailing position of empirical research on Green supply chain management practises (GSCMP) published in high quality indexed journals over the past eleven years, from 2012 to 2022 (Scopus). Scopus was chosen for the literature search to increase openness and clarity, and stringent inclusion and exclusion criteria were used to filter all studies. Only the 25 most relevant papers were included in this review; those that weren't were discarded. PRISMA 2009 is used for the intergration and removal process. The empirical findings of the chosen articles are used to propose a conceptual model of GSCMP implementation. Based on the findings, it is clear that most of the literature is focused on manufacturing companies and that supply chain networks are largely ignored in favour of individual practises, techniques, procurement methods, and initiatives that aim to reduce environmental impact. The findings of this study also show that green initiatives have a significant impact on the environmental, social, financial, and operational results of businesses. This research concludes that contemporary businesses must think about how their activities affect the environment, and that to mitigate their negative effects, they must prioritise supply chain networks and adopt environmentally friendly business practices.

1.0 Introduction

One of the main causes of weather variance and global warming is the rapid development and diffusion of ecological concerns from one country to another, and then from one zone to another, and finally to the entire planet. Furthermore, the restricted availability of ecological assets and contamination of water and the atmosphere have a severe influence on wildlife and plants as well as mankind, creating a wide range of ailments including cardiovascular disease, lung disease, etc (Abdul Rehman Khan, 2019). In order to slow down the rate at which the environment deteriorates and to control air, water, and waste pollution, businesses are adopting green supply chain concepts.

Although the primary goal of the green idea is undoubtedly to improve planetary protection, many businesses view it as an opportunity to accomplish two goals at once. While it's true that a green supply chain can lessen the adverse effects on the environment and the bottom line, it can also boost the financial system, give an organisation an edge through increased end-user satisfaction, positive brand and impression, and better export opportunities to eco-friendly countries (Khan & Qianli, 2017). Social responsibility, green process innovation, waste minimization, reusing and reprocessing self-sustaining friendly supply chain, greening the supply chain, and other technological advances and methodologies to protect ecological sustainability are increasingly included in the expanding definition of "green."

The concept sustainable green supply chain describes the notion of incorporating environmentally friendly operations into existing supply chains (Abdul Rehman Khan, 2019). Activities such as supplier selection and materials handling, product engineering, product manufacture and assembly, distribution, and final management can all be included. Green supply chain management (GSCM) refers to the incorporation of environmental considerations into supply chain management strategies (Zhu, Sarkis & Lai, 2013).

Among the primary aims of modern corporations is to build sustaining corporations. To accomplish more sustainable goals, companies must play an important role and be conscious about the surrounding ecosystem, which is sometimes referred to as the 'becoming green' objective (Tseng, Islam, Karia, Fauzi & Afrin, 2019).

The supply chain is an integral part of operations management and has a sizable impact on pollution, community health risks, and other environmental factors. Companies are making efforts to lessen their environmental impact by factoring ecological considerations into their supply chain operations. While GSCM research has grown exponentially over the past two decades, more nuanced understanding is still required for deeper dives into the field.

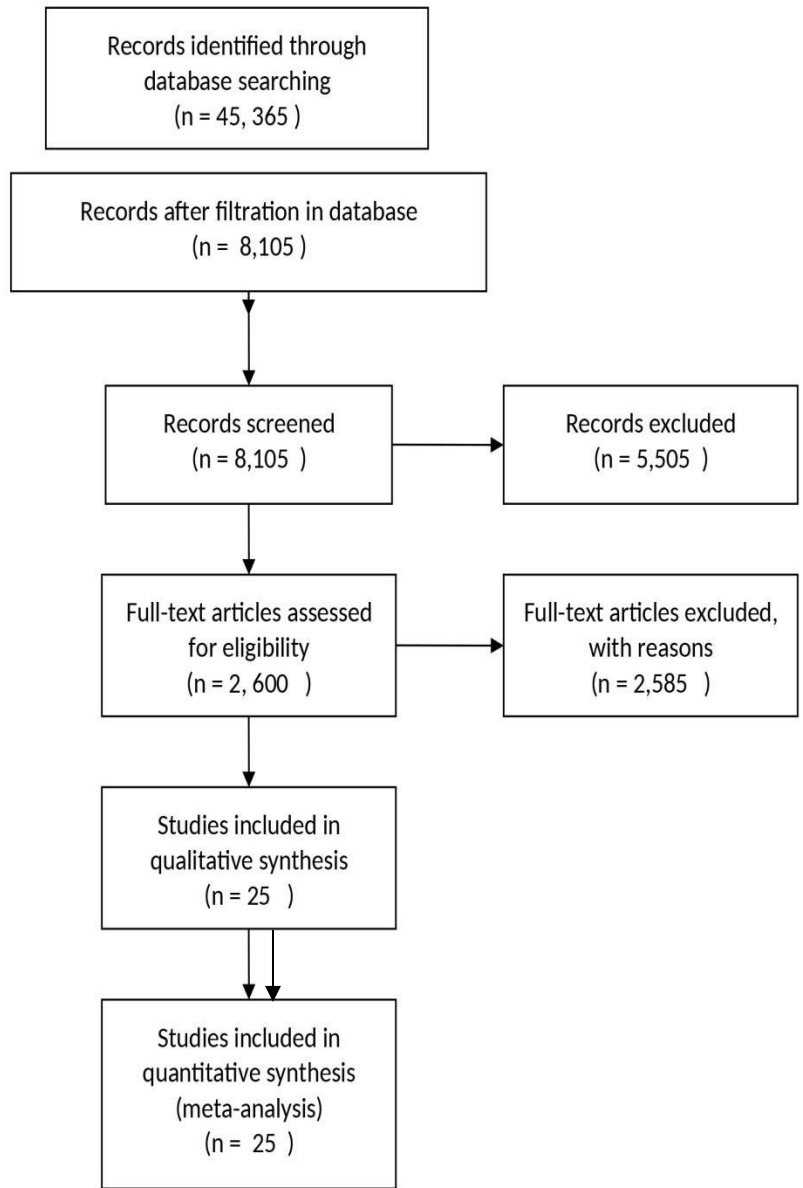
Previous academics have reviewed GSCM literature (Soda et al., 2016). Tseng, Islam, Karia, Fauzi, and Afrin (2019) and Soda et al. (2016) focus on the GSCM method, whereas others focus on specific aspects and practises (Islam et al., 2018). (2013). GSCM research seldom considers the intersection of "green" and "sustainable" supply chains.

Rapid growth in the GSCM literature has made it all the more important to share new perspectives and point the way for future study in light of these developments.

This research seeks to explore GSCM techniques, drivers and factors that influence firm outcomes in depth and also to assess the subject's behaviour during the previous ten years using a systematic literature review analysis of publications published between 2012 and 2022 in Scopus.

2.0 Methodology

Previous research was analysed by a systematic literature review in this study (SLR). Included and excluded items in the green supply chain management assessment are explained using the PRISMA statement form. A researcher can strengthen their review paper's results with the use of the PRISMA statement. Only works that have previously been published are considered for this review. The full process is depicted in PRISMA 2009's Figure 1.



PRISMA 2009 Flow Diagram

2.1 Quality assessment

The research publications relied on are purely review papers and empirical works; conference papers were not included. For the sake of ensuring that the review's integrity is not compromised, every possible form of repetition has been meticulously analysed. Publication abstracts and results are evaluated and filtered via many levels of review to guarantee the highest quality.

2.2 Selected articles in the systematic review

The final 15 studies are utilised for the final step of determining the study's focus and study from 2012 to 2022. The subject-specific research is further explained in the graph, which shows how many publications are included and excluded from the review.

2.3 Yearly Publication

Publications are segmented by year and the most-cited papers are highlighted. The first year chosen for analysis is 2012, and the most recent year chosen is 2022. Figure 2 shows the chronological distribution of publications; the most often represented year is 2022, with a total of 8, and the lowest is from 2012, with a total of 5. There are five papers chosen for the year 2021, making it the second most popular choice.

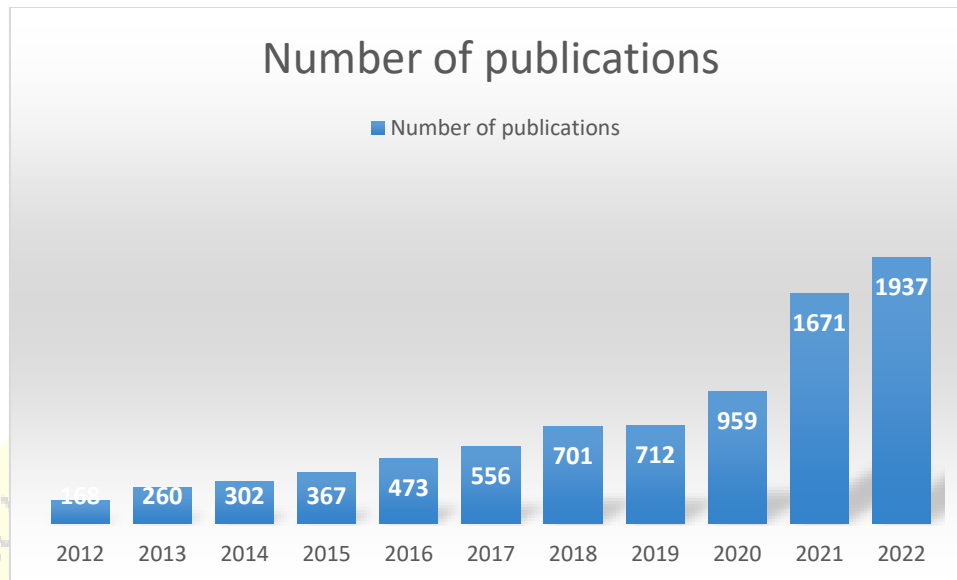


Figure 1: Number of publications

3.0 Literature research

3.1 Green Supply Chain Management (GSCM) Practices

The term "green supply chain" (GSC) was coined by Kelle and Silver in 1989, when they examined the practical application of recycled materials in industry (Nekmahmud, Rahman, Sobhani, Olejniczak-Szuster & Fekete-Farkas, 2020). The concept of supply chains as part of environmentally friendly operations was first introduced in the GSCM literature by Kelle and Silver (1989) and Roy and Whelan (1992).

Global sustainability management (GSCM) encompasses not just the introduction and upkeep of environmental management programmes but also their expansion through the development and regulation of associated practises.

Both environmental management and supply chain management have contributed to the development of the idea of "Green Supply Chain Management." If you want to give your supply chain management a 'green' spin, you need to think about how your operations affect the environment and how your operations interact with the environment. Environmental issues should be integrated into product design, buying, production, materials management, distribution/marketing, product delivery, and remanufacture (Nekmahmud, Rahman, Sobhani, Olejniczak-Szuster & Fekete-Farkas, 2020).

GSCM, as defined by Malviya and Kant (2015), is an all-encompassing strategy that helps businesses become more sustainable by integrating consideration for the environment into the production process from start to finish. Organizational development technique GSCM may boost industrial eco-efficiency. Other sustainability goals are improved (Hassan et al., 2016).

Sustainable supply chain management first concentrated on green purchasing, production, distribution, and marketing to better the world around us and its inhabitants. The use of GSCM is on the rise across all economic sectors. There has been widespread implementation of the GSCM framework over the past two decades, with its focus on eco sustainability (Green et al., 2012; Hasan et al., 2019; Liu et al., 2020).

Different drivers can be classified as either proactive or reactive, and both types of drivers are important to consider when deciding to adopt GSCM practises (Sujatha, 2021). One way to stay ahead of the competition is to adopt eco-friendly practises throughout the entire value chain, like reverse logistics and eco-friendly product design. However, the goal of a reactive strategy is to meet customer and government environmental requirements.

It wasn't until the 1970s that the developed world took up the environmental movement (Berny & Rootes, 2018; Washington-Ottombre, Washington & Newman, 2018). The environmental repercussions of pollution from various production organisations and other industries prompted the rapid uptake (Wibowo, Handayani & Mustikasari, 2018). People's desire for sustainable products and practises can be traced back to the rise in public understanding of GSCM's societal benefits (Kulshreshtha, Bajpai, Tripathi & Sharma, 2019).

Several governments have passed green laws to encourage "green" activities and eco-friendly commodities (Khan, & Qianli, 2017; Wu & Tang, 2020).

Previous research has uncovered the barriers that keep manufacturing companies in developing countries from "going green" (Muduli, Govindan, Barve & Geng, 2013; Bakos, Siu, Orenge & Kasiri, 2020). It's worth noting that some businesses in emerging economies have joined the ranks of environmentally conscious groups (Ojo, Mbohwa & Akinlabi, 2014). Dangote corporations, for instance, is a Nigerian and African producing powerhouse that was recently honoured for its "green" business practises. This manufacturing behemoth's commitment to environmental responsibility is based on seven pillars of sustainability (Ojo, Adeniyi, Ogundimu & Alaba). If we are to reduce the environmental threat that has led to a degraded living ecosystem, it is essential that the establishment adopt a more sustainable point of view (Dong, Tan, Wang, Zheng & Hu, 2021). It's important to remember that if sustainable practises aren't adopted, they could endanger the workers' quality of life in the manufacturing sector. Cost considerations, as noted by Deng and Jiang (2019), are a key factor in whether or not a company decides to implement any GSCM practice.

The understanding and support of senior management has been linked to an organization's adoption of GSCM practices. Upper management's pro-environmental skills may shape a firm's operational perspective and objective. Visions for the environment help businesses come up with environmentally friendly and ground-breaking production techniques.

Since factories require inputs like raw materials, sourcing is a fundamental part of daily operations. It is critical for manufacturers and their supply chains to work together toward shared green goals. However, previous research has shown that most organisations struggle with supplier management. Supply chains that share the "green" values of their customers are essential to the success of any enterprise committed to the implementation of sustainable concepts. Design directives based on green principles can be recommended to suppliers as a means of helping manufacturing organisations achieve their green concept

goals. It is possible to use either cooperative strategies, like conducting research and training together and disseminating findings, or competitive strategies, like insisting that the supplier implement ISO14001 (Ososanmi, Ojo, Ogundimu & Oke, 2022).

The government's role in GSCM implementation is central. The interesting conclusion reached by Ososanmi et al. (2022) is that GSCM is a joint venture between citizens, businesses, and governments.

3.2 Green Supply Chain Management Techniques

Many consumers now consider sustainability, climate change, and other environmental factors when making purchases (Tachizawa, Gimenez & Sierra, 2015). Many businesses, as a result, are investigating greener ways to coordinate their supply chains and production methods.

In addition to helping the planet in the long run, businesses see going green as a way to boost their own bottom line and public standing. Many businesses now use these easily accessible procedures as they continue to computerise their supply chains.

It is possible to implement GSCM in nearly any manufacturing company. The first step in putting this idea into practise is to analyse the current supply chain and pinpoint areas where sustainable practises can be integrated.

Refined methods of raw material procurement -

This could mean working with manufacturers to develop new recyclable or biodegradable packaging for stores. Also, businesses have the option of buying from vendors who employ green practises in their material procurement.

Reduce pollution from vehicles -

One way to lessen the environmental impact of transporting and delivering materials is to do so from suppliers in close proximity. It's possible that some businesses will cut emissions by switching to cleaner transportation systems and fuels.

Through logistics optimization, businesses can lessen their impact on the environment by decreasing the number of miles their goods must travel and the number of empty miles their trucks must travel with.

Acceptance of Knowledge -

Certifications can help businesses avoid working with vendors who distribute illegal goods. A manufacturer, for instance, might prefer to work exclusively with LEED-approved vendors.

3.3 Green Supply Chain Management implementation drivers

Greening a supply chain is influenced by both reactive and proactive drivers.

3.3.1 Reactive Drivers

Pressure from both inside and outside the company, as well as an understanding of the costs of not complying, has led to the widespread institutionalisation of environmentally responsible practises in modern businesses. As a result, the implementation of green behavior will be influenced by demands from government authorities and international regulators (Tachizawa, Gimenez & Sierra, 2015). If corporations care about the environment and have societal support, sustainability initiatives will spread faster along the supply chain. Institutional pressures from market and regulatory needs are driving adoption (Tachizawa, Gimenez & Sierra, 2015), (Mitra & Datta, 2014). (Fahimnia, Sarkis, Boland, Reisi & Goh, 2015). Carbon taxation and emission pricing policies are just two types of legislation that aim to regulate the cost of driving (Fahimnia, Sarkis, Boland, Reisi & Goh, 2015).

3.3.2 Proactive Drivers

Another motive is the "slack resource hypothesis," which claims that successful firms have more money and other resources to spend in environmental performance. Profitable companies may invest more in environmental performance. According to the "Good management theory," environmental performance strengthens connections with important stakeholders, which boosts financial success (Ortas, Moneva & Álvarez, 2014).

3.4 Green Supply Chain Management and firm outcomes

Outcomes in the areas of the environment, finances, operations, and the organisation are all part of the GSCM performance tally (Vijayvargy, Thakkar & Agarwal, 2017; Zaid, Jaaron & Talib Bon, 2018). Intangible performance, such as branded product and customer trust, has been underrepresented in previous studies (Laosirihongthong, Adebajo & Choon Tan, 2013). Additionally, most studies focused on environmental and financial outcomes (Deng & Jiang, 2019; Feng, Yu, Wang, Wong, Xu & Xiao, 2018) due to the fact that businesses worry about the financial repercussions of taking a novel approach and the

importance of measuring environmental performance when gauging the effects of adopting "green" practises.

Green initiatives and firm outcomes have garnered scholarly interest in recent years due to their significance to company strategy, public policy, and financial viability (Ortas, Moneva, & Ivarez, 2014).

Businesses that adopt green practises, as argued by Dues, see greater lean success. By eradicating commodity harm to the environment, for example, green practices aim to improve ecological efficiency and lessen the risks to and effects on external context. Green methods save money by conserving resources and reducing waste (Dües, Tan, & Lim, 2013). Mitra and Datta argue that a A sustainable supply chain helps the firm and its suppliers financially (Mitra & Datta, 2014). By recycling or reusing previously sold products, companies have reaped financial and ecological benefits.

In their review of the literature, Laosirihongthong, Adebajo, and Tan found contradictory findings regarding the relationship between GSCM procedures and the effectiveness of organisations (Laosirihongthong, Adebajo & Choon Tan, 2013). While some research has found a positive correlation between environmentally responsible practises and company success, other studies have found no such correlation.

3.5 Conceptual Model

According to the analysed literature, a manufacturing company cannot succeed in bettering its ecosystem or its bottom line without implementing sustainable practises throughout its supply chain. Executives in manufacturing companies may be inspired to take action in favour of environmental sustainability if they see the value of green practises for their companies' bottom lines, and employees at all levels of the organisation may be more willing to work together on logistics and consumption if they see the benefits of doing so (Abdel-Baset, Chang & Gamal, 2019;Geng, Mansouri & Aktas, 2017).Thus, GSCM may drive ecological and economical results (see Figure). The study's findings are significant for understanding the links underlying Gscm and a dominating industrial giant in a growing government's another very extensively utilized outcome measures.

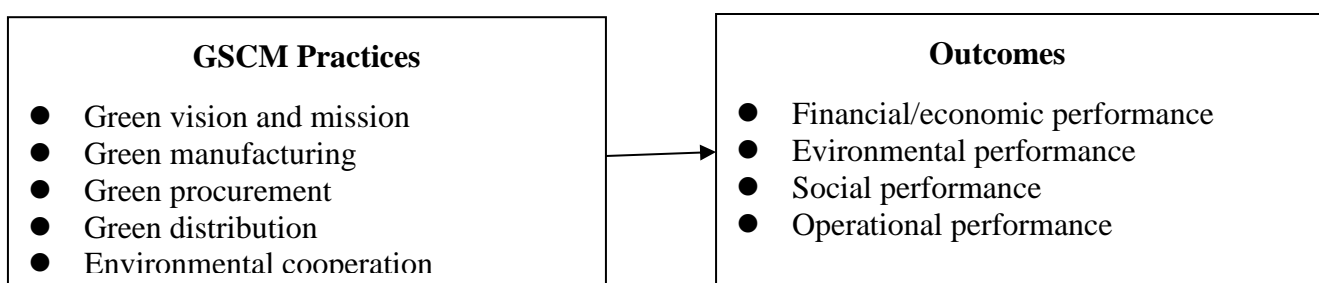


Figure 2: GSCM model and outcomes

4.0 Reviews finding

In line with the reviewed literature, a company's dedication may come from the upper echelons of management, the middle management, or the frontline workers. GSCM enthusiasm will decide commitment at top level.

It's interesting to note that prior research has shown that the dedication of a company's top executives significantly affects the results that can be anticipated (Oladirin & Ojo, 2022). The company's environmental vision and mission can be implemented because of the dedication of top executives. Dangote Group of Companies' (DGEC) dedication to the GSCM mission has earned them a slew of awards in recent years (Ojo, Adeniyi, Ogundimu & Alaba, 2022). When top-level executives at an organisation aren't on board with the environmental vision, it's doomed to fail. The reviewed literature supports the conclusion of Sheopuri and Sheopuri (2015), that green management initiatives become an important factor of achieving optimum productivity for organisations that place green practices at the core of their vision and mission.

The reviewed literature confirms the perspective of (Karuppiah, Sankaranarayanan, Ali, Chowdhury & Paul, 2020) that Small and medium enterprises have a hard time implementing green manufacturing. These problems can be traced back to insufficient R&D, poor eco-design, and a lack of accreditation. The literature also shows that the lack of necessary skills and financial resources makes it difficult to implement green manufacturing practises. Findings from the reviewed literature also show that a SME's social and environmentally performance improves after adopting GM practises, and that the SME's economic performance improves in the long run thanks to lower raw material and energy costs, which is in line with these same findings (Karuppiah, Sankaranarayanan, Ali, Chowdhury & Paul, 2020: Sezen & Cankaya, 2013).

The findings of the literature review uncovered prospective drivers of green manufacturing, including workforce needs, safety and wellness employer brand, improvement, economic gain, climate change, legislation, and strategic edge.

Consistent with the findings of Mojumder, Singh, Kumar, and Liu (2022), which found that government agencies, purchasing agents, suppliers, and clients were crucial to the success of green procurement, this study found that the efficiency, probability, and success of green procurement were determined by the cooperation of stakeholders.

Effective green procurement practices by organisations results to efficient financial and economic performance.

According to a literature review based on previous research, the advantages of green distribution for businesses include gains in productivity, savings, cost management, risk mitigation, service, market penetration, revenue, and reputation. Most of the recent studies that were reviewed for this article, however, failed to state whether or not green distribution practises improved firm competitiveness or increased market share. Nonetheless, it is clear from the results, and consistent with the work of Rizki and Augustine, that the capacity to develop new products gives businesses an advantage in the marketplace (2022). According to a literature review based on previous research, enterprises' economic and financial performances may suffer if stakeholders (organisations, clients, community) do not work together to improve the environment in which they operate. The studied literature suggests that most businesses employ CSR as a sustainability practices to boost environmental collaboration, which has a consequential effect on the business' social performance.

5.0 Recommendation

Recent years have seen a rise in interest in greener initiatives as a solution to various ecological and societal problems. Managers need to incorporate environmental effort into the supply chain to solve these problems. GSCM, an organisational concept that reduces environmental hazards and increases profit, market share, and ecological efficiency, should be adopted by companies.

6.0 Conclusion

As a direct result of increasing temperatures and altering ecosystems, businesses are under greater pressure than ever to enhance their environmental performance. Stakeholders also have a greater awareness of environmental issues, which puts pressure on firms to reduce the environmental impact of their activities. A significant portion of environmental damage is caused through corporate supply networks. It is imperative, then, that efforts to reduce pollution begin with the supply chain system.

7.0 References

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GENDER, STUDENT ATTITUDE AND ENTREPRENEURSHIP TRAINING: A SYSTEMATIC REVIEW

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ABSTRACT

It is a fact that entrepreneurship has important roles to play in any nation's socio-economic growth as it helps graduates to establish their own businesses thereby creating jobs rather than depend on governments and private establishments for employment. This explains why entrepreneurship training was held important among students in higher institutions globally. However, gender differences have been observed in the attitudes of students towards such education. This study is a systematic review that was done to examine available evidence about this relationship. The literature database used in this review was Scopus. The studies were narrowed down by applying a timeframe between 2012 and 2022 for studies included. The procedure of inclusion and exclusion was done using the PRISMA 2009 flow diagram. The results show a positive and significant relationship between the gender of students and attitudes towards entrepreneurship training as well as preferred skills for business enterprises.

Keywords: Gender, Attitude, Entrepreneurship, Polytechnic Students, Training, Self-employment.

INTRODUCTION

Unarguably, it would be an understatement to say that unemployment rate in Nigeria has not been on a continuous increase beginning from the past three decades. More worrisome is the fact that graduates of tertiary colleges who have been equipped managerial manpower that can enhance efficient service delivery are also finding it difficult to be gainfully employed. Specifically, Anah, Ezeji and Nwosu (2017) noted that graduate unemployment in Nigeria is traceable to the implementation of the Structural Adjustment Program (SAP) by President Ibrahim Babangida in 1996. However, Teshome (2014) observed that graduate unemployment is universal. According to him, across countries, it is becoming increasingly hard for college graduates to get employment in both public and private organizations due to global harsh economic conditions as a result of which governments of several countries have resorted to entrepreneurship training as a way of employment and wealth creation. Karim and Reddy (2014) found that many governments all over the world have developed entrepreneurship culture in order to facilitate economic growth, hasten development process and alleviate social challenges. In the opinion of Lokoko, Rankhumise and Ras (2012) the universal embracement of entrepreneurship education in higher institutions of education has become a necessary vehicle to self-employment and important ingredient of economic advancement. Notably, entrepreneurship plays an important role in socio-economic development as it stimulates employment opportunities.

ENTREPRENEURSHIP AND ENTREPRENEURSHIP EDUCATION

As a social construct, entrepreneurship may be explained in several ways. For instance, Mokaya, Namusonge and Sikalieh (2012) saw it as a personal motivation and readiness to take risk, create and maintain a growth-directional and profit-making venture. The Global Entrepreneurship Monitor A. (GEM, 2014) describe it as any effort to start a new business or making a new venture such as self-employment, a new business organization, or the expansion of an established business by an individual, a group of individuals, or a corporate body. This implies that entrepreneurship signifies an individual's determination to explore opportunities, develop strategic plans, possess

and demonstrate skillfulness, exert managerial expertise and self-reliantly set up a business enterprise.

According to Ariyo (2019), promotion of entrepreneurship has become a global phenomenon, especially in the third world countries where youth unemployment is mostly rampant. Trading Economics (2017) reported that youth unemployment rate in Nigeria rose to 33.10% in the third quarter of 2017 from 29.5% in the second quarter of the same year. In order to tackle this social problem, the Federal Government of Nigeria introduced entrepreneurship education into the course components of its tertiary institutions. The policy is meant to change tertiary education from theory-based system to practical and enterprise-driven arrangement so that students of such institutions will be equipped with entrepreneurship experience, proficiency and mindset to become independent employers of labour and wealth creators in order to enhance the socio-economic development of the country. To enhance the ease of implementation of the policy, every institution of higher learning was directed to set up Entrepreneurship Development and Skills Acquisition Centres (EDASAC) which are funded by Education Trust Fund (ETF). The sole objective of such centres was to expose students to entrepreneurship education.

Thus every student in higher institutions must undergo entrepreneurship instructions compulsorily irrespective of their discipline. Akpa (2008) describes entrepreneurship instruction as a coursework that intends to change students' attitudes and perception and to equip them with the qualities to plan, implement and reliably manage their own business investments. It is a form of training that instills into learners concepts, abilities and ideas of how to start a new business (Adiele, 2010), develop entrepreneurship mindset and enterprise behaviour (Hong, 2000); creates jobs (Adiele, 2010); and be responsive to their environments (Ilo, 2012) in order to control high rate of unemployment and ensure a functioning economy (Chukwuna & Ogbeide, 2017).

Ango and Kyari (2018) noted that entrepreneurship education as a form of strategy to curb socio-economic challenges such as unemployment, poverty, criminal activities and other underdevelopment indices, the Federal Government of Nigeria (FGN) institutionalized entrepreneurship education in all Nigerian higher institutions of learning and mandated all students of such schools to undergo such training. This is because students who have been exposed to such instructions developed positive attitudes and beliefs toward self-employment (Kumara, 2012) as 78% of such students studied in Ireland indicated willingness to start their own business upon the completion of their academic programmes (Hannon, 2009). In a similar study, Obisanya (2010) found the training stimulating and showed readiness to work for themselves after graduation. Thus, entrepreneurship education instills entrepreneurial enthusiasm and behaviour change in students after undergoing entrepreneurship lessons.

Beyond individual advancement Roxas Cayoca-Panzales (2008) explained that promoting entrepreneurial knowledge among students can boost a country's development and economic growth. According to GEM (2006), nearly one-third of the differences in economic growth among nations can be linked to difference in enterprise activity. This is because such skill has the potential and capacity to create employment opportunities (Mustapha & Salvaraju, 2015) and can also serve as a driver for economic growth productivity and social development (Derianyoh, 2015). This means it may be sufficient to say that engendering entrepreneurial culture among students of higher education will not only create national socio-economic benefits, it can also promote opportunity-oriented mindset of such students and as well enhance their intuitive ability, instincts, unique values, skills and positive attitude to life.

According to Sovitaris, Zerbinati and Andrea (2007), entrepreneurship education gives students know-how, skills and a sense of confidence that inspire their intuitive intentions towards

entrepreneurism. This is evident in a study that was conducted by Zain, Akran and Ghain (2010) where they discovered that more than 50% of students of their research subjects took the decision to become entrepreneurs after their exposure to entrepreneurship instruction. A similar study by Kabui and Maalu (2012) also revealed that nearly all students that undergo entrepreneurship lessons had the intention to engage in their own business in the future.

According to Iqbal, Melhem and Kokash (2012), when students are taught entrepreneurship education, they always believe that they had been given enough idea and skills to successfully commence their own businesses. Thus, entrepreneurship (Basu & Virik, 2008), increases the chances of self-employment and also enhances economic-reward as well as self-satisfaction of such students (Kanffman Foundation, 2000). Entrepreneurship education instills values, beliefs and attitudes that play important role in shaping students' attitude towards entrepreneurial dispositions. Solex-Borowska and Chudy-Laskwoska, (2017), observed that effective entrepreneurship training is expected to increase the likelihood that move students would become self-reliant and be more involved in entrepreneurial activity. This is because proper education equips students with the needed knowledge and skills required to prosper in working environments (Adroft, Dhaliwa & Willis, 2005) and also places them in a vantage position where some of them can become managers, business owners and career developers having possessed appropriate skills and practical guides through entrepreneurship education. However, some studies have found that personal attributes of students had effect on their attitudes towards entrepreneurism. For instance, Kirby(2004) averred that students characterized by extroversion are more inclined to entrepreneurship than their introverted counterparts. It was also established that a supportive school environment has a positive impact on students' attitude towards entrepreneurship (Sriram, Mersha & Herron, 2007) just as mentoring and enjoyment of successful entrepreneurs as guest speakers encourage more students to be indeed in entrepreneurship education (Bergh, Thorgren & Wincent, 2011). The aim of this study is to find out the extent to which gender influences students' attitude towards entrepreneurship training.

GENDER AND ENTREPRENEURSHIP EDUCATION

Turker and Selcuk (2008) have argued that in order to increase involvement in entrepreneurship activities and as well stimulate entrepreneurial intentions among students, lying factors affecting entrepreneurial inclinations must identified. Dabic and Dam (2012) noted that early focus of the studies on entrepreneurship was largely based on attributes such as self-confidence, risk-daring tendency and the drive for self-fulfillment but subsequently, ones have identified other factors such as socio-demographic variables like age, education, social status, parental influence and gender. For instance, Menzies and Tatroff (2008) observed that fewer females indicate penchant for entrepreneurship education compared to men. This is because women have lower self-efficiency levels in areas linked to business activity such as problem solving, money management, decision-taking, and qualitative abilities (Marlino & Wilson, 2003), have lower risk tolerance (Fernandez, Linan & Santos, 2009), insufficient female role models (Room & Harrison, 2010), and are less likely to be self-reliant (Mimti, Arenius & Langwtz, 2005) when compared to men.

An investigation that was conducted by Marlino and Wilson among middle and high school students in 2003 revealed that female adolescents perceived entrepreneurism as risky, stressful, complex and showing disinterest in being self-employed in contrast to young boys. A similar inquiry that was made among 15 European Union(EU) member countries and the United States of America (USA) by Grilo and irigoyen in 2005 also found that the chances of preference for self-employment is significantly lower when compared to men. These conclusions were corroborated

by Chinomona and Maziriri (2015) who reported that South African women entrepreneurs go through extensive challenges compared to businessmen. In the same way, Bandiera and Natraj (2013), observed that inequalities in accessing socio-economic and political opportunities existed between the genders with women having less prospects and property rights. According to them, such limitations impair females economic attitudes and performance making them susceptible to poverty and inadequacies. Ahang (2014) argued that such unequal and biased property laws is a reflection of patriarchal institutional arrangements. In an explanation of the variance in the motivational variable to entrepreneurship, Eddleston and Powell (2008) investigated how gender identity influences an individual's attraction to entrepreneurship and found that gender identity, which is a measurement of masculinity and femininity, functions as a cognitive mechanism that accounts for difference in business enterprise involvement among women and men.

In a comparative analysis of some selected students in a South African University and micro-business owners, Farrington, Ggray and Sharp (2012) established that males had greater entrepreneurial inclinations than females. Further, they detected considerable different gender-oriented perceptions about entrepreneurship between males and females which is, attributed to different reasons. For instance, it was discovered that in connection to their domestic responsibilities, women see entrepreneurship engagements as giving them the flexibility and independence to balance household and work commitments. According to Eagh and Koery, (2006), a probable reason for such gender divergence is embedded in the social role theory when claims that gender differentials influence the decision-making process and actions of men and women.

SOCIAL ROLE THEORY OF ENTREPRENEURSHIP

Social role theory portends that the social construction of gender results in gender role stereotypes (GRS) and gender role identity (GRI), (Wood & Eagly, 2012). As men and women fill and play different roles in society, their social characteristics and expectations from them also differ which leads to the development of gender role stereotypes (GRS) that are described as shared beliefs and opinions about the features associated with males and females. In other words, GRS provide information about the sorts of behaviours that are socially acceptable and expected from specific individuals and groups of people. Such social ideologies are internalized during socialization process facilitated by family, school, peers, media (social and mass), religion and other institutions that inspire and enthuse people to conform to social stipulations regarding gender role stereotypes. Abeke and Wojaszke (2007) identified two dimensions of GRS as agency and communism. Agency suggests the assertive and instrumental tendency that is commonly attributed to males while communism explains emotional and relational qualities that are mostly linked to females. Agency characteristics are exhibited in the form of dominance, assertiveness, self-determination and mastery whereas communal traits while more women than men are regarded as possessing communion features (Wood & Eagly, 2012). As individuals grow up, they become aware of the GRS in their social environments and gradually develop the tendency (sometimes subconsciously, or even consciously) to conform to the social regulations in line with the GRS (Gupta, Turban & Charie, 2008).

Gender role identity (GRI), which is the extent to which people accepts, adopts and develops their thoughts, behaviour, attitudes and career options based on the socially constructed expectations associated with GRS forms along the line of masculinity or femininity (Zakkariya, 2018). Masculinity describes the degree to which a person possesses attributes attached to male GRS and agency traits while femininity indicates the extent to which someone has characteristics linked to

female GRS and communion features (Eddleston & Powell, 2008). Universally, males are brought up to internalize and adopt qualities that demote masculinity whereas females are socialized to learn and develop those attributes that depict femininity (Zampetakis, et.al, 2016).

The standpoint of the social role theory (SRT) is that subjective social expectations often play important role in the entrepreneurial learning of women. In an investigation of the influence of GRI on people's intention of business involvement, Zampetakis et.al (2016) revealed a positive correlation between GRI and entrepreneurial intent. In other words, masculinity and femininity significantly facilitated the impact of the investor's sex on the intentions of business growth. Another study that was conducted by Mueller and Conway Date-on (2013) to examine the effects of biological sex, GRI and cultural expectations on entrepreneurial self-efficiency concluded that GRI had a notable impact on entrepreneurial self-efficiency than biological sex.

STATEMENT OF PROBLEM

Evidently, Nigeria is among the underdeveloped countries globally in terms of social and economic measurements. This has resulted to a lot of socio-economic problems that have worsened the condition of the country further. Examples of such adverse effects are youth unemployment, insecurity, overpopulation, mass unemployment and so on. Considering the value of entrepreneurship in socio-economic development, the Federal Government made concerted efforts and programmes encouraging g young adults to engage in innovative and wealth creation plans via various entrepreneurship activities. In all of the country's tertiary institutions, entrepreneurship programmes and education were set up.

Unarguably, certain factors will influence the realization of that policy, for example, classroom environment, teacher's competence, gender and attitude of students. Consequently, this study intends to analyze how students gender might influence their attitude to entrepreneurship education in order to reinforce the opinion and behaviour of potential entrepreneurs. More importantly, understanding the constraints and attitudes of learners may be helpful in constructing effective policy that will encourage entrepreneurship. To achieve the aim of this study two research questions were raised and answered. They are:

- 1) Are there gender differences in students' attitude towards entrepreneurship training?
- 2) To what extent does the entrepreneurship training acquired by Nigerian students in higher institutions of learning influence their preference for self-employment?

METHODOLOGY

Participants

This investigation was conducted at the Federal Polytechnic, Ilaro in Ogun State, Nigeria. A total of 315 students (150 males and 165 females) of the school of Management and Engineering were involved in the study. All of them are in the final year of the Higher National Diploma program (HND II) and their age ranged between 19 and 24 (M=20.3) using the stratified random sampling, the sample was representative of the entire departments of the two schools. Out of the 315 students, 295 completed the questionnaire making a response rate of 93.7%. permission was obtained from the Management of the school and the intention of the investigation was explained to the students before questionnaire were administered on them. Students in HND II were selected for this study because it is the opinion of this researcher that such students are in the decisive stages of their career.

Procedure

A total of nine classes were engaged in filling the questionnaires and each session lasted approximately thirty minutes. The classes were visited at different times during their

entrepreneurship training sessions. After the purpose of the study was explained to them, the students were instructed to indicate if they were willing to participate in the exercise and once a student signifies his/her willingness, a questionnaire is given to him/her. Detail instructions were given to them in order to be sure that they understood how to provide their answers and as they filled the questionnaires, the researcher walked round the classrooms so as to be sure that appropriate answers were provided.

Instrument

A valid and reliable questionnaire was developed to collect useful information from the students. The questionnaire which consists of 32 items was divided into three sections. The first section asked respondents about their demographic characteristics such as age, current academic status, gender, and religion. The second and third sections were formed based on four dimensions of measuring attitudes towards entrepreneurship training which include: (1) entrepreneurial intention (Linan & Chem, 2009), (2) attitude towards entrepreneurship (Linan & Chem, 2009), (3) subjective norms (Ndofirepi, 2016), and (4) perceived behavioural control (Forbes, 2005). The Chronbach's Coefficient alpha that was computed to determine the reliability of the items of the scales were 0.89, 0.75, 0.79, and 0.52 for entrepreneurial intention scale, attitudes towards entrepreneurship scale, subjective norms scale, and perceived behavioural control scale respectively. This shows that all of the instruments are very reliable.

Responses were fashioned in Likert type scale format that ranged from strongly agree to strongly disagree. Each respondent is expected to mark (v) either of the response format (as appropriate) for each statement. This allowed the responses to be categorized and analyzed statistically using SPSS V21.

After the questionnaire was developed, a pilot study was organized to validate its precision. This was needed to improve the instrument and consequently, three items were deleted while another four were rephrased to ensure comprehension and unambiguity.

DATA ANALYSIS

As stated earlier, SPSS V.21 was used to analyze the data that were obtained for this study. This means that reliability analysis and t-test were determined using SPSS statistical package. The level of significance was set at 0.05.

DISCUSSION, CONCLUSION AND RECOMMENDATION

This study investigated entrepreneurial intention, attitude towards entrepreneurship, subjective norms and perceived behavioural control as predictors of students' inclination towards entrepreneurship training.

The result shows that gender is an important index of entrepreneurial intention as significant differences were observed in the responses of the students. In all identified areas, the mean responses of male students are higher than that of the female students of the Polytechnic, which means that TVET-oriented students are more likely to utilize the knowledge and they have obtained from their entrepreneurship classes than the female students. This finding is in line with the submissions of Ndofirepi, Ranibe and Dzansie (2018), Solek-Borowska and Chudy-Laskowska (2017), Dabic et.al (2012), which found that more male than female students are willing to set up their own business after completing their academic program. According to Ndofirepi and Ranibe (2018), the discrepancy in the attitudes of male and female attitudes to entrepreneurial education may be due to the common way of perceiving entrepreneurship as a masculine pursuit which makes more males than females intend to take innovative risks.

It was also revealed that academic choice of students academic field does not make them feel differently towards entrepreneurship education. In other words, there is no any variance in the

assessment of entrepreneurship education by Polytechnic students based on their academic programs. This means that the education authorities have been able to stress the importance of entrepreneurial education as a crucial tool for gaining vocational expertise in all scientific and technical realities and suppositions.

Inability of this study to detect a considerable difference in the students' perception about entrepreneurship training may be as a result of the fact that students in other related schools such as Universities pursuing medical and science based courses were not involved in the study which is a major weakness this study. For instance, Dutse, Mamaki and Djibo (2019) who argued that Polytechnic students are noted to be very committed and versed in entrepreneurship education because of the practical skills they obtained from the technical and vocational education and training (TVET) and more so, their National Diploma (ND) program already prepared them for middle manpower expertise

Although any significant variance was not observed in the respondents opinion despite their different course of study, however, it is suggested that all curriculums of academic programs must be designed in such a way that they will emphasize the core objectives of entrepreneurship.

Further, since gender variables were observed in the students attitudes and intentions toward entrepreneurship, it is recommended that methods and approaches of delivering entrepreneurship instructions should be designed in a way that gender-neutrality will be ensured. For instance, programs and activities that will change gender role stereotype should be designed and emphasized in traditional and educational institutions.

Involvement of African rural women in the production of chicken and eggs for income generation

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Abstract

In the rural areas of most developing countries of Africa, women play major roles of home keepers, bearing and rearing children, such that, every sector of the family requires the service of a woman most especially in the preparation of family menu in the kitchen. The ability of the households to obtain animal protein food both in quality and quantity to meet the family member food nutritional requirements is laid mostly on the rural women in Africa, which is the main reason for women's involvement in chicken production to guarantee family-sustenance. Chicken and egg consumption constitute the primary purpose for extensive chicken rearing, sales of live adult chicken and eggs as a source of income are never intended by rural women as a primary purpose of their involvement in chicken production. Challenges such as poverty, lack and low level of education, multiple roles, exclusion from property inheritance, high maternal mortality, and insufficient funds are faced by African women involved in rural chicken production. A shift from the traditional ways of chicken production just for family consumption to intensive smallholder chicken production has the

potentials of empowering women to escape from poverty and hunger by increasing women's income-earning ability and strengthening women's bargaining power.

Keywords: African women; Chicken production; Income generation; Smallholder

Introduction

The concept of woman and home are synonymous as home cannot be built without a woman. A woman's role in the family context is complementary to that of a man in the economic wellbeing of the family, she plans and prepare daily meal for the family. Women are different from men because of their natural roles and physiology (Szameitat *et al.*, 2015). Women possess less muscles and strength when compared to men and they are naturally designed to incubate the young ones. In the rural areas women play major roles of home keepers, bearing and rearing children, while the men assume headship of the family, protecting and providing welfare for the family. But men's responsibility has since been taken over by women in most traditional African communities. Women are saddled with the responsibility of maintaining and achieving the wellbeing of individual members of the family (Evans *et al.*, 2016), which is the reason why every sector of the rural family requires the service of a woman most especially in the preparation of family menu (De Backer & Hudders 2016). African women who have nothing doing for a living to meet up with all the responsibilities will gradually slide into poverty and hunger. Poverty is a situation in which a person or group of persons are not able to meet their basic and elementary requirements for human survival in terms of food, clothing, shelter, health, transport, education and recreation (LeVine & White 2017).

Poverty is also a condition in which income is insufficient to meet subsistence needs of an individual or a family, poverty contribute to social problems like malnourishment, diseases, death, youth restiveness, terrorism, banditry, armed robbery, drug trafficking, human trafficking, broken families and prostitution among others. The effects of poverty on women can take on immeasurable proportions (Unterhalter 2017). Women have long standing discrimination and economic disadvantages in the developing countries. Women have fewer personal assets to rely on during economic crises. Women do not have landed property (Aluko 2015). Women are disproportionately poorer than men and mainly responsible for managing the household and caring for family members. Women guarantee livelihoods, especially in rural areas (Taremwa *et al.*, 2016). As a result of their great efforts in agricultural production particularly in indigenous chicken production, women's production helps to guarantee family-sustenance (Alabi *et al.*, 2020). The ability of the households to obtain animal protein food both in quality and quantity to meet the family member food nutritional requirements is laid mostly on the women.

Role of Rural Women in Poverty Alleviation through Indigenous Chicken Production

African women occupy an enviable position when it comes to farming, women are involved in virtually all agricultural activities which range from on-farm to post harvest activities (Egziabher 2014). They have been making substantial contribution to all agricultural activities and in most cases have responsibilities for production, processing and distribution of agricultural produce. They have also been observed to provide cheap agricultural labour. Economically, women dominate in the informal non-waged unskilled and drudgery technique-based labour force sector. Women constitute 70 -80% of the rural agricultural labour force (Agarwal 2020; Ankrah *et al.*, 2020), yet they have limited access and control over land, they have no access to credit and agricultural inputs and never involved in decision making process. Engagement in indigenous poultry production activities provides means of livelihood to a large cross section of rural women

(Ngongolo *et al.*, 2021). The supply of animal protein for every household is very important as the population increases every day in the developing countries. Poultry is one of the major sources of animal protein and is generally accepted worldwide. Poultry production is the fastest growing component of global meat production (Sharaunga *et al.*, 2014).

Rural chicken production is extensive and dominated by indigenous chickens that exhibit remarkable adaptation to local environment; these indigenous chickens are prevalent in the rural areas because it is central to the livelihood of rural populace (Sati *et al.*, 2022). Small holder poultry production is practiced by most rural women throughout the developing world. Indigenous chicken is considered as valuable asset for rural household and has contributed significantly to food security for the household. This because, poultry mainly provides meat and eggs (Miranda *et al.*, 2015) which increase households' consumption of animal sourced food. Moreover, the contribution of poultry to food security can be related with income from sales of poultry and poultry products, which are often used for purchase of addition food items necessary for the household from the market. Many of the rural women keep chicken for multiple purposes and objectives. Meat consumption and egg consumption constitute the primary purpose for extensive chicken rearing and other objectives for keeping chicken by the rural women include socio-cultural obligation in marriages and festivals (Ye *et al.*, 2016). Sales of live adult chicken and eggs as source of income are never intended by rural women involved in chicken production.

Major Challenges faced by Women Involved in Rural Chicken Production

Poverty – poverty has remained one of the key indices that make Africa women remain backward, women and girls are often exposed to greater risk of violence in times of hardship from poor standard of living and so women will prefer to feed the family and not to feed chickens because of poverty (Alders *et al.*, 2018; Griffin 2018).

Lack and low level of education – education for girl child in the rural communities may be seen as luxury when family resource becomes scarce (Jewitt and Ryley 2014). When the household income declines, girls are more likely to be withdrawn from school and married to men that are old enough to be their father and after marriage they take on more menial work responsibilities to get money, hence the educational gender gap in poor countries are widen as girls are pulled out of school as households strive to cope with declining household income. Education is important for skill acquisition; improved skills levels lead to improved productivity. Due to lack of education, it becomes difficult for women to access credit facilities and other agencies that are relevant to entrepreneurship development (Andriamahery & Qamruzzaman 2022).

Multiple roles – rural women involved in chicken production finds it difficult to balance production work with family. Production of chicken for income generation is considered secondary, since they have to play the multiple roles as wife, mother, home-teacher, daughter-in-law and daughter of a family (Mujiyambere *et al.*, 2022) they do not have enough time to develop themselves so they are left with less time for increased chicken production.

Exclusion in property inheritance – in most African societies men are the main owners of land (Akinola 2018; Botreau & Cohen 2020). Private land is mainly inherited by sons and not daughters; hence, insecurity of women's land ownership is one of the most serious obstacles to increased productivity and income of rural women (Doss & Meinzen-Dick 2020). The financial institutions often demand for landed properties as collateral for loan which legally put women at a disadvantage.

High maternal mortality – one of the problems confronting developing and underdeveloped countries globally are high maternal mortality. Several risk factors have been identified to

contribute to maternal mortality which includes maternal age, illiteracy, demographic pressure, poor access road, non-utilization of antenatal services and poverty. Poverty as one of the major factors influencing maternal mortality is compounded by the economic down turn which has manifested in high food prices, low medical care, increased pregnancy risks, communal clash and poor sanitation; resulting in high maternal death (Azuh *et al.*, 2017; Cardona *et al.*, 2022).

Insufficient fund – A large amount of unpaid work is undertaken by women in family chicken production, rural African women lack sufficient economic resources (Alemayehu *et al.*, 2018) that will enable them to articulate their needs and interests and organize themselves into strong chicken farmers. In general rule, men have easier access to government provided credit than women. Women are rarely considered creditworthy because they have no collateral. Lack of flow of fund in the rural areas has always hampered increased productivity of indigenous chickens; most of the women cannot bear the cost of feeding (Padhi 2016) and vaccinating the chickens hence the engagement of the extensive system of production where the birds are left alone to scavenge for food themselves.

Rural Women's Involvement in Intensive Smallholder Chicken Production

Sustainable intensification of smallholder farming is a serious option for satisfying global animal protein requirements and alleviating persistent poverty. Intensive smallholder chicken production is a system of management where technology-driven production process such as provision of housing, complete feed, drugs and vaccination for improved breeds of chicken are largely been employed with increased productivity such as increased egg production, increased weight gain and increased survivability. The intensive smallholder chicken farmer has above 200 chickens per time under production. The rural chicken production is done under the extensive system of production, where the farmer keeps less than 50 birds per time of production. Extensive system is based on traditional animal agricultural activities that are predominately restricted to risk, uncertainty, predatory, theft and low productivity from impoverishment factors of production (Bjornlund *et al.*, 2020). Intensive smallholder chicken production has potentials of making women escape from poverty and consequently relieve hunger by increasing income earning and strengthening women's bargaining power.

Income generation – owing to the marriage tradition practiced in African communities, women are considered fit for full time housewives, who should not seek any form of economic wellbeing and that is why rural chicken production is never considered for income by rural women but for family consumption. However, it can be source of income on daily, weekly and monthly basis when the production is intensively done resulting in sales of chicken and chicken products such as egg. Income generation is a factor used to determine the socio-economic position of women as it greatly influences their status and well-being. Increasing women's income through improved chicken production would therefore increase their status and improves the welfare of household members particularly children's nutritional status and school attendance (Pius *et al.*, 2021).

Decision- making and empowerment – Women are often excluded from the development process mostly in decision making and are apparently marginalized from taking part in issues that concerns community and household. Women hold key role in the family affairs and they can greatly influence decisions related to family members and the community. Involvement in intensive smallholder chicken production will help to empower women to become independently self-employed, confident with greater self-esteem and even employers of unemployed persons within the community (Brownlee 2018). Women empowerment can help to maximise opportunities for women to explore and exert their influence to achieve significant results in their lives and others.

Conclusion

The involvement of rural African women in intensive chicken production can generate income and empower women beyond preparation, cooking and feeding chickens to the households.

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EFFECT OF OWNERSHIP STRUCTURE ON FINANCIAL PERFORMANCE OF QUOTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

The research study examined the effect of ownership structure on financial performance of quoted manufacturing firms in Nigeria within the period of 2010-2020. Survey research design was used and secondary data was sourced from annual financial reports of the quoted manufacturing firms based on managerial ownership, institutional ownership and ownership concentration. of quoted manufacturing firms in Nigeria. Regression analyses were adopted to test the secondary data extracted. It was observed that there was significant effect of managerial ownership on financial performance of quoted manufacturing firms in Nigeria, institutional ownership has significant effect on financial performance of quoted manufacturing firms in Nigeria and also ownership concentration has significant effect on financial performance of quoted manufacturing firms in Nigeria. It was recommended that there is need for corporate entities quoted on the Nigerian Stock Exchange to have effective ownership structures. There is need to re-examine the criteria used in the selection of directors in the companies, to ensure that corporate boards are more independent, to ensure that the board is well diversified in terms of age, gender and ethnic groupings and there is appropriate board size. All these will reduce the incidence of poor performance and will ensure that directors are accountable to the shareholders with a ripple effect of improving investor returns.

Keywords: Corporate Ownership Structure, Financial Performance, Quoted Manufacturing Firms, Institutional Ownership, Independent Board.

1 Introduction

Ownership structure and firm's financial performance have been a subject of importance in corporate finance literature. The effects of ownership forms on financial performance of firms have been of particular research interest in the literature of corporate finance. Often times, the interest of managers and shareholders are usually not aligned, which results to problems that reduce firm's value as well as financial performance (Tatiana & Stela, 2018). Shareholders are always regarded as the corporate owners, while directors are agents or representatives of shareholders who are supposed to allocate business resources in a way to increase their wealth (Benjamin, Love & Kabiru, 2018). The owner-managers are more efficient than non-owner managers firms because owner-managers have stakes in the firm while non-owner managers firms

are less efficient because the non-owner managers seek after their own personal interests at the expense of other shareholders and the organization at large (Beni & Alexander, 2019). The issues of managerial ownership are two opposing views: incentive and entrenchment effect (Beyer, Czarnitzki & Kraft, 2016). From the point of view of incentive effect, managerial ownership is supposed to have a positive relationship with firm financial performance because of the remuneration attached to manager's performance. On the other hand, entrenchment effect is a situation where the manager is powerful enough to use the discretion, which usually leads to protecting the interests rather than pursuing the goals of institutional owners and concentration owners (Beyer, Czarnitzki & Kraft, 2016).

The relationship between managerial ownership and firm financial performance can be described in two ways. First, managers who own shares in the company will perform better than non-manager owners who will seek after their personal benefits without taking into consideration the concentration and institutional owners. Secondly as managers', equity ownership further increases the efficiency of the managers because they are involved in the day to day activities of the company and this involvement will in turn increase the financial performance of the company (Tatiana & Stela, 2018). The relationship between institutional ownership and firm financial performance is that institutional owners have greater incentive to monitor managers because of the substantial amount of shares invested by them in the company. Also, large institutional owners have the opportunity, resources and ability to monitor, discipline and influence managers. This corporate monitoring by institutional owners can result in managers focusing more on corporate performance and less on opportunistic or self-serving behavior (Edmans & Manso 2020).

Hence, ownership concentration is related to firm financial performance due to the fact that traditional theories argued that when ownership of a firm is concentrated in the hand of large shareholders, they have incentive to monitor the managers' action through direct intervention to reduce agency problem (Chen & Swan, 2020). In addition, in the studies of diversification strategy, it was found that ownership concentration enhance corporate diversification and performance of a firm because it constitute the largest investment in a corporate firm (Genc & Angelo 2017). Based on previous literatures, it is observed that various forms of ownership structure have impacted on the financial performance of firms. However, the study chooses to focus on whether the form of ownership structures have significant impact on financial performance of quoted manufacturing firms and to consider how desirable such impacts are, if they exist. Financial performance has been a question of interest for both researchers and practitioners. In accounting and finance literature, it has been widely accepted that the ultimate goal of a firm is to maximize shareholders' wealth, which can be reflected in stock price. Meanwhile, financial performance significantly affects the value of stock and returns of an entity, especially in the long term (Henry & Zheng, 2017). On the other hand, from a macroeconomics perspective, financial performance reflects firms' efficiency in

utilizing scarce resources to produce output. Thus, sustainable high-performing firms are desirable as they can attract new investments, as well as reflect a healthy economy in general (Beni & Alexander, 2019). As a result, factors affecting financial performance have long been sought by researchers. Among these factors, ownership structure is specified in the literature as a possible alternative. There are three determinants of firms' financial performance. The first is associated with external factors that are beyond the control of the firms. The second refers to factors that are internal and under the direct purview of the firms. These constitute managerial efficiency, governance structure and ownership structure among others that affect the ability of the firms to cope with external factors. Lastly, the other factors that affect firms' financial performance are firm size, leverage, and the type of industry (Kechi, 2021). There are several studies conducted on ownership structure and firms financial performance in developed economies like the United States, Taiwan, Russia, and France. Some of the studies are Harold and Belen (2016), Wang (2018), Pavel and Alexander (2016) and Eric (2016). Harold and Belen (2016). Wang (2018) showed that managerial ownership had a negative relationship with financial performance of firms and a positive relationship exist between institutional ownership and financial performance of firms. Pavel and Alexander (2016) found out that the association between ownership by different groups of owners' ownership concentration, state ownership and firm's financial performance was relatively weak. Eric (2016) found out that there was no significant difference between type of ownership and financial performance. The results in the above studies have shown mixed findings and these differences could be attributed to difference in economic structure of the countries studied as well as firms characteristics. In addition, most of these foreign studies used different industries as their domain. Thus, it was on these note the study was undertaken.

The main objective of the study is to determine the effect of ownership structure on financial performance of quoted manufacturing firms in Nigeria. The specific objectives are to: Determine the impact of managerial ownership on financial performance of quoted manufacturing firms in Nigeria; Determine the impact of institutional ownership on financial performance of quoted manufacturing firms in Nigeria and determine the impact of ownership concentration on financial performance of quoted manufacturing firms in Nigeria.

Literature Review

Concept of Corporate Ownership Structure

Corporate Ownership structure is seen as the classes or group of owners that exercise control over activities of a firm. Various scholars have different definition for ownership structure. According to Demstz and Lehn (2020), ownership structure is regarded as the fraction of shares owned by a firm's most significant shareholders, with much attention given to the fraction owned by the five largest shareholders. Demstz and

Lehn (2020) also saw ownership structure as the fraction of shares owned by firm's management, which include shares owned by members of the corporate board, chief executive officer (CEO) and top management. In the works of Chiara (2017) viewed ownership structure as a combination of concentrated ownership and large stockholdings by institutional owners for productivity. Ram and Camela (2018) defined ownership structure as directors' equity which could be summed up as the percentage stake owned by beneficiary and non-beneficiary directors.. Demstz and Belen (2020) viewed Ownership structure as the combination of the fraction of shares owned by important shareholding families and the fractions owned by management. This definition puts into perspective the issue of family ownership in conjunction with organizational ownership. Pavel and Alexander (2016) viewed Ownership structure as the composition of percentage of voting shares in the hands of the top three shareholders without drawing distinction between state-controlled holdings and percentage of voting shares in the hands of the top three private investors. Wang (2018) viewed Ownership structure as the combination of three different groups of ownership namely; managers, control group and institutional investors. Sahut and Gharbi (2020) viewed Ownership structure as the combination of ownership concentration, managerial ownership and institutional ownership. Alipour and Amjadi (2016) defined ownership structure as the composition of the biggest five shareholders, which includes a combination of institutional shareholders, individual and managerial shareholders. Shah, Safdar and Mohammad (2016) saw Ownership structure as the percentage of shares held by Directors. Khalil, Syed and Zahid, (2017) viewed Ownership structure as the composition of managerial ownership and concentrated ownership. However, the basic composition of ownership structure studied by this work is a combination of managerial, institutional and ownership concentration,

Concept of Firms' Financial Performance

Firm financial performance is used to describe the state of affairs of a firm. In analyzing a firm financial performance, emphasis should be made in formulating an adequate description of the concept of a firm's financial performance which uncovers the different dimensions upon which firm's financial performance should be evaluated. In terms of measurement, several scholars measures firm financial performance differently. Demstz and Lehn (2016) measured firm financial performance as accounting profit rate. Uadiale (2020) measured firm performance by Return on Equity as the proportion of profit after tax to Issued share capital and Return on Capital Employed as the proportion of profit after tax to issued share capital plus reserves. Kechi (2016) measured firm financial performance by Return on Asset (ROA) and Profit Margin (PM). Fazlzadeh (2016) measured firm financial performance as the Net Income to total assets and ordinary

income to total assets. Uwaloma and Olamide (2017) measured firm financial performance as Return on Asset (ROA). For the purpose of this study, firm financial performance is defined as Return on Equity measured by the proportion of profit after tax to total shareholders' equity at book value.

Empirical Review

There are several studies conducted on corporate ownership structure and firm performance in developed and developing countries. These include that of Beni and Alexander (2019) which examined the effect of ownership structure on firm's financial performance. They studied the relative differences among family controlled firms, firms controlled by partnerships of individuals, concern controlled firms, and firms where block holders have less than 50%. The samples of 280 Israeli firms were used and Data Envelopment Analysis technique was used in analyzing the work. The findings of their study showed that owner manager firms are less efficient in generating net income compared to firms managed by a professional (non-owner) manager, and that family firms run by their owners perform (relatively) the worst. They recommended that modern form of business organization should open corporation with disperse ownership and non-owner managers to promotes firm financial performance.

Wang (2018) examined the relationship between ownership structure and firm's financial performance in Taiwan. The study classified ownership into three categories (managerial owners, institutional owners and the control group) for listed manufacturing firms in Taiwan. Using piecewise and the Granger causality to test relationships between ownership structure and firm's financial performance, the findings showed that a positive relationship exist between institutional ownership and firm's financial performance and a negative relationship exist between managerial ownership and firm financial performance.

John, Jacob and Daniel (2018) examined the link between ownership structure and firm's financial performance in Sweden. The study period was 1999-2003 consisting of 87 firms. Five specific research questions were applied to explore the relationships between the vote fraction held by controlling owner/owners and financial performance and vote differentiation and financial performance. The results of their finding indicate that companies with a dispersed ownership structure, meaning the largest owner holds less than 20% of total votes, were associated with worse financial performance.

Kapopoulos and Lazaretou (2016) examined the impact of corporate ownership structure and Firm's financial Performance of Firms in Greece. Their study investigated whether there is strong evidence to support the notion that variations across firms in observed ownership structures result in systematic variations in observed firm's financial performance. 175 Greece listed firms were used as sample for the study. Following Demsetz and Villalonga (2016), they modelled ownership structure, as an endogenous variable and considered two different measures of ownership structure reflecting different groups of shareholders with conflicting interests. Their findings showed that a more concentrated ownership structure

positively relates to higher firm profitability and a higher firm profitability requires a less diffused ownership.

Francis and Ogbulu (2017) investigated to find out whether the ownership structure of Nigerian firms results in systematic variations in their financial performance. The population of their study consisted of companies quoted on the Nigerian stock exchange as at 31st December, 2006, while their sample size was chosen based on the criterion of companies whose data required were available. They used cross sectional survey research design and purposive sampling technique to select their sample size. Their findings showed a negative significant relationship between insider (managerial) ownership and firm's financial performance and a significant positive relationship between outsider (institutional) ownership and firm performance. Kim and Park (2016) examined the relationship between the ownership structure of firms and their export performance in Korea. Their study used unbalanced panel data that consist of annual time-series data for 463 Korean manufacturing firms during 1994-2005, with a total of 5,557 observations. The sample covered all manufacturing firms quoted on the Korean Stock Exchange. The main contribution of their study is to help remedy this serious gap in the empirical literature on ownership and performance. Their findings indicated that Korean firms with more concentrated ownership are more effective.

Alipour and Amjadi (2016) examined the effect of ownership structure on corporate financial performance of listed companies in Iran. Their study hypotheses were based on the type of relationship between ownership structure and corporate performance. To test each hypothesis, four models were used on dependent variables. The sample consisted of 68 companies from 2006 to 2020. The data being panel in nature their findings indicated a significant negative relationship between ownership with biggest shareholder and firm performance, a positive significant relationship between ownership of five greater shareholders and firm's financial performance while a significant negative relationship exist among ownership of institutional shareholders, ownership of managerial shareholders and ownership of individual shareholders.

Eric (2016) examined the relationship between ownership structure and corporate governance and its effects on financial Performance in Kenya. Survey design was employed along side with Stratified sampling to select the sample of the study. The Descriptive ways of Statistical Package for Social Sciences (SPSS) were used to analyze the data into frequencies and percentages. One-way Analysis of Variance (ANOVA) was used to test the hypotheses. His study recommended that corporate entities should promote corporate governance to send a positive signal to potential investors, Central Bank of Kenya (CBK) should continue enforcing and encouraging firms to adhere to good corporate governance for efficiency and effectiveness of financial Institutions and finally, regulatory agencies including the government should promote and socialize corporate governance and its relationship to firm financial performance across industries.

Shah (2016) examined the relationship between ownership structure and performance of the listed companies in Asia. Marris Ratio was used to represent Performance of the firms and Tobin's Q represented the market based measures of companies' performance whereas Return on Equity and Return on Investment captured the financial reporting perspective. Percentage of shares held by the Board of Directors was used as the proxy for ownership structure. Sample was divided into three groups by using Cluster analysis. Chi square test for homogeneity provided that the groups were significantly different. Their findings showed that companies with concentrated ownership at Board showed weak financial performance whereas the companies with independent Board performed better.

Ioraver and Wilson (2016) examined the relationship between ownership structure and financial performance of listed companies in Nigeria. The sample of their study consisted of 73 companies listed on the Nigerian Stock Exchange covering the period of 2001 to 2007. They used Ordinary Least Squares (OLS) for their analysis. The results of their study showed that dominant shareholding, concentrated ownership, and foreign ownership structures have no significant effect on firm financial performance while insider ownership was inversely related to firm financial performance. Wahla (2017) analyzed the relationship of ownership structure and firm financial Performance in listed non-financial companies in Pakistan for the period of 2008 to 2020. Ownership structure was represented by managerial ownership and ownership concentration and Tobin's Q was used as a proxy for firm performance. The findings of the study showed that managerial ownership has a significant negative relationship with firm financial performance; while ownership concentration showed insignificant relationship with firm financial Performance.

Methodology

The study adopts ex-post facto research design to examined corporate ownership structure and financial performance of quoted manufacturing firms in Nigeria. The study use secondary data on the economic variables of firm growth proxy on productivity, profitability and instrument growth from the annual published financial statements of the five selected quoted manufacturing companies on the Nigerian stock exchange as at 31st December 2020. The annual reports of the Securities and Exchange Commission and the website of the sampled listed manufacturing firms. The population of the study consists of all the fifty four (54) quoted manufacturing firm in the Nigerian stock exchange as at 31st December 2020. The quoted manufacturing firms are categorized into five (5) sectors as stated in the Nigerian stock exchange of 31st December 2020. The sample size covered five (5) selected quoted manufacturing firms in Nigeria, information on the indicators of the variable were drawn covering the period of 10years from the year 2010 – 2020 with the adoption of purposive sampling of non-probability sampling technique. The researcher extracted data from the annual reports of the quoted manufacturing firms in Nigeria on managerial

ownership, institutional ownership, ownership concentration and financial performance from the year 2010 – 2020. The reliability of the research instrument was determined using the Cronbach’s Alpha and it was found reliable at coefficient value of .718. The procedure for analyzing the data was econometric procedure. Here the technique used was multiple regression analysis to test whether the corporate ownership structure indices have effects on the financial performance in Nigeria. The types of multivariate models are vector autoregressive (VAR) model and vector error correction (VEC) model, The functional specification is shown thus:

By Linearization:

$$\ln FP_{it} = \beta_0_{it} + \beta_1 CO_{1it} + \beta_2 IO_{it} + \beta_3 OC_{it} + U_{1it}$$

To account for heterogeneity

$$\ln FP_t = \beta_0_{it} + \beta_1 CO_{1it} + \beta_2 IO_{it} + \beta_3 OC_{it} + U_{1it}$$

where;

FP= Financial Performance

MO = Managerial Ownership

IO = Institutional Ownership

OC = Ownership Concentration

μ = Error Term

A Priori expectation: $\beta_1, \beta_2, \beta_3 > 0$.

Data Presentation, Analysis and Discussion

This S was based on the analysis of data sourced from the annual financial report of the quoted manufacturing firms of the Nigerian stock exchange on managerial ownership, institutional ownership, ownership concentration and financial performance from 2010-2020. Statistical tool of regression was adopted using Statistical Packages for Social Sciences (SPSS) to analyze the secondary data extracted from the annual financial report of the quoted manufacturing firm’s statistical bulletin from (2010-2020) while the result and the interpretation are given below.

Hypothesis One

HO₁: Managerial ownership has no significant impact on financial performance of quoted manufacturing firms in Nigeria.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.387 ^a	.377	.139	.37313	.128	47.992	1	382	.000	1.719

Source: Researchers Computation (2020)

a. Predictors: (Constant), Managerial ownership

b. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.618	.103		9.3285	.000
	Managerial ownership	.572	.059	.389	7.442	.000

Source: Researchers Computation (2020)

a. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

Interpretation

The analysis for the coefficient of the variables depicted that a unit increase in managerial ownership will lead to increase in financial performance of quoted manufacturing firms in Nigeria by .572. Indeed, the R-square value .377 depicted that 38% of the factors put under consideration were responsible for financial performance of quoted manufacturing firms in Nigeria while other factors not considered among the variables were responsible for the remaining percentage. Thus, managerial ownership contributed to financial performance of quoted manufacturing firms in Nigeria at beta value of .572 and t-value of 7.442. More so, the Durbin Watson value is 1.719, meaning that there is presence of auto correlation. The statistical test of significance of the model estimates is by employing the simple regression analysis at five per cent significance level. It was revealed from the analysis that managerial ownership has significant effect on financial performance of quoted manufacturing firms in Nigeria.

Hypothesis Two

HO₂: Institutional ownership has no significant impact on financial performance of quoted manufacturing firms in Nigeria.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.274 ^a	.172	.139	.26628	.098	37.336	1	392	.000	1.882

Source: Researchers Computation (2020)

a. Predictors: (Constant), Institutional ownership

b. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.978	.195		8.921	.000
	Institutional ownership	.329	.087	.339	5.343	.000

Source: Researchers Computation (2020)

a. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

Interpretation

The analysis for the coefficient of the variables depicted that a unit increase in institutional ownership will lead to increase in financial performance of quoted manufacturing firms in Nigeria by .329. Indeed, the R-square value .172 depicted that 17% of the factors put under consideration were responsible for financial performance of quoted manufacturing firms in Nigeria while other factors not considered among the variables were responsible for the remaining percentage. Thus, institutional ownership contributed to financial performance of quoted manufacturing firms in Nigeria at beta value of .329 and t-value of 5.343. More so, the Durbin Watson value is 1.882, meaning that there is presence of auto correlation. The statistical test of significance of the model estimates is by employing the simple regression analysis at five per cent significance level. It was revealed from the analysis that institutional ownership has significant effect on financial performance of quoted manufacturing firms in Nigeria.

Hypothesis Three

HO₃: Ownership concentration has no significant impact on financial performance of quoted manufacturing firms in Nigeria.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.564 ^a	.239	.597	.28255	.279	184.083	1	389	.000	1.942

Source: Researchers Computation (2020)

a. Predictors: (Constant), Ownership concentration

b. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

0Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.580	.182		5.293	.000
	Ownership concentration	.674	.098	.569	10.947	.000

Source: Researchers Computation (2020)

a. Dependent Variable: financial performance of quoted manufacturing firms in Nigeria

Interpretation

The analysis for the coefficient of the variables depicted that a unit increase in ownership concentration will lead to increase in financial performance of quoted manufacturing firms in Nigeria by .674. Indeed, the R-square value .239 depicted that 24% of the factors put under consideration were responsible for financial performance of quoted manufacturing firms in Nigeria while other factors not considered among the variables were responsible for the remaining percentage. Ownership concentration contributed averagely to financial performance of quoted manufacturing firms in Nigeria at the beta value of .674 and t-value of 10.947. Durbin Watson value is 1.942, meaning that there is presence of auto correlation. The

statistical test of significance of the model estimates is by employing the simple regression analysis at five per cent significance level. It was revealed from the analysis that ownership concentration has significant effect on financial performance of quoted manufacturing firms in Nigeria.

Conclusion and Recommendations

The study concluded statistically that there was significant effect of corporate ownership structure on the financial performance of quoted manufacturing firms in Nigeria. Thus, there were significant effect in the indicators measures which were managerial ownership, institutional ownership and ownership concentration on the financial performance of quoted manufacturing firms in Nigeria. There is significant effect of managerial ownership structure on the financial performance of quoted manufacturing firms in Nigeria. It was concluded that managerial ownership shows the ownership portion or stake in a firm that is owned by managers. Managerial ownership is not only intended to enlarge the capital of the company but also to serve as inducements to managers to support managers' interests with the interests and needs of the company. There is significant effect of institutional ownership structure on the financial performance of quoted manufacturing firms in Nigeria. It was concluded that institutional ownership is represented by natural logarithm of equity shares held by managers as shareholders of the firm. Institutional ownership shows the ownership portion of a firm that is held by large organizations, financial firms, endowments, pension funds etc. Institutions normally purchase big blocks of a company's outstanding shares and can apply substantial influence on its management. Thus, institutional shareholders are usually professionals and they generally apply their expertise in supervising the management to ensure that their interests support those of the company's interests. Institutional ownership is represented by natural logarithm of equity held by different institutions as investors in the company. Ownership concentration shows the ownership portion or stake in a firm that is held by shareholders having the controlling interest or with large chance. There is significant effect of ownership concentration on the financial performance of quoted manufacturing firms in Nigeria. It was concluded that ownership concentration gives the shareholders the inspiration and capability to monitor and control the decision of the management. Thus, concentrated shareholders exercise their ample chance in declining conflicts between managers and the firm by being more practical in supervising and protecting their investments. Ownership concentration is represented by natural logarithm of equity held by block holders' investors in the company.

Recommendations

From the conclusion drawn, it is imperative to recommend that:

There is significant effect of managerial ownership structure on the financial performance of quoted manufacturing firms in Nigeria. It was recommended that there is dire need to reasonably increase

managers' shareholding of the quoted manufacturing firms in Nigeria as not only meant to increase the equity of the firms but as a way of motivating them towards increasing their operational efficiency and that the managers should be protected by the Board of Directors from unnecessary direct interference by other shareholders. The private ownership is one of the identified ownership structures that have proven empirically positive to firm's financial performance in this study. This was linked by the researcher to the fact that private owners frequently deploy their professionalism and wealth of experience to the firms towards meeting corporate goals.

There is significant effect of institutional ownership on the financial performance of quoted manufacturing firms in Nigeria. It was recommended that there is need to extensively increase both managerial and institutional shareholding of the quoted financial firms in Nigeria as not only way to increase the share of the firms but as a way of encouraging them in increasing their efficiency. The institutional owners should be allowed to deploy their expertise and wealth of experience to the firms in achieving corporate goals. The executive managers should also be protected by the Board of Directors from needless direct intervention by other shareholders in order to perform their tasks effectively and that firms quoted in the NSE seem to follow pecking order theory which is based on assumption of asymmetry of information. This being the case it then follows that the degree of asymmetry in Nigeria may be quite high, the government should therefore make a deliberate effort to minimize asymmetry in the country as this could cause corporate failure. In this regard the government can use various signaling devices to bring confidence into the entities.

There is significant effect of ownership concentration on the financial performance of quoted manufacturing firms in Nigeria. It was recommended that the private ownership should be increased against concentrated ownership for better performance. Stock Exchange Commission as a regulatory body should encourage potential managers to invest more in any company in the food and beverage industry to enable them manage the firm well as their funds are invested in the firm. The study also recommends that there is need for corporate entities quoted at the Nigerian Stock Exchange to have effect ownership structures. There is need to re-examining the criteria used in selection of directors in the companies and ensure that corporate boards are more independent, ensure that the board is well diversified in terms of age, gender and ethnic groupings and there is appropriate board size. This will reduce incidence of poor performance and will ensure that directors are accountable to the shareholders with a ripple effect of improving investor confidence.

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