

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

August 2022

Influence of Information Literacy Skills on Infopreneurship Intentions of Library and Information Science Undergraduates in Public Universities in South-West, Nigeria

Helen Osebequen Chris-Israel
Federal Polytechnic, Ede, helenachriston@yahoo.com

Uloma Doris Onuoha
ud_onu@yahoo.com

Beatrice Yemisi Ojokuku
yemiojokuku@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Chris-Israel, Helen Osebequen; Onuoha, Uloma Doris; and Ojokuku, Beatrice Yemisi, "Influence of Information Literacy Skills on Infopreneurship Intentions of Library and Information Science Undergraduates in Public Universities in South-West, Nigeria" (2022). *Library Philosophy and Practice (e-journal)*. 7271.

<https://digitalcommons.unl.edu/libphilprac/7271>

**INFLUENCE OF INFORMATION LITERACY SKILLS ON
INFOPRENEURSHIP INTENTIONS OF LIBRARY AND INFORMATION
SCIENCE UNDERGRADUATES IN PUBLIC UNIVERSITIES IN SOUTH-WEST,
NIGERIA**

Helen Osebequen CHRIS-ISRAEL (CLN)
chrisrael.helen@federalpoly.edu.ng / helenachristoto@gmail.com
Department of Library and Information Science
Federal Polytechnic Ede, Nigeria

Uloma Doris ONUOHA, PhD (CLN)
Ud_onu@yahoo.com
University Library
Adeleke University, Ede, Nigeria

&

Beatrice Yemisi OJOKUKU (CLN)
Ojokuku.beatrice@federalpoly.edu.ng / yemiojokuku@gmail.com
Department of Library and Information Science
Federal Polytechnic Ede, Nigeria

Abstract

The study investigated influence of information literacy skills on infopreneurship intentions of Library and Information Science (LIS) undergraduates in public universities in South-West Nigeria. Two theories supported the study, namely; the theory of planned behaviour and the big six information literacy model. The Descriptive survey research design was adopted for the study and population comprised 668 LIS undergraduates in their final year (400 level) across three public universities in South-West Nigeria. Total enumeration technique was used to cover all the target respondents. An adapted questionnaire was used as data collection instrument. Five hundred and eighty responses were returned from the online google form sent to 668 respondents, representing 86.8% response rate. Findings revealed that there was a positive and significant correlation between information literacy skills and infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria ($t=7.765$; $B=0.294$; $p<0.05$). The study concluded that information literacy skills are critical variables that can predict and facilitate positive infopreneurship intentions among LIS undergraduates in public universities in South-West Nigeria and recommended among others that public universities in Nigeria should explore the idea of equipping LIS undergraduates with the requisite information literacy skills to facilitate start-up of information businesses after graduation.

Keywords: Influence, Information literacy skills, Infopreneurship, Infopreneurship intention, LIS undergraduates, public universities.

Introduction

Infopreneurship plays a strategic role in the economic sector of any nation and is important and beneficial in many ways. Umoru (2016) succinctly put it that the growth and development of any society lies in the ability of its citizenry to identify and exploit existing but unnoticed investment opportunities in a way quite novel to the expected market. The term infopreneurship is an extension of two distinct fields as the term has its origin from the words; information and entrepreneurship. Information constitutes essential ingredient in today's knowledge-based economy. It is dynamic, expensive, continually being reconfigured and repackaged and has earned inclusion among the factors of production previously limited to land, labour, capital and entrepreneur (Aregbesola et al., 2019).

According to Musa and Tsafe (2019), entrepreneurship refers to an individual's ability to manipulate ideas and turn them into reality. Presently, information professionals (people who help to structure, manage, navigate and find information) are compelled to use new skills and strategies in order to change, survive, and continue to compete in the world of virtual information. This has created a new area of specialisation which is referred to as information entrepreneurship or infopreneurship. The overcrowded labour market in Nigeria is forcing thousands of graduates including Library and Information Science (LIS) graduates into unemployment and its associated consequences that undermine development which is particularly pathetic (Madu et al., 2016). However, the information age where information provision is an increasingly important commercial activity has led to a change in the role of LIS professionals and focus of this research work on infopreneurship intention.

Infopreneurship intention is the willingness of an individual to exhibit behaviour and engage in activities associated with self-employment initiatives and new business creation relating to information provision. Ajzen (1991) posited that intention is the immediate determinant of behaviour; hence intentions are considered to be strong predictors of future actions. In the same vein, Fatoki (2014) argued that individuals will consider infopreneurship based on their perceptions that such efforts can enhance the achievement of personal goals, pursuit of ideas, and the realisation of financial gains. As a result, different skills are required by LIS undergraduates as key requirements for successful infopreneurship. These include: information technology skills; managerial skills; personal entrepreneurial skills; information literacy skills; economics and marketing of information products and services among others (Ugwu & Ezeani, 2012).

Information literacy skills (ILS) entails the techniques and skills for utilizing the wide range of information tools as well as primary sources in moulding information to solve problems.

It encompasses knowledge of one's information concerns and needs, and the ability to identify needed information, understand organisation of information, identify appropriate information sources, locate these sources, critically evaluate the sources, use and communicate information to address issues or problems at hand (Naik & Padmini, 2014). There is, therefore, no doubt that the possession of information literacy skills is a part of basic human right of lifelong learning and a basic requirement and a prerequisite to effectively navigate the information world.

Statement of the Problem

Infopreneurship which is the identification and exploitation of information business opportunities is seen as a viable option that can address the problem of unemployment amongst LIS undergraduates. However, observations and literature revealed that the rate of unemployment is still on the rise amongst many graduates of Library and Information Science despite the opportunities of infopreneurship. A situation which is quite disheartening considering the limitless opportunities offered by advancement in technology for the creation, packaging and selling of information as products and services through various online and offline platforms. There is, therefore, the need to gain a fuller understanding of the infopreneurship intentions of LIS undergraduates and to establish whether or not information literacy skills can determine their venturing into information business upon graduation. It is on this premise that this study sought to examine information literacy skills and infopreneurship intentions of LIS undergraduates in public universities, South-West Nigeria.

Research Questions

The following questions were raised and answered in the study;

1. What is the level of infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria?
2. What are the infopreneurship practices that LIS undergraduates are exposed to in public universities in South-West Nigeria?
3. What is the level of information literacy skills of LIS undergraduates in public universities in South-West Nigeria?

Hypothesis

One null hypothesis (H_0) was formulated and tested at 0.05 level of significance:

1. Information literacy skills will not significantly determine infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria.

Review of Related Literature

As new technologies evolve and the demand for information more sophisticated, the trend has brought in certain attributes and approaches into the practice in today's librarianship with requisite skills needed to cope with the information needs of the 21st century users. An information literate person of today should possess specific online search skills such as the ability to select appropriate search terminology, logical search strategy and appropriate information evaluation, acquisition and appropriate use of skills in the information communication technology age. There is therefore the need for skills acquisition to facilitate access to gain the limitless opportunities inherent in infopreneurship (Ukachi, 2013)

Infopreneurship is an emerging business model in mainstream information practice that is profit oriented in nature, based on a vision and passion to create/develop, package and sell information products and services for the purpose of generating income (El-Kalash et al., 2016). Chux-Nyeche and Opara (2019) theorise that infopreneurship involves the creation of value through the identification of unmet needs or through the identification of opportunities for change especially as it concerns information needs. Simply defined, any person that is involved in the practice of infopreneurship is an infopreneur. Igwe (2017) affirmed that there are generally two main categories of infopreneurs namely: content creators - those who create their own content and affiliate marketers - those who promote other peoples' content. Content creators create their own information products or services as a result of their own knowledge, training and background or by researching and gathering information aimed at making profit.

There are ranges of information products and services that can be exploited in the career landscape of Library and Information Science (LIS). Babalola et al. (2015); Nwokocha and Chimah (2015) noted that many entrepreneurial opportunities abound for information professionals, especially in the technology age and identified some that can be leveraged on by the LIS undergraduates after graduation as sources of business venture to include: Information brokerage business; this entails the provision of specific information products or professional services for an agreed fee, (e.g., cataloguing and classification, literature reviews, Internet services, blogging services, selective dissemination of information (SDI), current awareness services (CAS), online literature search, information repackaging, marketing of books to libraries; reprographic services, bibliographic compilation, translation, speech writing and presentations, setting up of libraries, inter library loan services, etc.). Other are; publishing and editing, consultancy services, freelancing, bookselling and marketing business, operating a business centre/cybercafé, rural information provision services and binding services.

Infopreneurship intention is the conscious awareness, conviction and desire by an individual to start up one's own information business venture and plan to do so in the future with the thinking that can drive individual attention, experience, and action towards the objective to perform that business. Intention is believed to be a predictor towards the forming of human behaviour in various situations and has been recognized as the most effective in predicting human behaviour (Ajzen, 1991; Krueger, 1993; Krueger et al., 2000; Fayolle, 2000). Three indicators were used to measure infopreneurship intentions in this study and they are; attitude, subjective norms and behavioural control. Succinctly put by Ajzen, the proponent of the Theory of Planned Behaviour (TPB), individuals who pursue their intentions are most likely to implement their intention (Ajzen, 1991). This shows the need to investigate the infopreneurship intentions of LIS students with the view of determining if information literacy skills could predict it.

Adeleke and Emeahara (2016) described information literacy skills as information competencies which involve the capacity to identify when information is needed, and the competence and skill to locate, evaluate and use information effectively. Farmer and Henri (2008) outlined the operationalised seven-dimensional constructs of information literacy as propounded by Shapiro and Hughes (1996) to include; tool literacy, resource literacy, social-structural literacy, research literacy, publishing literacy, emerging technology literacy and critical literacy. These are no doubt critical competences and skills needed for LIS undergraduates to effectively and efficiently enhance infopreneurship intentions. In agreement, Odede and Nsibirwa (2018) stated that: the information literate student should be able to determine the nature and extent of the information needed; access needed information effectively and efficiently; evaluates information and its sources critically and incorporate selected information into his or her knowledge base and value system; use information effectively to accomplish a specific purpose; understand many of the economic, legal, and social issues surrounding the access and use of information ethically and legally. These are no doubt critical competences and skills needed for LIS undergraduates to effectively and efficiently enhance infopreneurship intentions.

The current trends in the practice of today's librarianship requires these requisite competencies and skills to cope with the information needs of the 21st century users. Skills are the learned capacity, abilities or proficiencies required of a person to execute an action geared towards accomplishing some tasks, achieving some goals or intentions to start up a business venture (Hashim & Mokhtar, 2012). According to Nwokocha et al. (2019), information literacy skills will help LIS undergraduates to cultivate the culture of empowering themselves through their profession rather than sit down expecting white collar jobs or employment which may not be

available. This act of self-empowerment will not only be beneficial to LIS undergraduates but it could trigger infopreneurship intentions bringing benefits to the society at large. Ojokuku et al. (2018), therefore, averred that there is need for information literacy skills in the society since information literacy competencies are aggregate of various skills and abilities encompassing library-use, literacy, computer literacy, media literacy, network literacy, critical thinking skills, information-use ethics, and communication skills, which when acquired, would empower students not only to be successful in their academic pursuits and become independent lifelong learners, but could also activate infopreneurship intention.

Empirical Studies

Malebana and Swanepoel (2015) carried out a study to investigate the entrepreneurial intention (EI) of rural university students based on the Theory of Planned Behaviour (TPB). The study's objective was to test whether the TPB can help the EI of these students in a South African context and assess whether these students will intend to start their businesses in the future. The study revealed that TPB is a valuable tool in understanding EI. The attitude towards becoming an entrepreneur accounted for a higher percentage of variance in the respondents' EI, followed by perceived behavioural control.

The study carried out by Lee et al. (2012) focused on the factors affecting students' entrepreneurship intentions (EI), level of EI and awareness towards the entrepreneurial career. Findings showed that all independent variables positively correlated with entrepreneurial intention. Attitude toward the behaviour had the highest correlation (0.713), followed by moderate correlations, which were personality traits (0.690), subjective norm (0.439), perceived behavioural control (0.416) and entrepreneurship education (0.410). Furthermore, the summary of the result of hypothesis testing showed that the five independent variables had a significant relationship with entrepreneurial intention; therefore, the null hypothesis was rejected.

In Zimbabwe, David and Dube (2014) examined infopreneurial behaviour among university graduates. The intention was to equip undergraduates with the know-how and skills to develop as infopreneurs. A case study of the exploratory type was employed and only focused on graduating students of the Faculty of Communication and Information Science at the National University of Science and Technology in Zimbabwe. The study revealed that the university had been offering entrepreneurship and later introduced infopreneurship courses to information science students, and contributing courses include; data economics, web content management and marketing of records and archives products and services.

The study of Nwokocha et al. (2019) examined the level of information literacy of LIS undergraduates, Abia State University, Uturu. A descriptive survey research design was adopted to elicit responses from the entire student population of two hundred and twenty-nine (229). Findings showed that undergraduate LIS students were information literates and book publishing and trade was the most likely entrepreneurship skill pursued by the undergraduates. They recommended that avenues be provided for LIS undergraduates to learn and be equipped with diverse skills, ideas and values that will enable them discover their passion early and thus ensure self-dependence. Similarly, on the awareness of expected skills required by LIS students, Onyia and Agbawe (2017) carried out a survey of entrepreneurship knowledge and skills among LIS students in Nigerian universities in the South-south. The study adopted a descriptive survey design in which 118 students were purposively sampled using a structured questionnaire. Frequency tables and simple percentages were used to analyse data and findings showed that students were aware of entrepreneurship opportunities within LIS. These students are however yet to seize and use these opportunities fully. The study recommended extensive exposure of LIS students to the many benefits of entrepreneurship courses in their studies.

On the importance of information literacy skills on infopreneurial intention, Thanuskodi (2019) carried out a study to determine the level of information literacy skills among Library and Information Science (LIS) professionals in India. The study adopted a descriptive survey method with a population consisting of LIS professionals in India. Simple random sampling technique was used to select LIS professionals in all kinds of designations. The study revealed that as India becomes more advanced technologically; it has become more important for citizens to have the awareness of a solid foundation in information literacy to allow them maximize opportunities. Based on this finding an enabling environment propelled by government approved standards and policy was recommended.

Yevelson-Shorsher and Bronstein (2018) study presented three perspectives on the subject of information literacy skills in academia by examining the perceptions of students, teaching faculty, and librarians. Purposive sampling was used to pick the population sample based on the researchers' judgments. Thirty-two people were interviewed for the study. Findings from the study showed that greater collaboration and communication among faculty, librarians, and students is needed to improve students' information literacy skills. Also, Aliyu (2018) in a similar study focused on undergraduates' students of Modibbo Adama University of Technology Yola, revealed that some students in Nigerian universities have poor information literacy skills due to some factors like poor search skills, inadequate end user training, failure to find information, slow

internet connectivity, inaccessibility of some sources, etc. Recommendations made was the need for students to be equipped with good information literacy skills involving the ability to search, locate, identify, retrieve, evaluate and use information among others.

Olajide (2013) examined the level of relationship and differences in the undergraduate LIS curriculum. The prospectuses/brochures of the various Nigerian Library Schools that have been graduating students were the population for the study. The use of content analysis was employed to compare the available courses in these library schools. The study revealed that most library schools still hold on to the core of librarianship which is traditional librarianship. One basic recommendation among others was that there is the need to include courses that will make the library schools graduate more marketable students in the emerging information market.

The literature reviewed have shown that there are quite a lot of studies carried out on entrepreneurship intention while there is a dearth of literature on infopreneurship intentions. Also, more studies are available on graduate students than on undergraduates and most studies have been carried out in developed countries leaving a lot unknown about the developing countries like Nigeria. Consequently, the comprehensive review of literature revealed that there is the need for more studies on the benefits and opportunities inherent in infopreneurship and influence of information literacy skills in the prediction of infopreneurship intentions among LIS undergraduates especially in a developing country like Nigeria. It is therefore, this gap in literature that this study intended to provide through empirical research findings.

Theoretical Framework

The Theory of Planned Behaviour (TPB) propounded by Icek Ajzen in 1991 and the Big Six Information Skills Model developed by Eisenberg and Berkowitz 1990 were adopted for this study. According to Ajzen (1991), human action is guided by three actions: behavioural beliefs (beliefs about the likely consequences of behaviour), normative beliefs (beliefs about the normative expectations of others) and control beliefs (beliefs about the presence of factors that may facilitate or impede performance of behaviour). The TPB considers these three basic drivers that ultimately shape intentions as: Behavioural attitude; this is a person's attitude towards the behaviour, Subjective norms; social pressure/influence or beliefs about the normative expectations of the others and Perceived behavioural control; this is the ability to perform the behaviour. In support of the theory, Krueger (2007) also stressed that the theoretical underpinning of entrepreneurial intentions is that individuals do not embark on business creation as a consequence of reflex action, but rather a function of an intentionally planned behaviour. Therefore, the TPB is

relevant to this study in that since behaviour can be deliberative and planned; the theory can be used to predict deliberate behaviour of the infopreneurial intent of LIS undergraduates which will largely impact the likelihood of LIS students initiating infopreneurial endeavours post-graduation.

The Big Six Information Skills Model developed by Eisenberg and Berkowitz in 1990, is a six-stage model to help people solve problems or make decisions using available information. Each of the six steps has two sub-skills. The first sub-skill is task definition and the second sub-skills are location, access and use of information. The first sub-skill requires students to identify the exact information problem presented to them, identify types of information needed to solve the problem, identify all possible sources of information, and then evaluate each source to determine the best to use. While location, access and use of information sub-skills comprised of traditional bibliographic skills, synthesis (which requires students to make a decision) and finally, evaluation which requires students to evaluate not only their final product but also to evaluate how well they perform the information solving tasks (Eisenberg & Berkowitz, 1990). This model is relevant to this study because it connects information literacy skills with technology tools in a systematic manner to find, use, apply, and evaluate information for specific needs and tasks. Consequently, the extent to which infopreneurship intentions are translated into actual participation in infopreneurship would be triggered by the ability to define information needs, locate, evaluate and apply information appropriately.

Conceptual Model

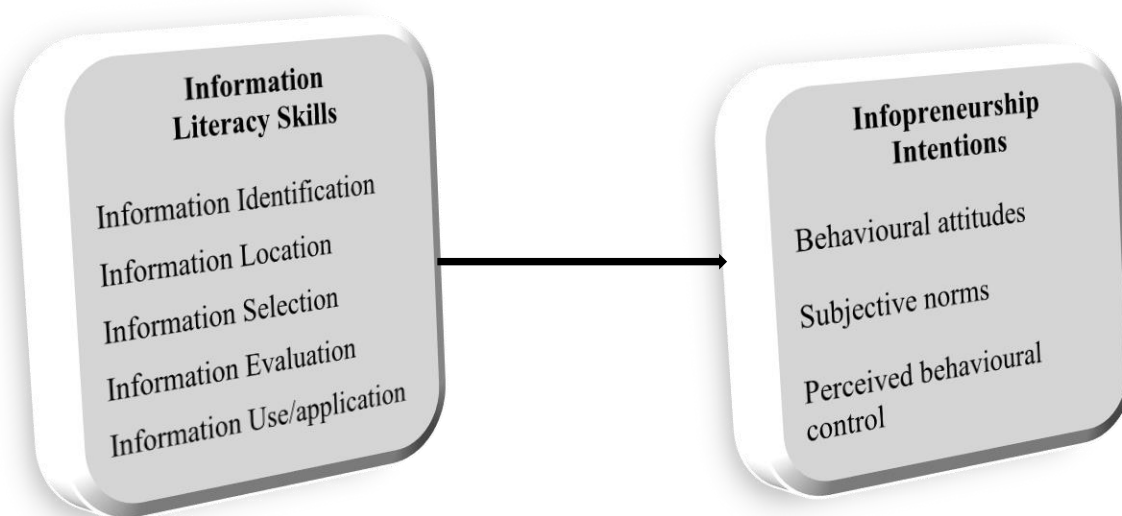


Figure 1: Conceptual model for information literacy skills and infopreneurship intentions among LIS undergraduates in public universities

The model describes the relationship between the independent variable; information literacy skills and the dependent variable of infopreneurship intentions. It is assumed by the study that LIS undergraduates, who have the ability to identify, locate, select, evaluate, use and apply information would be equipped with the requisite competencies of tool literacy, critical literacy, social-structural literacy, publishing literacy, emerging technology literacy, resource literacy and research literacy, and are likely to develop the intention for infopreneurship after graduation. According to this model, it can be inferred that information literacy skills has a positive impact on infopreneurial inclinations and is considered to be a solid predictor of infopreneurship intentions.

Methodology

The study adopted a descriptive survey research method. The population comprised six hundred and sixty-eight (668) LIS undergraduates (2019/2020 academic session) in their final year (400 level) in three public universities in South-West Nigeria. The universities are: University of Ibadan, Federal University Oye-Ekiti, and Tai Solarin University of Education Ijebu- Ode. Total enumerative sampling technique was adopted to cover all the 668 LIS undergraduates for the study. Instrument used for data collection was google form questionnaire that was administered online to the WhatsApp platforms and personal phone lines of the respondents due to the prevailing situation then of COVID-19 where public institutions of higher learning have not fully resumed for physical academic work. 580 responses were returned and found valid for analysis giving a response rate of 86.8%. Data collected were subjected to descriptive statistical analysis. On the decision to accept or reject the null hypothesis (H_0), the researcher depended on the p value. p value less than an alpha value (0.05), means the result is significant and H_0 would be rejected, but, p value greater than alpha value (0.05), means the result was not significant and H_0 would be accepted.

Table 1: Demographic characteristics of respondents

Items	Characteristics	Frequency	Percent (%)
Institution	FUOYE	194	33.4
	TASUED	332	57.2
	UI	54	9.3
	Total	580	100
Faculty	COSPED	332	57.2
	Education	248	42.8
	Total	580	100
Department	LIS	526	90.7
	LARIS	54	9.3
	Total	580	100
Gender	Male	362	60.3
	Female	238	39.7
	Total	580	100

Source: Field Survey (2021)

Results and Discussion

Research Question 1: What is the level of infopreneurship intentions of LIS undergraduates in public universities in South-West, Nigeria?

Table 2: Level of infopreneurship intentions of LIS undergraduates in public universities (N=580)

S/N	Variables	VH		H		L		VL		Mean	Std. Dev
		N	%	N	%	N	%	N	%		
1	I have thought seriously to start my own business after graduation	506	87.2	56	9.7	10	1.7	8	1.4	3.86	.984
2	If I had the opportunity and resources, I would like to start a business	486	83.8	77	13.3	7	1.2	10	1.7	3.73	.855
3	Being an infopreneur implies more advantages than disadvantages to me	451	77.8	104	17.9	19	3.3	6	1.0	3.55	.916
4	Amongst various options, I would rather be an entrepreneur	401	69.1	157	27.1	12	2.1	10	1.7	3.48	.891
5	I want to be my own boss	432	74.5	128	22.1	14	2.4	6	1.0	3.50	.873
6	I prefer to be an infopreneur to being an employee in a company	438	75.5	120	20.7	12	2.1	10	1.7	3.52	.872
7	I will put in every effort to start and run my own company	452	77.9	109	18.8	12	2.1	7	1.2	3.56	.817
8	I believe that if I were to start my business, I will certainly be successful	449	77.4	113	19.5	7	1.2	11	1.9	3.49	.948
9	My greatest achievement will be to have my own business	431	74.3	130	22.4	10	1.7	9	1.6	3.51	.891
	Weighted mean = 3.58									32.20	8.047
	Subjective Norms	N	%	N	%	N	%	N	%	Mean	Std. Dev
10	My friends see entrepreneurship as a logical choice for me	460	79.3	96	16.6	25	4.3	4	0.7	3.61	.913
11	My parents are positively disposed to my future career as an entrepreneur.	378	65.2	173	29.8	7	1.2	4	0.7	3.28	.819
12	My immediate family would approve of the decision to start a business	356	61.4	202	34.8	18	3.1	4	0.7	3.16	.958
13	My role model believes I would do well as an entrepreneur	349	60.2	210	36.2	18	3.1	3	0.5	3.14	.729
14	In my university, students are encouraged to pursue their own ideas	375	64.7	160	27.6	31	5.3	14	2.4	3.29	.817
15	There is a well-functioning support infrastructure in my university to support the start-up of new firms	377	65.0	143	24.7	37	6.4	22	3.8	3.30	.988
16	The skills learnt in the university has adequately prepared me	432	74.5	94	16.2	32	5.5	7	1.2	3.49	.955
17	I have saved enough money to start my own business after graduation	214	36.9	99	17.1	140	24.1	127	21.9	2.31	.963
18	I find government policies and regulations favourable for business	382	65.9	138	23.8	34	5.9	26	4.5	3.12	.810
	Weighted mean = 3.19									28.70	7.952
	Perceived Behavioural Control	N	%	N	%	N	%	N	%	Mean	Std. Dev
19	To start a business and keep it working would be easy for me	461	79.5	94	16.2	22	3.8	3	0.5	3.54	.953

20	I am able to control the creation process of a new business	399	68.8	194	33.4	18	3.1	9	1.6	3.46	.839
21	To be my own boss would help me realize my dream	378	65.2	182	31.4	16	2.8	4	0.7	3.28	.851
22	I know all about the necessary practical details needed to start a business	410	70.7	148	25.5	16	2.8	6	1.0	3.49	.858
23	Starting my own business would be the best way to leverage on my education	378	65.2	182	31.4	16	2.8	4	0.7	3.28	.955
24	Having my own business would grant me freedom to explore, empower me economically and increase my status	359	61.9	194	33.4	18	3.1	9	1.6	2.94	.916
25	If I wanted to, I could easily start and run a business	379	65.3	180	31.0	13	2.2	8	1.4	3.19	.880
26	If I start a business, I would have a high chance of being successful	421	72.6	139	24.0	11	1.9	9	1.6	3.49	.983
27	Starting a business is a way of challenging myself for my satisfaction and growth	448	77.2	101	17.4	23	4.0	8	1.4	3.51	.872
Weighted mean = 3.53						Sub-total				30.18	8.107
Overall Weighted mean =3.43; Grand mean = 91.08, Standard deviation = 24.106											

Source: Field Survey (2021)

Key: Very High (VH=4); High (H=3); Low (L=2); Very Low (VL=1); N=Population

Decision Rule: 1-1.49 = VL (Very Low), 1.5-2.49 = L (Low), 2.5-3.49 = H (High), while 3.5-4 = VH (Very High). The criteria mean =2.50 that is $4+3+2+1=10 \div 4 = 2.5$. This implies that scores less than 2.5 were considered low.

It could be observed from the information in Table 2 that infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria were dichotomized into three indicators namely attitude towards self-employment (weighted mean =3.58), subjective norms (weighted mean = 3.19) and perceived behavioural control (weighted mean = 3.53). The percentage of respondents and their responses were presented in the same box for ease reference. This is to ensure ease of interpreting and reporting the results. Also, the weighted mean for each indicator was used as benchmark such that items that fall above the weighted mean were considered high while those that fall below the benchmark were considered low.

On attitude towards self-employment, the result indicated that the response of the respondents was that 87.2% of them highly agreed that they had thought seriously of starting their own businesses after graduation, with 9.7% agreeing fairly to this claim while a combined total of 18 respondents equivalent to 3.1% did not have interest in starting up their own business after graduation. 83.8% of respondents claimed that if they had the opportunity and resources, they would like to start a business; 13.3% also fairly wished so and a combined 2.9% claimed that they would not establish any business even if they had the needed resources. Also, the advantage of being an infopreneur was highly emphasized by 77.8% of respondents, with 17.9 fairly endorsing

the condition while a combined total of 25 respondents equivalent to 4.3% claimed that being an infopreneur was more disadvantageous than being advantageous. Of all respondents, 69.1% highly supported that they preferred being an entrepreneur compared to other alternative and 27.1% fairly supported the choice. However, a combined percent of 3.8 didn't have interest in entrepreneurship. The weighted mean recorded was 3.58. According to the decision rule, it could be deduced that level of the attitude of LIS undergraduates in public universities in South-West Nigeria to self-employment is high.

On subjective norms, the result revealed that the majority of the respondents affirmed high level of subjective norm with weighted mean of 3.19 with the following responses: friends' approval for me to be an entrepreneur (Very High: 460, 79.3%), the skills learnt in the university (Very High: 432, 74.5%), parents' positive disposition (Very High: 378, 65.2%) among others. The implication of this result is that the LIS undergraduates in public universities in South-West, Nigeria are subjected to high level subjective norms going by the weighted mean score of 3.19 which is higher than the criteria mean.

Further results on perceived behavioural control indicated that most of the respondents attested to high level of perceived behavioural control: starting and keeping the business (Very High: 461, 79.5%), starting a business is a way of challenging myself for my satisfaction and growth (Very High: 448, 77.2%), to easily start a business (Very High: 421, 72.6%) and knowing about the necessary practical details needed to start a business (Very High: 410, 70.7%). This means that LIS undergraduates in public universities in South-West Nigeria have a high level of perceived behavioural control going by the weighted mean score of 3.53 which is higher than the criteria mean. Finally, an overall high level of infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria was established with a mean score of 3.43; grand mean = 91.08, standard deviation = 24.106. The implication to be drawn from the results is that there is a high level of infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria.

Research Question 2: What are the infopreneurship practices that LIS undergraduates are exposed to in public universities in South-West, Nigeria?

Table 3: Infopreneurship practices exposed to LIS undergraduates in public universities

S/N	Items	Yes		No		Mean	Std dev.
		N	%	N	%		
1	Indexing and Abstracting	417	71.9	163	28.1	1.47	0.499
2	Cataloguing and Classification	531	91.6	49	8.4	1.34	1.780
3	Literature Review	497	85.7	83	14.3	1.75	0.690
4	Literature search	357	61.6	223	38.4	1.77	0.160
5	Bibliographic compilation	489	84.3	91	15.7	1.81	0.237
6	Speech writing and Presentation	199	34.3	381	65.7	1.20	0.360
7	Information repackaging	225	38.8	355	61.2	1.26	0.341
8	Editing and proof reading	159	27.4	421	72.6	1.61	0.390
9	Book binding and reprography	147	25.3	433	74.7	1.56	0.296
10	Book publishing	149	25.7	431	74.3	1.55	0.207
11	Database and website designing	135	23.3	445	76.7	1.38	0.396
12	Information marketing	343	59.1	237	40.9	1.47	0.349
13	Data mining and processing	341	58.8	239	41.2	1.46	0.360
14	Information Business Management	423	72.9	157	27.1	1.65	0.324
15	Multimedia	468	80.7	112	19.3	1.90	0.333
16	Book Trade	275	47.4	305	52.6	1.46	0.429

Weighted mean =1.54; Grand Mean =24.64 Standard Deviation =7.151

Table 3 shows the type of infopreneurship practices respondents were exposed to in their respective universities. From the results, it could be observed that the four most prominent infopreneurship practices were cataloguing and classification (531; 91.6%), literature review (497; 85.7%), bibliographic compilation (489; 84.3%) and multimedia (468; 80.7%). Others in descending order are: editing and proof reading (159; 27.4%), book publishing (149; 25.7%), book binding and reprography (147; 25.3%), and database and website designing (135; 23.3%). It could be deduced from the foregoing results that most of the respondents affirmed that they were exposed to infopreneurship practices such as cataloguing and classification, literature review, bibliographic compilation and multimedia while they claimed they were not adequately exposed to database and website designing, book binding and reprography, book publishing and editing and proof reading.

Research Question 3: What is the level of information literacy skills of LIS undergraduates in public universities in South-West, Nigeria?

Table 4: Level of information literacy skills of LIS undergraduates in public universities (N = 580)

S/N	Variables	VH (%)	H (%)	L (%)	VL (%)	Mean	Std. Dev.
1	I have the ability to select search strategies by date, subject and language	461(79.5)	94(16.2)	22(3.8)	3(0.5)	3.38	0.813
2	I can browse online databases to locate pertinent information	560(96.6)	6(1.0)	9(1.6)	5(0.9)	3.52	0.821

3	I have the ability to compare and evaluate critically if the information collected is credible and relevant	467(80.5)	90(15.5)	19(3.3)	4(0.7)	3.24	0.725
4	I can judge critically if the information on websites is authentic and accurate	415(71.6)	133(22.9)	27(4.7)	5(0.9)	3.03	0.778
5	I can compare and evaluate critically if the information is timely and appropriate	339(58.4)	201(34.7)	35(6.0)	5(0.9)	3.01	0.813
6	I understand how information is socially situated	319(55.0)	209(36.0)	44(7.5)	8(1.3)	3.05	0.816
7	I understand how information is socially produced	368(63.4)	167(28.8)	39(6.7)	6(1.0)	3.21	0.763
8	I am able to create or cause to be created unavailable information that I need	368(63.4)	159(27.4)	47(8.1)	6(1.0)	3.15	0.785
9	I can format and publish ideas electronically in textual and multimedia form, in addition to traditional media form	406(70.0)	130(22.4)	38(6.6)	6(1.0)	3.01	0.851
10	I have the ability to communicate and present the information to others in appropriate and usable formats and mediums	408(70.3)	132(22.8)	33(5.5)	7(1.2)	3.02	0.860
11	I can decide when to adopt the continually emerging innovations in information technology	404(69.6)	129(22.2)	40(7.0)	7(1.2)	3.11	0.729
12	I know when to adopt latest product development in new information technologies	400(72.4)	141(24.3)	32(5.5)	7(1.2)	3.00	0.812
13	I have the ability to accurately identify and define the information needed and the different sources	420(72.4)	113(19.5)	39(6.7)	8(1.3)	3.21	0.830
14	I can select the information that is most appropriate to my needs, meet the needs of others, solve problems, or make an informed decision	418(72.1)	119(20.5)	38(6.6)	5(0.8)	3.91	0.853
15	I am able to understand and use relevant information technology tools for research	425(73.3)	116(20.0)	31(5.3)	8(1.3)	3.32	0.719
16	I have the ability to utilize the information to solve a problem, make a decision or meet a need	425(73.3)	114(19.6)	33(5.7)	8(1.3)	3.31	0.758

Weighted mean =3.22, Grand mean = 51.48, Standard deviation=12.726

Key: Very High (VH=4); High (H=3); Low (L=2); Very Low (VL=1).

Decision Rule: 1-1.49 = VL (Very Low), 1.5-2.49 = L (Low), 2.5-3.49 = H (High), while 3.5-4 = VH (Very High). The criteria mean =2.50 that is $4+3+2+1=10 \div 4 = 2.5$. This implies that any score less than 2.5 is considered low

The assessment of information literacy skills of respondents reveal that a combined percent of 95.7% of respondents has enough recognition skill; 96.2% can select search strategies by date,

subject and languages; 96% has the ability to compare and evaluate critically if the information collected is credible and relevant; 97.6% can browse online databases to locate pertinent information; 94.5% can judge critically if the information on websites is authentic and accurate; 93.1% can compare and evaluate critically if the information is timely and appropriate while others fall short of these requirements. Conclusively, it could be noted from Table 4.5 that the weighted mean was 3.22, which was above the threshold mean point. It therefore follows that the level of information literacy skills of LIS undergraduates in public universities in South-West Nigeria is high.

Hypothesis: There is no significant influence between information literacy skills and infopreneurship intentions of LIS undergraduates in public universities in South-West, Nigeria

Table 5: Linear regression showing influence of information literacy skills on infopreneurship intentions of LIS undergraduates (N = 580)

Model	Unstandardized Coefficient B	Std. Error	Stand. Coefficient Beta Contribution	T	R	R ²	Sig.
Constant	4.151	.094	-	0.576			0.844
Infopreneurship intentions	Attitude towards self-employment	1.222	.020	.151	5.510	0.469	0.219
	Subjective Norms	2.941	.027	.410	14.979		.000
	Perceived behavioural control	3.073	0.041	0.322	3.306		.003

Source: Field Survey (2021)

The result in Table 5 showed that there is significant correlation between information literacy skills and infopreneurship intentions. The correlation coefficient between information literacy skills and attitude towards self-employment which is ($t=5.510$, $B=0.151$ $p<0.05$); for subjective norms ($t=14.479$; $B= 0.410$, $p<0.05$) and for perceived behavioural control ($t=3.306$; $B=0.322$; $p<0.05$). The implication of this result is that there is a significant relationship between information literacy skills and infopreneurship intentions of LIS undergraduates in South-West Nigeria. This indicated that direct relationship exists between information literacy skills and the three constructs used to measure infopreneurship intentions among LIS undergraduates in public universities in South-West Nigeria. Therefore, the null hypothesis which states that information

literacy skills will not significantly determine infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria is rejected and the alternate is accepted. Based on this finding, it implies that information literacy skills of LIS undergraduates if enhanced would increase and ultimately determine their level of infopreneurship intentions.

Discussion of Findings

On research question one, which sought to find out the level of infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria; it was revealed that there was a high level of infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria. This is established with high level of attitude towards self-employment, subjective norms and perceived behavioural control among LIS undergraduates in public universities in South-West, Nigeria. This finding corroborates with the studies of Malebana and Swanepoel (2015); Lee et al. (2012) which revealed that the TPB is a valuable tool in understanding entrepreneurship intentions (EI). The finding demonstrated that Attitude toward the behaviour, subjective norms and perceived behavioural control are strong predictors of students' intentions to start a business.

On infopreneurship practices exposed to LIS undergraduates in public universities in South-West Nigeria, greater number of the respondents were exposed to cataloguing and classification, literature review, bibliographic compilation and multimedia but, not adequately exposed to database and website designing, book binding and reprography, book publishing and editing and proof-reading respectively. This finding is in consonance with the study conducted by David and Dube (2014) which revealed that the university had been offering entrepreneurship and later introduced infopreneurship courses and contributing courses which include; information economics, web content management and marketing of records and archives products and services. In agreement, Babalola et al. (2015); Nwokocha and Chimah (2015) noted that many entrepreneurial opportunities abound for information professionals, especially in the technology age and identified; book publishing, information brokerage, consultancy services, database and website designing, information repackaging among others

On the level of information literacy skills of LIS undergraduates in public universities South-West Nigeria, majority of the respondents' information literacy skills level was high. Specifically, LIS undergraduates were rated highly in information identification, searching, sorting and communicating information. This finding is in tandem with the study conducted by Nwokocha et al. (2019); Thanuskodi (2019) that information literacy skills are critical for equipping graduates

with the capacity to set up business enterprises on their own if they are unable to secure government employment, especially in the face of high-level unemployment in Nigeria. This finding also corroborates with the study conducted by Onyia and Agbawe (2017) which revealed that students were aware of entrepreneurship opportunities within LIS but are however, yet to seize and use these opportunities fully. On the contrary, the present study disagrees with Aliyu (2018) who observed that some undergraduates' students in Nigerian universities have poor information literacy skills due to some factors like poor search skills, inadequate end user training, failure to find information, slow Internet connectivity, inaccessibility of some sources, etc. Also, Yevelson-Shorsher and Bronstein (2018) study confirmed that greater collaboration and communication among faculty, librarians, and students is needed to improve students' information literacy skills.

The null hypothesis which stated that information literacy skills will not significantly influence infopreneurship intentions of LIS undergraduates in public universities in South-West Nigeria is rejected based on the result of the analysis. Finding showed that there was a significant positive relationship between information literacy skills and infopreneurship intentions of LIS undergraduates in South-West Nigeria. The result of the study demonstrated that individuals who possess high level of information literacy skills are more likely to connect information search and use skills with technology tools in a systematic manner to find, use, apply, and evaluate information for specific needs and tasks. This finding supports previous studies by Ugwu and Ezeani (2012); Onyia and Agbawe (2017) that LIS students were aware of entrepreneurship opportunities within LIS but yet to seize and use these opportunities fully. Similarly, the finding supports previous studies by Also, in agreement, the finding of Olajide (2013) reiterated that there is the need to include courses that will make the library schools graduate more marketable students in the emerging information market.

Conclusion

The study established that high level of information literacy skills is positively associated with infopreneurship intentions among LIS undergraduates in public universities. From the findings therefore it was inferred that LIS undergraduate who is equipped with relevant information literacy skills will have the capacity to use information effectively which is very germine and this could give a boost to the development of infopreneurship mindset. LIS student that can access information that is required in growing a business entity from multiple information sources and uses such for the desired reason might not see any reason not to start such business. Thus, the possession of information literacy skills could serve as a springboard in the development

of their infopreneurship intention which would ensure that infopreneurship do not just remain as an intention but become real viable businesses after their graduation.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. To ensure that the high level of infopreneurship intention is sustained among LIS undergraduates in public universities South-West Nigeria, there is the need for the incorporation of infopreneurship studies in the curriculum of all library schools in Nigeria.
2. Infopreneurship practices such as database and website designing, book binding and reprography, book publishing and others should be encouraged and enhanced among LIS undergraduates in public universities. This could be achieved by organising periodic seminars and workshops aside normal lectures at least twice in a semester.
3. The management of public universities should ensure that the teaching of information literacy skills to LIS undergraduates in public universities is promoted. The information literacy skills of LIS undergraduates can be strengthened if it is merged with entrepreneurship/infopreneurship course. This will give room for the lecturers teaching entrepreneurship related courses to properly explore the indicators and provide practical based instructions.

References

- Ajzen, I. (1991). Theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.
- Aliyu, M. (2018). Information literacy among undergraduate students of Modibbo Adama University of Technology, Yola. *Nigerian Libraries*, 51(2), 93-107.
- Aregbesola, A., Van der Walt, T., Owolabi, S., Idiegbeyan-ose, J., F. Okocha F., & Eyiolorunshe, T. (2019). *Infopreneurship in a developing country: Opportunities and challenges*. IOP Conference. Series: Materials Science and Engineering 640 IOP Publishing. <https://doi.org/10.1088/1757-899X/640/1/012123>
- Adeleke, D. S., & Emeahara, E. N. (2016). Relationship between information literacy and use of electronic information resources by postgraduate students of the University of Ibadan. *Library Philosophy and Practice (e-journal)*. <http://digitalcommonsunl.edu/cgi/viewcontent.cgi?article=3788&context=libphilprac>
- Babalola, G. A., Abifarin, F. P., & Ahmed, A. O. (2015). *Productivity, profitability, and entrepreneurial skills needed in setting up and maintaining library and information firms: a study of Abuja, Nigeria*. Paper presented at the Annual Conference of the National Association of Library and Information Science Educators (NALISE), University of Uyo.
- Chux-Nyeche, G. C., & Opara, D. N. (2019). *Infopreneurship: A panacea for curbing youth restiveness in Nigeria*. The British Academy of Management Conference Proceedings 3rd-5th September.
- David, R., & Dube, A. (2014). Infopreneurial behaviour among university graduates in the Information Science Faculty of a university in Zimbabwe. *Infopreneurship Journal*, 1(2), <http://ir.nust.ac.zw/xmlui/handle/123456789/381>
- Eisenberg, M. B., & Berkowitz, R. E. (1990). *Information problem-solving: The big six skills approach for library information skills instruction*. Ablex. <https://eric.ed.gov>
- El-Kalash, K. I., Mohammed, S. B., & Aniki, M. Y. (2016). Exploring infopreneurship for economic growth and sustainability in a developing economy: The Nigeria perspective. *Journal of Educational Policy and Entrepreneurial Research (JEPER)*, 3(7), 240-249.
- Farmer, L. S. J., & Henri, J. (2008). *Information Literacy assessment in K-12 settings*. Scarecrow Press.
- Fatoki, O. O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), 294-297.
- Fayolle, A. (2000). Exploratory study to assess the effects of entrepreneurship programs on French student entrepreneurial behaviours. *Journal of Entrepreneurship Culture*, 8(2), 169-184. <https://doi.org/10.1142/S0218495800000103>
- Hashim, L. B., & Mokhtar, W. H. (2012). Preparing new era librarians and information professionals: Trends and issues. *International Journal of Humanities and Social Sciences*, 2(7), 154-166.

- Igwe, S. C. (2017). *Entrepreneurship: Theories and perspectives*. Faith Digital Press.
- Krueger, N. F. (1993). The impact of prior entrepreneurial exposure on perception of new venture feasibility. *Entrepreneurship Theory & Practice*, 18(1), 5-21.
- Krueger, N. F., Reilly, M. D., Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5/6), 411-432.
- Lee, W. N., Lim, B. P., Lim, L. Y., Ng, H. S. & Wong, J. L. (2012). Entrepreneurial intention: A study among students of higher learning institution. A research project, Universiti Tunku Abdul Rahman. *UTAR Institutional Repository*. <http://eprints.utar.edu.my/id/eprint/691>
- Madu, U. W., Ajayi, A. S. & Ebire-Abata, B. D. (2016). *Harnessing infopreneurship for sustainable development: LIS graduates in perspective*. www.researchgate.net
- Malebana, M. J & Swanepoel, E (2015). Graduate entrepreneurial intentions in the rural provinces of South Africa. *Southern African Business Review*, 19(1), 89-111.
- Musa, J., & Tsafe, A. G (2019). Entrepreneurship opportunities for graduates of library and information Science. *Journal of Library Services and Technologies*. 1(2), 76–82.
- Naik, M. M., & Padmini. (2014) Importance of information literacy. *International Journal of Digital Library Services*, 4(3), 92-100.
- Nwokocha, U., & Chimah, J. N. (2015). *Commoditization of knowledge and information for sustainable development: imperative for entrepreneurial librarians and information scientists*. Paper presented at the Annual Conference of the National Association of Library and Information Science Educators (NALISE), University of Uyo.
- Nwokocha, U., Chimah, J. N., & Okorie, J. N. (2019). Information literacy level of LIS undergraduates towards entrepreneurship skills for employment in Nigeria. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 24(3), 67-73.
<https://doi.org/10.9790/0837-2403086773>
- Odede, I. R., & Nsibirwa, Z. (2018). Information Literacy Skills in using Electronic Information Resources. *Library Philosophy and Practice (e-journal)*.
<https://www.researchgate.net/publication/329327137>
- Ojokuku, Y. B., Ogunsipe, A. A., Aboyade, M. A., & Chris-Israel, H. O. (2018). Information literacy skills for sustainable development goals in the 21st Century Nigeria. *LivingSpring Journal of Library and Information Science*, 1(1), 51-59.
- Olajide, A. A. (2013). Nigerian library school undergraduate library and information science curriculum: A comparative analysis. *Nigerian Libraries*, 46(2), 72-86.
- Onyia, G. N. & Agbawe, M. (2017). Survey of entrepreneurship knowledge and skills among library and information science students in Nigeria universities. *International Journal of Applied Technologies in Library & Information Management*, 3(2), 85-91.
- Shapiro, J. J & Hughes, S. K. (1996). Information literacy as a liberal art: Enlightenment proposal for a new curriculum. *Educom Review*, 31(2). <https://web.archive.org>

- Thanuskodi, S. (2019) Information literacy skills among library and information science professionals in India. *Library Philosophy and Practice (e-journal)*, <http://digitalcommons.unl.edu/libphilprac/2126>
- Ugwu, F., & Ezeani, C. N. (2012). Evaluation of Entrepreneurship Awareness and Skills among LIS Students in Universities in South-East Nigeria. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/836>
- Ukachi, N. B. (2013). *Accessibility and students' variables as correlates of the use of electronic information resources in university libraries in South-West*. <http://www.unn.edu.ng/publications/files/UKACHI'S%20THESIS.pdf>
- Umoru, F. (2016). *Harnessing entrepreneurial opportunities for sustainability: Developing a Nigerian model*. Being a lead paper presented at 1st National Conference of School of Business, Federal Polytechnic, Idah held at Judith Attah Lecture Theatre, 9th -12th August.
- Yevelson-Shorsher, A. & Bronstein, J. (2018). Three perspectives on information literacy in academia: talking to librarians, faculty, and students. *College & Research Libraries*, 79(4), 535-553.