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# Attitude of Undergraduate Students to Information Literacy: Bowen University Experience

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**ABSTRACT**

The study investigated the rationale behind undergraduates' apathy for information literacy (IL) programme at Bowen University, Nigeria. A descriptive survey design was adopted for the study and a multi-stage sampling method was used to select a sample size of five hundred participants spread across disciplines and levels of study. A questionnaire containing close-ended, structured items was used to gather data from the respondents and descriptive analyses, including percentages and frequency count were used to analyse the data collected. Three research questions were developed and answered and three research hypotheses were tested through the instrument. Results show that students' attitude to information literacy significantly influences their information literacy skill and students' perception of information literacy significantly influences their information literacy skills. Although perception of IL does not predict influence of IL on students, attitude to IL determines the influence of IL on students' information literacy skills. The study further revealed that the erroneous equation of technology literacy with information literacy was largely responsible for students' lukewarm disposition to information literacy. The study concludes by recommending a paradigm shift from the traditional teaching delivery to a technology-driven, interactive pedagogy that will ginger the interest of the students and thus effect the desired attitudinal change to IL.

**Keywords:** Attitude, Information literacy, Digital literacy, Information communication technologies, Undergraduate students, Bowen University, Nigeria.



## I. Introduction

Information literacy (IL) is a very fundamental ingredient to students' success in the digital age, particularly in higher education and lifelong learning. It has therefore become a significant issue in many academic communities. Coming on the heels of rapidly emerging information and communications technologies (ICTs) and increasing quantities of information, but broader than fluency in the use of ICTs, it has been recognised globally by institutions of higher learning as a sine qua non for the information society, thereby making it imperative for students to accurately understand, and integrate information literacy (IL) skills.

Many universities have integrated IL into their curriculum and also put much work into developing information literacy programmes that students can properly understand. However, students seem to struggle with IL skills when claiming to search for, evaluate and use appropriate information sources. Literature clearly accentuates the importance of integrating IL skills into a comprehensive university education (Kim & Shumaker, 2015; Saunders, 2012; Tumbleson & Burke, 2013), in order to enhance students' tertiary education experience, and provide a basis for independent life-long learning and effective participation in their communities. It therefore initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them (Anyaoku, Ezeani & Osuigwe, 2014).

Librarians in Bowen University have long recognised that "the quality and quantity of information needed to function effectively in the society and workplace continues to increase" (Association of College and Research Libraries, 2016), and this calls for everyone

who desires to succeed in this rapidly growing information society to "master rapidly changing information technology and possess the information literacy skills to act independently in this information rich environment" (ACRL, 2016). From "Use of Libraries" in 2002, to "Library and Information Literacy Skills" in 2007, and then "Use of Libraries, Study Skills and ICTs" in 2018, Bowen University has endeavored to develop and integrate information literacy programmes into the university curriculum, to ensure that students survive in the midst of the ever-increasing volume of information they face daily.

## II. Statement of the Problem

The age we live in is characterised with the use of information as an economic resource, intense use of information by members of the society to take informed decisions and the emergence of an information sector within the knowledge society (Moore, 1997). And as noted by Bulls (2016), it is a global knowledge economy, where information is currency and wallets are digital which makes access a sine qua non. As a result, institutions of higher learning all over the world have proactively incorporated information literacy course into students curriculum to equip them with lifelong skills required to survive in the technology driven, global knowledge economy. That the knowledge economy is driven by an enabling technology which is growing exponentially in capacity and reducing sporadically in cost without any scintilla of abating, are pointers to an enduring and long lasting epoch. Hence, the necessity for impartation of information literacy skills to the teeming population especially, the undergraduate students.

However, there is a common and growing misconception that students enter higher institutions with the skills necessary for success, therefore, making information literacy courses unnecessary. Although technological advances have made access to information easier, university students are still not information literate and cannot confidently locate, retrieve, evaluate and use required information. Studies reveal such skill deficiencies among students (Buzzetto-Hollywood, Elobeid, &Elo-baid, 2017; Hanson, Kilcoyne, Perez-Mira, Hanson, & Champion, 2011; Mishra, Cellante, &Ka-vanaugh, 2015). As cited in Buzzetto-Hollywood, et al. (2018), Hargittai (2005) explains that students express this inflated sense of confidence in their digital literacy because they have mastered the small portion of familiar technologies that they use on a daily basis, and thus assume they are information literate.

The assumption that this generation of students is born into the digital age and so is digitally literate is unfortunately proven to be wrong most of the time. As a sub-component of digital literacy, information literacy has become, maybe has always been, an indispensable objective in course design and delivery in the age of technology. The literature on undergraduate students' competency in information and computer technologies confirm that today's undergraduate students are highly immersed in and familiar with digital technology and online information so that they can easily utilise online information for their studies. However, their 'technical proficiency' does not necessarily make them information literate, which requires the capacity to locate, identify and critically appraise resources in order to determine which are the most relevant and reliable (Judd & Kennedy, 2011; O'Reilly, 2014).

This accordingly has placed a challenge and additional responsibility on universities to meet the needs of students with varying levels of technological readiness, with digital and information literacy deficiencies so as to enhance their academic success and prepare them for lifelong, real life information society.

Propelled by this scenario, this study seeks to confirm and unravel the reasons behind perceived Bowen University students' negative attitudes and apathy towards information literacy programmes. Moreover, the dearth of literature on students' attitudes to information literacy from the Nigerian landscape will be filled by this study.

## III. Objectives of the Study, Research Questions and Research Hypothesis

### Objectives of the Study

To determine students' perception of information literacy programme.

To ascertain students' attitude to the information literacy programme.

To evaluate the result/influence of information literacy programme on students' information literacy skills.

### Research Questions

1. What perception do students have of information literacy programme?
2. What are the attitudinal traits students exhibit with information literacy programme?
3. How does the information literacy programme influence students' IL skills?

### Research Hypothesis

**H01:** Students' attitude to information literacy does not significantly influence their information literacy skill

**H02:** Students' perception of information literacy does not significantly influence their information literacy skills

**H03:** Students' attitude to, and perception of information literacy programme do not determine its influence on students' information literacy skills.

## IV. Literature Review

Various studies have revealed that there are many types of literacies existing in gradations with the meaning and value of literacy depending on the social contexts. However, literacy alone does not give benefits when separated from its original purpose, but can be acquired with education and culture in combination with power (Shapiro and Hughes, 2009; Warschauer, 2011).

There is no ambiguity as to what information literacy is as the literature is replete with its descriptions. However, there seems to be a dearth of literature on the attitude of

students to information literacy programme. Hence, Tella and Bashorun (2012) opine that attitude is one of the most prominent variables that have not been so much considered in various related studies particularly from the African context and Nigeria particularly; and Reetseng (2016) noted that there is less literature on the assessment of students' attitude to information compared to literature on the assessment of information literacy skills. At best, vague reference has been made to students' attitude to information literacy. Some of the available literature will be reviewed accordingly.

Information literacy is about understanding information and how it works, about introducing students to the forms of information available to them, and helping them determine what sort of information they need in any specific context, how to find it, evaluate it, and use it effectively and ethically. Thus, Pinto (2010) defines Information literacy (IL) as "the set of literacies or competencies that an informed citizen needs in order to participate judiciously and actively in an information society". In addition, Adetoro, Simisaye and Oyefuga (2010) state that information literacy is a critical input in today's learning environment and indeed for lifelong learning. It is the foundation for survival in the information society, aiding individuals in identifying when information is needed and the type of information needed. It therefore becomes necessary for students to develop the required IL and information seeking skills in order to function perfectly in whatever discipline, level or environment they find themselves and be successful both academically and professionally. Hence, Pinto and Fernández-Pascual (2017) state that information literacy is vital for the modern information-intensive world, enabling personal, economic, social and cultural development. The importance of teaching IL skills, "clearly linked with academic and critical thinking skills, as part of a comprehensive university education" has also been variously emphasised (Kim & Shumaker, 2015; Saunders, 2012; Tumbleson& Burke, 2013).

## V. The Concept of Digital/ Technology and Information Literacies

Reetseng (2016) reveals that students have their own perceptions of information needs, which happen to be different from the academic environment that they enter. These are contemporary students (referred to as "digital natives") who think and process information differently from their predecessors (referred to as "digital immigrants"), because they are surrounded by new technology. There is therefore this fallacy that students already possess the necessary skills for success, hence, information literacy courses were unnecessary in the higher institution. However, various studies have revealed the contrary (Buzzetto-Hollywood, Wang, Elobeid, &ElobeidElobeid, 2017; Hanson, Kilcoyne, Perez-Mira, Hanson, & Champion, 2011; Mishra, Cellante, &Ka-vanaugh, 2015), showing that students were only "digital literates", knowing how to use information and communication technologies without particular concentration on information literacy.

Digital literacy, has been noted to play crucial parts both in students' abilities to perform well academically (Mckee-Waddell, 2015) and to eventually function and succeed in areas such as employment and civic involvement (Murray and Pérez, 2014). According to American Library Association (ALA, 2013) digital literacy is "the ability to use information and communication technologies to find, understand, evaluate, create, and communicate digital information, an ability that requires both cognitive and technical skills". Beetham (2011) cited in Ondari-Okemwa (2016) pictures digital literacy as "the awareness, attitude and ability of individuals including undergraduates to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesise digital resources, construct new knowledge, create media expression, and communicate with others in the context of specific life situations, in order to enable constructive social actions; and to reflect upon this process". Zwimpfer (2016) defined it as a person's confidence and ability to use digital devices and the internet to find, evaluate, create and communicate information. JISC (2014) noted that digital literacy looks beyond functional IT skills to describe a richer set of digital behaviours, practices and identities. Hence, digital literacy encompasses various skills identified in the "Seven Capabilities Model of media literacy" by JISC (2014) in Fig. 1.

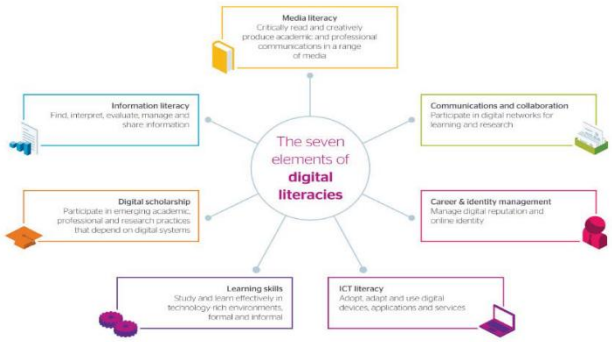


Fig. 1. Seven capabilities model of media literacy. Adapted from "Developing digital literacies" by JISC, 2014.

According to Ondari-Okemwa (2016), digital literacy does not just happen, it has to be planned for and implemented. Buzzetto-More (2009) states that technological literacy, which is the understanding of the uses, functions, and purposes of technology for the achievement of goals, is increasingly being tied into information literacy. Students nowadays have the ability to manipulate digital technology and process online information, but that does not make them particularly information literate. According to Judd & Kennedy (2011), their 'technical proficiency' does not necessarily make them information literate. Information literacy requires 'the capacity to locate, identify and critically appraise resources, in order to determine which are the most relevant and reliable'.

Considering a library and information science perspective also, the Association of College & Research Libraries (ACRL, 2016) states that "Information literacy

is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning". Ogunlana, Oshinaike, Akinbode and Okunoye (2013) and Reetseng (2016) reveal that information literacy is a valuable skill, required for every aspect of students' lives such as their discipline, studies, occupation and career. Thus, Ogunlana et al. (2013) define information literacy as a necessary skill that enables both students and the researchers to recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information.

The foregoing reveals that there is a clear-cut difference between digital literacy and other literacies it compasses such as information literacy. Hence, Dunn (2010) states that "information literacy is about developing a wide range of cognitive skills which goes beyond understanding technologies". It is therefore important for students to be able to both understand, and integrate information literacy skills, as these are "needed for lifelong learning and perceived as an essential skill that supports learning" (Reetseng, 2016). And as Anyaoku, Ezeani and Osuigwe (2014) stated, "it initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them".

## VI. Conceptualisation of Attitude

It has often been said that attitude determines not only altitude but everything in life. It dictates how individuals respond to situations and shapes decisions and actions. It sums up individual perceptions, dispositions, inclinations and worldview. Attitude is defined by Hornby (2010) as the way that you behave towards somebody or something that shows how you think and feel. Tella and Bashorun (2012) see attitude as an inner psychic state influencing behaviour. It is not inborn, but depends on a person's experience and its impact in a new situation. Gajalakshmi (2013) notes that attitudes have three main components which are affective (the way we feel), cognitive (the way we think) and behavioural (the way we act) towards a particular entity. Also, Adekunle, Ogie and Tella (2007) see attitudes as inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic.

## VII. Attitude and Learning

Beetham's (2011) study referred to by Ondari-Okemwa (2016) draws attention to the importance of individual attitude as a catalyst of learning experience. Researchers in different parts of the world also realise that attitude plays an important role in academic achievements of students (Ahmed & Bora, 2012; Beetham, 2011, Mckee-Waddell, 2015). Perkins, Adams, Pollock, Finkelstein and Wieman (n.d.) observe positive correlations between students' attitudes and conceptual learning gains, concluding that students who come into a course with more favorable attitudes are more likely to achieve high learning gains. However, students' perceptions of courses and attitudes toward learning both play significant roles in retention and enrollment (Gasiewski, Eagan, Garcia, Hurtado and Chang, 2012), and their eventual success as learners. Gajalakshmi (2013) adds that if students have a positive attitude towards any subject, they can achieve many things in that specific area. Hence, a student has no possibility of succeeding in a course, no matter how effective the instructor or instruction is as long as the student believes that no matter what he does, he will not succeed in that course (Gasiewski et al., 2012). Ogunlana et al's (2013) study revealed that students' negative attitudes to information literacy may reflect a lack of skills and understanding that needs to be addressed before they gain confidence to attempt information-related tasks. This is because whatever attitude students have towards the training will eventually determine the success of the instruction.

Valerie (2015) posits that the issue of attitude can be understood from the perspective of the subject-object relationship. The subject enters in diverse relations with the object. In such relationships, the subject does not manifest uniformly, but manifests differently towards diverse objects: some he likes, other he dislikes, some attract him, others repel him, some interest him, others he is indifferent towards, some he wants, other he refuses etc. thus confirming that students attitude to a given subject determines their performance in such subject. Hence, Freeman (2004) observes that if students perceive library instruction as unimportant, they will certainly never take advantage of the available library instruction opportunities. Thus, the students will never benefit from a service proven to enhance research skills. The fact that library instruction is effective makes no difference if students are unwilling to give instruction a chance. However, a student that perceives information as important recognises information literacy as both a means to and an outcome of learning.

## VIII. Students' Attitude and Information Literacy

As noted by Pinto (2010), learning involves three domains of educational activities: knowledge, skills and attitude (KSA). Every student's personal KSA will therefore determine improvement in IL since each person possesses a particular and unique KSA level. The attitude of a student is therefore affected by the student's favourite source of learning, motivation and self-efficacy. Also, the student's favourite source of learning will significantly affect both learning and "the path towards the full training" of the student Fig. 2.

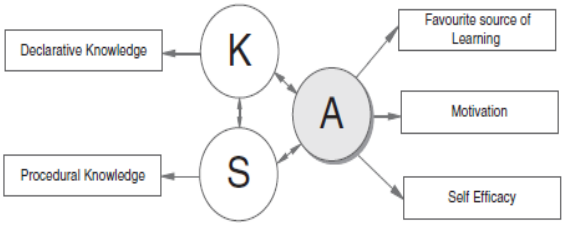


Fig. 2. Importance of attitude in the educational triangle. Adapted from "Design of the IL-HUMASS survey on information literacy in higher

education: A self-assessment approach." by M. Pinto, 2010, Journal of Information Science, 36 (1), 86–103.

Pinto (2010) reveals that students can become information literate only if they proactively and independently choose to pursue the opportunities that are available to them during the course of their education, are properly motivated and possess a strong self-assurance concerning their capabilities. This attitude will enable them approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Hence, Ogunlana et al. (2013) and Adebamigbe, (2004) posit that attitude is the most powerful determinant of literacy skill acquisition by students and students' perception, attitude and experience are significantly related to information literacy skills. Students with negative attitudes have been realised to have formed a premonition about the librarian and his duty (Driscoll, 2010), including library instruction.

Baro and Zuokemefa (2011) therefore recognise the need for librarians to make use of available opportunities in order to spearhead IL as well as tackle the identified challenges including lack of interest by students, teachers, and management, inadequate human resources to handle IL training, lack of facilities, low acceptance of online IL delivery approach and absence of IL policy, lack of facilities, lack of understanding of IL, students' nonchalant attitude towards attending IL sessions, and low acceptance of the online approach, as factors militating against librarians' efforts in providing IL training in Nigerian university libraries, and barriers such as lack of time allotted for teaching IL skills, students tendency to be apathetic and bored, and a lack of understanding of what IL identified by the libraries studied in the UK and US.

Although first-year students are usually sentimental about the trainings they are exposed to, they sometimes lack an understanding of what they need to learn or how research can benefit them, were overconfident, indifferent, and had short attention spans which make them less willing to attend or absorb new training (Buzzetto-Hollywood, Wang, Elobeid and Elobeid; 2018; Schmidt, Tin & Sanderson, 2018). Reetseng (2016) reporting a study by Julien et al. (2009) revealed that students eventually benefitted from the IL training and had gained searching skills, and confidence in efficient use of resources, believing that these skills would reduce time used in conducting searches.

## IX. Methodology

Descriptive survey research design was adopted for this study. The population comprised 5,500 undergraduates in the surveyed university and multistage sampling method was used to select a sample size of 550. A structured questionnaire was the instrument of data collection to selected respondents from among the 200 to 500 level students of the university who were expected to have taken the information literacy course titled "Library and Information Literacy Skills". The questionnaires were administered to the 550 students and 514 completed copies were returned and found valid for the study. These were analysed using SPSS, ANOVA and regression analysis.

## X. Results

### *a. Demographic Characteristics of the Respondents*

1.1 Respondents' Demographics

The demographic characteristics of Bowen University students are presented in Fig. 3. The distribution shows the normal expected age of undergraduate students. The table revealed that 20 years has the highest percentage (30.4), followed by 19 years (17.9%) then 21 years (15.8%). The ages with low percentages are 27 and 35 years with 0.2 % followed by 14 and 15 years with 0.4%.

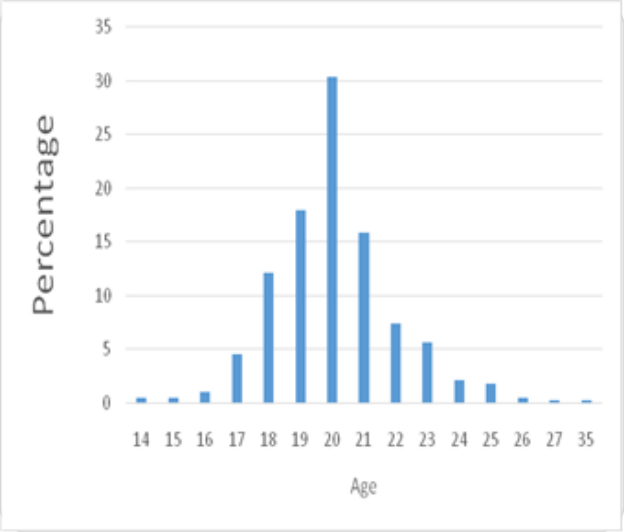


Fig. 3. Age of respondents

The demographic characteristics of Bowen University library students as presented in Fig. 4 revealed that the male respondents were 215 which accounted for 41.8% while female respondents were 299, accounting for 58.2%

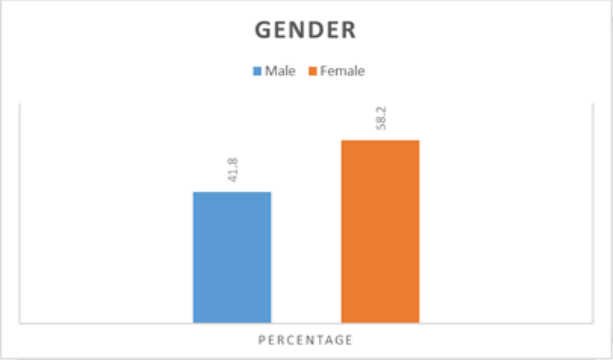


Fig. 4. Gender of respondents

Respondents were asked to indicate their levels of study. The distribution for the levels of study in Fig. 5 showed that most of the respondents were in 400 level (40%), a few other respondents were in 300 level (29.8%) while a small number of respondents were in 500 level (1.4%) and the least number were in 100 level (0.2%).

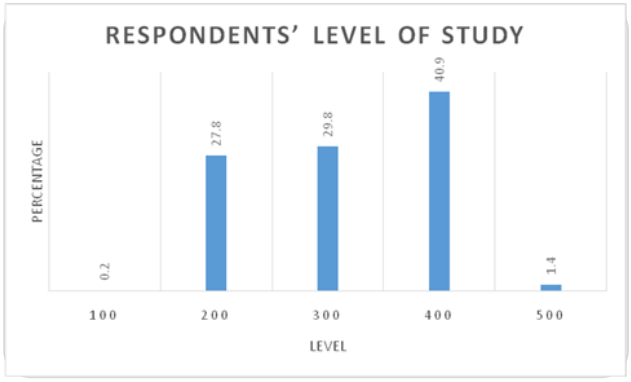


Fig. 5. Respondents' level of study

## XI. Results of the Analysis

The results of the analysis are presented in this section. The study was guided by the following three research questions:

Research Question 1. What perception do students have concerning information literacy programme?

TABLE I
STUDENTS' PERCEPTION OF INFORMATION LITERACY PROGRAMME

| Variables | VH | H | AV | L | VL | Mean |
|---|---|---|---|---|---|---|
| Library and information literacy skills course is important to my academic pursuit | 10(1.9) | 33(6.4) | 69(13.4) | 192(37.4) | 208(40.5) | 4.07 |
| The lectures were always boring | 37(7.2) | 69(13.4) | 129(25.1) | 165(32.1) | 113(22.0) | 3.48 |
| Lecture time was always time to sleep, chat, ping, play online games, copy notes of other courses* | 100(19.5) | 121(23.5) | 99(19.3) | 106(20.6) | 86(16.7) | 2.90 |
| Library sessions were like field trip and very boring | 45(8.8) | 112(21.8) | 122(23.7) | 142(27.6) | 93(18.1) | 3.25 |
| The information literacy course was interesting and helpful | 25(4.9) | 51(9.9) | 122(23.7) | 215(41.8) | 99(19.3) | 3.60 |
| The lectures were always interesting and I was always eager to attend | 54(10.5) | 87(16.9) | 131(25.5) | 172(33.5) | 68(13.2) | 3.21 |
| Library instruction is important for learning how to use the library and information | 24(4.7) | 44(8.6) | 89(17.3) | 180(35.0) | 177(34.4) | 3.86 |
| Library and information literacy skills should not be a compulsory course | 33(6.4) | 80(15.5) | 119(23.2) | 155(30.2) | 127(24.7) | 3.51 |
| The librarians teaching the course were friendly | 43(8.4) | 58(11.3) | 177(34.4) | 153(29.8) | 83(16.1) | 3.34 |
| The lecture room was not conducive for learning | 68(13.2) | 135(26.3) | 112(21.8) | 122(23.7) | 77(15.0) | 3.01 |
| The class was too large for learning | 75(14.6) | 118(23.0) | 143(27.8) | 105(20.4) | 70(13.6) | 3.07 |
| The lecture note was self-explanatory | 42(8.2) | 94(18.3) | 113(22.0) | 170(33.1) | 95(18.5) | 3.35 |
| The teaching methodology used by lecturers was poor | 63(12.3) | 149(29.0) | 151(29.4) | 94(18.3) | 57(11.1) | 2.87 |
| The lecture environment was too noisy for any meaningful assimilation | 69(13.4) | 136(26.5) | 132(25.7) | 119(23.2) | 58(11.3) | 2.92 |
| There were distractions when classes were going on | 48(9.3) | 110(21.4) | 105(20.4) | 153(29.8) | 95(18.5) | 3.25 |
| The classes were not well ventilated | 67(13.0) | 146(28.4) | 117(22.8) | 103(20.0) | 78(15.2) | 2.94 |
| The lecture note was too voluminous | 47(9.1) | 120(23.3) | 129(25.1) | 135(28.3) | 80(15.6) | 3.14 |
| I did not see the relevance of the course to my programme | 63(12.3) | 136(26.5) | 117(22.8) | 111(21.6) | 84(16.3) | 3.02 |
| The lecture delivery was abstract and non-interactive | 59(11.5) | 127(24.7) | 152(29.6) | 97(18.9) | 76(14.8) | 2.99 |
| The lecture period was most unsuitable | 48(9.3) | 130(25.3) | 152(29.6) | 122(23.7) | 59(11.5) | 3.01 |
| | | | | | | 3.24 |

[VH: Very High; H: High; AV: Average; L: Low and VL: Very Low]

The results in Table 1 show that majority of the respondents perceived that lecture time is a time to sleep, chat, ping, play online games, copy notes of other courses (X=2.9); the lecture room not conducive for learning (X=3.0); the class was too large for learning (X=3.0); the teaching methodology used by lecturer was poor (X=2.9); the lecture environment was too noisy for any meaningful assimilation (X=2.9); and the classes were not well ventilated (X=2.9).

The addition of "very low (VL)" and "low (L)" responses together revealed that 61.1% had a low perception that the information literacy course was interesting and helpful; 46.7% did not feel that the lectures were always interesting and they were not always eager to attend; 69.4% of the respondents had a low perception that library instruction is important for learning how to use library and information; 45.9% did not think the librarians teaching the course were friendly; and 51.6% did not perceive that the lecture note was self-explanatory.

Although the result on the table shows that majority (77.9%) of the respondents had a low (37.4%) and very low (40.5%) perception of the importance of Library and Information Literacy Skills course to their academic pursuit, majority (X=3.5) however, did not support that Library and information literacy skill should not be a

compulsory course, most respondents (X=3.5) did not think that the lectures were always boring and majority (X=3.3) did not perceive that library sessions were like field trips and very boring.

Research Question 2: What are the attitudinal traits students exhibit toward information literacy programme?

TABLE II
STUDENTS ATTITUDINAL TRAITS TOWARDS INFORMATION LITERACY PROGRAMME

| Variables | SD | D | NT | A | SA | Mean |
|---|---|---|---|---|---|---|
| I enjoyed taking lecture in library and information literacy skill course | 60(11.4) | 76(16.7) | 111(21.6) | 152(29.6) | 102(19.8) | 3.27 |
| I benefitted from library and information literacy skill course | 33(6.4) | 40(7.8) | 85(16.8) | 231(44.9) | 122(23.7) | 3.70 |
| I paid rapt attention during classes | 33(6.4) | 68(13.2) | 160(31.1) | 176(34.2) | 74(14.4) | 3.35 |
| I sat for and passed information literacy course in my first year | 19(3.7) | 41(8.0) | 75(14.6) | 192(37.4) | 183(35.6) | 3.91 |
| Librarians can teach me a lot about information literacy skill course | 43(8.4) | 47(9.1) | 103(20.0) | 179(34.8) | 139(27.0) | 3.61 |
| I find it difficult to comprehend during lectures | 54(10.5) | 135(26.3) | 131(25.5) | 129(25.1) | 60(11.7) | 2.99 |
| I felt nervous and worried when I have to attend information literacy classes | 79(15.0) | 134(26.1) | 130(25.3) | 100(19.5) | 70(13.6) | 2.89 |
| I felt overwhelmed with the volume of notes I had to read for the course | 48(9.3) | 112(21.80 | 129(25.1) | 144(28.0) | 78(15.2) | 3.16 |
| I always had fear or failure whenever I thought about the course | 59(11.5) | 125(24.3) | 117(22.8) | 114(22.2) | 96(18.7) | 3.11 |
| I experience negative feelings about the course | 61(11.9) | 118(23.0) | 124(24.7) | 118(23.0) | 90(17.5) | 3.10 |
| It was sometimes hard for me to concentrate because of my perception | 65(12.6) | 102(19.8) | 128(24.9) | 125(24.3) | 91(17.7) | 3.13 |
| I dislike the information literacy course because of what I heard about it from other people | 76(14.8) | 128(23.9) | 135(26.3) | 99(19.3) | 78(15.2) | 2.94 |
| | | | | | | 3.26 |

[SD: Strongly Disagree; D: Disagree; NT: Neutral; A: Agree; SA: Strongly Agree]

In Table 2, the findings of this study in respect of research question 2 revealed that majority of the respondents usually enjoyed taking lecture in library and information literacy skill course (X=3.3), benefitted from library and information literacy skill course (X=3.7), paid rapt attention during classes (X=3.4) and sat for and passed information literacy course in their first year (X=3.9).

The results also show that although most respondents affirmed that librarians can teach them a lot about the information literacy skill course (X=3.6), majority usually find it difficult to comprehend during lectures (X=3.0), felt nervous and worried when they had to attend information literacy classes (X=2.9), felt overwhelmed with the volume of notes they had to read for the course (X=3.2), always had fear of failure whenever they thought about the course (X=3.1), experienced negative feelings about the course (X=3.1), sometimes found it hard to concentrate because of their perception (X=3.1), and disliked the information literacy course just because of what they had heard about it from other people (X=2.9).

Research Question 3: What is the effect of information literacy programme on students' IL skills?

TABLE III
INFLUENCE OF INFORMATION LITERACY PROGRAMME ON STUDENTS' IL SKILLS

| Variables | S.D | D | NT | A | S.A | Mean |
|---|---|---|---|---|---|---|
| I can effectively use the computer and other technologies, therefore I consider myself to be information literate | 22(4.3) | 28(5.1) | 60(11.7) | 159(30.9) | 242(47.1) | 4.09 |
| I use and borrow library books | 68(13.2) | 73(14.2) | 89(17.3) | 154(30.0) | 127(24.7) | 3.37 |
| I can differentiate between information and data | 14(2.7) | 29(5.6) | 103(20.0) | 161(31.3) | 204(39.7) | 3.98 |
| I understand how the library is organised | 22(4.3) | 46(8.9) | 118(23.0) | 179(34.80) | 143(27.8) | 3.70 |
| I am able to use the library effectively to find information | 32(6.2) | 30(5.8) | 101(19.6) | 198(38.5) | 146(28.4) | 3.73 |
| I am aware of the different information sources available in the library | 25(4.9) | 51(9.9) | 109(21.20) | 194(37.7) | 131(25.50 | 3.67 |
| I always search OPAC to find books on a topic that interests me before retrieving resources from the shelves | 50(9.7) | 87(16.89) | 104(20.2) | 182(35.4) | 88(17.1) | 3.25 |
| I always seek assistance form librarians on how to find information in library | 35(6.8) | 59(11.5) | 131(25.5) | 172(33.5) | 113(22.0) | 3.32 |
| It is easy to find books and other resources in the library for useful | 20(3.90) | 56(10.9) | 131(25.5) | 156(30.2) | 149(29.0) | 3.50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| articles for research | | | | | | |
| I can differentiate between primary, secondary and tertiary sources of information | 28(5.4) | 66(12.8) | 144(28.0) | 166(32.3) | 104(20.2) | 3.68 |
| I can tell the difference between scholarly and popular journals without any problem | 16(3.1) | 61(11.9) | 102(19.8) | 182(35.4) | 150(29.20 | 3.46 |
| I can cite sources I use | 58(11.3) | 83(16.1) | 124(24.1) | 152(29.6) | 93(18.1) | 3.74 |
| I can tell the difference between a citation to a book and a citation to an article | 25(4.9) | 46(8.9) | 129(25.1) | 173(33.7) | 138(28.8) | 3.67 |
| I also search research databases in the library for useful articles | 23(4.5) | 89(13.4) | 120(23.3) | 174(33.9) | 125(24.3) | 3.58 |
| I prefer to use only web resources for my assignment and term/seminar papers | 21(4.1) | 74(14.4) | 144(22.2) | 164(31.9) | 135(26.3) | 3.58 |
| I can perfectly form a search strategy | 34(6.6) | 70(23.6) | 136(26.5) | 169(32.9) | 100(19.5) | 3.42 |
| I can confidently use search engines to retrieve relevant information from web-based resources | 23(4.5) | 36(7.0) | 109(21.2) | 186(36.2) | 157(30.5) | 3.80 |
| I am confident that I will retrieve relevant information whenever I search information | 15(2.9) | 39(7.6) | 97(18.9) | 198(38.5) | 163(31.1) | 3.84 |
| I can confidently apply Boolean operators to retrieve relevant information | 21(4.1) | 61(11.9) | 171(33.3) | 149(27.0) | 109(21.2) | 3.50 |
| I can define and articulate my need for information | 16(3.1) | 50(9.7) | 139(27.0) | 192(37.4) | 14(22.2) | 3.64 |
| I am able to formulate relevant information to help solve my information needs | 14(2.7) | 62(12.1) | 106(21.0) | 196(38.5) | 129(25.1) | 3.69 |
| I am capable of retrieving relevant information from different formats of information | 26(5.1) | 51(9.9) | 114(22.2) | 194(37.7) | 125(24.3) | 3.65 |
| | | | | | | 3.63 |

[SD: Strongly Disagree; D: Disagree; NT: Neutral; A: Agree; SA: Strongly Agree]

Considering the influence of the information literacy programme on information literacy skills of the respondents, the results in Table 3 show that majority of the respondents can effectively use computer and other technologies, therefore consider themselves to be information literate (X= 4.1), use and borrow library books (X= 3.4), can differentiate between information and data (X=4.0), understand how the library is organized (X=3.7), able to use the library effectively to find information (X=3.7), aware of the different information sources available in the library (X=3.7), always search OPAC to find books on a topic that interests them before retrieving resources from the shelves (X=3.3), always seek assistance form librarians on how to find information in library (X=3.3), easy to find books and other resources in the library useful for research (X=3.5), can differentiate between primary, secondary and tertiary sources of information (X=3.7), can tell the difference between scholarly and popular journals without any problem (X=3.5), can cite sources used (X=3.7), can tell the difference between a citation to a book and a citation to an article (X=3.7), search research databases in the library for useful articles (X=3.6), can perfectly form a search strategy (X=3.4), can confidently use search engines to retrieve relevant information from web-based resources (X=3.8), are confident that they will retrieve relevant information whenever they search for information (X=3.8), can confidently apply Boolean operators to retrieve relevant information (X=3.5), can define and articulate their need for information (X=3.6), are able to formulate relevant information to help solve their information needs (X=3.7), and are capable of retrieving relevant information from different formats of information (X=3.7). However, majority (X=3.6) prefer to use only web resources for their assignments and term/seminar papers.

Hypothesis one: Students' attitude to information literacy does not significantly influence their information literacy skill.

Table 4 shows that the overall mean score of students' attitude to information literacy (IL) is 39.16. This reveals that t-value associated with df = 512 at .005 significance level for a two tailed test is +or- 1.96. The calculated t-ratio of 97.59 is greater than the critical value of 1.96; therefore the null hypothesis is rejected and the alternate will be accepted. Consequently, Students' attitude to information literacy significantly influences their information literacy skill.

TABLE IV
HOW STUDENTS' ATTITUDE TO INFORMATION LITERACY INFLUENCES THEIR INFORMATION LITERACY SKILL

| | N | Mean | Std. dev | Df | T | Sig(p) | Remark |
|---|---|---|---|---|---|---|---|
| Attitude to IL | 513 | 39.16 | 7.93 | 512 | 97.59 | .005 | |

Hypothesis two: Students' perception of information literacy does not significantly influence their information literacy skills

Table 5 shows that the overall mean score of students' perception of information literacy is 64.78. The table reveals that t-value associated with the df =513 at .005 significant level for a two-tailed test is +or-1.96. The calculated t-ratio of 137.89 is greater than the critical value of 1.96; therefore, the null hypothesis is rejected and the alternate is accepted. Consequently, Students'

perception of information literacy significantly influences their information literacy skills

TABLE V
HOW STUDENTS' PERCEPTION OF INFORMATION LITERACY INFLUENCES THEIR INFORMATION LITERACY SKILL

| | N | Mean | Std. dev. | Df | T | Sig (p) | Remark |
|---|---|---|---|---|---|---|---|
| Perception of IL | 514 | 64.78 | 9.83 | 513 | 137.89 | .005 | |

Hypothesis three: Students' attitude to, and perception of information literacy programme do not determine its influence on students' information literacy skills.

Dependent variable: the influence of IL

In Table 6,

B =0.009, t(507)=0.202, p>0.05. This indicates that perception of IL is not a predictor of influence of IL. The observed is not significant at p< .05 level

B= 0.359, t(507)=7.841, p<0.05. Attitude to IL is a strong predictor of Influence of IL. The small observed significance level (P<.05) associated with the slope of IL supports the hypothesis that attitude to IL and Influence of IL are linearly related.

TABLE VI
INFLUENCE OF ATTITUDE TO, AND PERCEPTION OF INFORMATION LITERACY PROGRAMME ON STUDENTS' INFORMATION LITERACY PROGRAMME

| | Unstandardised coefficient | | Standardized coefficient | T | sig |
|---|---|---|---|---|---|
| Model | B | Std Error | Beta | | |
| Constant | 52.545 | 4.351 | | 12.076 | .000 |
| Perception of IL | .014 | .069 | .009 | .202 | .840 |
| Attitude of IL | .673 | .086 | .359 | 7.841 | .000 |

In Table 7 the regression analysis result indicates that the model (perception of students to IL, attitude of students to IL) significantly predicts information literacy: R=0.363; R2 adj = 0.129; F(2,507)= 38.56; p<0.05. The model accounts for 13.2% of variance of influence on information literacy.

TABLE VII
MODEL SUMMARY AND ANOVA TABLE

R= 0.363a
R square =0.132
Adjusted R square =0.129

| Model | Sum of squares | Df | Mean square | F | Sig |
|---|---|---|---|---|---|
| Regression | 14852.047 | 2 | 7426.024 | | |
| Residual | 97648.716 | 507 | 192.601 | 38.557 | .0006 |
| Total | 112500.763 | 509 | | | |

Dependent variable: influence of information literacy

Predictors: (constant), attitude of students to information literacy and perception of students to information literacy.

## XII. Conclusion

Despite the increasing sophistication of ICTs and the ease with which the technology native generation adopts every emerging technology, this study established the need for a holistic paradigm shift from the traditional teaching delivery to a more robust and technology driven interactive pedagogy that will ginger the interest of the learners and effect the desired attitudinal change in the generation of undergraduate students. The study therefore recommends that since these students are known to be technology savvy, there is the need to increase mobile educational applications in order to meet them at their familiar terrain, develop and enhance the content, videos and interactive tools to potentially support greater positive outcomes as asserted by Schmidt, Tin & Sanderson (2018).

Furthermore, IL teaching should be made a dedicated element in the main curriculum as well as staggering it to last the duration of an undergraduate programme since it has been established that skills transfer is a process which takes time. Librarians should teach for long-term transfer by working closely with faculty and ensuring that assessment of IL skills continues for the full duration of the academic programme, since management support is essential for a successful implementation as asserted by Pinto (2010).

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