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Students' Perception, Attitude and Experience as Factors Influencing Learning of Information Literacy Skills in Public Universities in Ogun State, Nigeria

Ogunlana, E.K[1], Oshinaike, A. B[2], Akinbode, R. O[3], Okunoye, O.[4]
[1] 'Nimbe Adedipe Library, Federal University of Agriculture, Abeokuta, Ogun State
[2] University Library, Federal University, Lokoja, Kogi State
[3] University Library, Olabisi Onabanjo University, Ago Iwoye, Ogun State
[4] University Library, Osun State University, Osogbo, Osun State
* E-mail of the corresponding author ogunlanakunle@yahoo.co.uk

Abstract
In research and learning, information literacy is a necessary skill for both the students and the researchers to recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information. This study focuses on information literacy within the context of these associated variables perception, attitude and experience. Data were collected through self-constructed questionnaire with Cronbatch's Alpha reliability coefficient of 0.7812. A spectrum of 3000 students from three universities constituted the sample. Three factors namely perception, attitude, and experience for which mean scores, alpha coefficients and correlations were calculated. One-sample t-test, independent samples t-test and one-way ANOVA were employed for significance and variance analysis. The study established the fact that students' perception, students' attitude and student' experience are significantly related to information literacy skills. The results of this study should be utilized in providing guidelines for designing the new information literacy skills programme. Students regard information literacy as a valuable skill, and believe that a certain level of information literacy skill should be attained. More work must be done to define what constitutes information literacy skills and universities are advised to embark on programme on information literacy initiatives to fully satisfy their students.
Keywords: Information literacy skill, Students' perception, Students' attitude, Students' experience, Library literacy, Literacy skill

Introduction

Information has always been prime factor for the development of society, economic growth and is often regarded as a vital national resource. The growth of information and the dependency on it have paved way for the information society and subsequently the knowledge society. Information as a factor of production has become important part of our daily lives and should be made available when needed. Information services are generated using new tools and techniques to direct the users to the right information. Information technology has had a significant impact and has successfully changed the characteristics of information services being generated in libraries (Khodeh and Dhar, 2002). Technological tools for disseminating information have progressed from conventional books and journals to electronic journals and online databases, making it possible to explore the vast information around the world.

Information comes from a range of sources and is used for problem solving, decision-making, research and perennial needs in modern workplaces. Hence, the relevance of information literacy is framed often within the notion of lifelong learning (Kapitzke, 2003).

Needless to say, institutions of higher education have a great role to play in the provision of information use skills through various methods including information related courses such as: information literacy, information literacy skills or information fluency.

Libraries are entrusted with a host of tasks like acquiring, organizing, preserving, retrieving and disseminating information to the user. Apart from these objectives, the library must make available all its information resources for maximum utilization. This can only be done thoroughly and effectively by the way of information literacy. In a knowledge organisation, the library is recognised as the knowledge centre for organisational learning where its unique species of librarians the knowledge workers have capacity and capability of delivering information literacy. Libraries have information professionals that make judgments and interpret user needs; they provide services and resources to students, lecturers and researchers (Ogunlana, 2006).

Information literacy forms the basis for learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content, become self-directed learners, and assume greater control over their own learning. An information-literate individual is able to determine the extent of information needed, access the needed information effectively and efficiently, evaluate information and its sources critically, incorporate selected information into his or her knowledge base, and use information effectively to accomplish a specific purpose, understand the economic, legal, and social issues surrounding the use of information. Information literacy skills is a dynamic concept which extends basic reading, writing and calculating skills for application in information and technologically rich environments for the purpose of learning or solving problems (Kuhlthau, 2004 and Moore, 2002).

In research and learning information literacy is a necessary skill for both the students and the researchers to recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information. The advent of information technology, the increase and multiplication of information resources with unrivalled library and information users' needs have indeed increased the importance of information literacy. Consequent upon the above discussion, this study aimed at investigating and analyzing students' perception, attitude and experience of information literacy skill in three Nigerian universities. It focuses on information literacy within the context of these associated variables perception, attitude and experience. This is in order to ascertain if the variables under study have any relationship.

Research Questions

The following research questions guided the study.

1. Is there any significant relationship between male and female perception of information skill?
2. Is there any significant relationship among the independent variables (**s**tudents' perception, **s**tudents' attitude **s**tudents' experience) and information literacy skill?
3. Are there any significant composite and relative contribution of students' perception, students' attitude and students' experience to information literacy skill?

Literature Review

Information literacy include the knowledge of information sources in one's subject area, the ability to construct effective search strategies, the ability to critically appraise information sources and the ability to use these sources appropriately. Information literacy, sometimes referred to as information competency, is generally defined as the ability to access, evaluate, organize, and use information from a variety of sources. Information literacy is the ability to access, use and evaluate information in an effective and efficient manner.

Abilock, (2004) defined information literacy as a transformation process in which the learner needs to find, understand, evaluate and use information in various forms to create for personal, social, or global purposes. Information literacy are used to solve problem, the importance of basic information retrieval skills, the ability to be critical in the information use process, and the ability to use information across contexts or subject area. It is the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.

Information literacy is tripartite, much broader than the acquisition of traditional information skills. According to Ojedokun and Lumade (2005) and Adeyemi (2010) information literacy skills are associated with three main areas: the ability to access, evaluate, and use information efficiently and effectively, the ability to access information and find what is needed is the cornerstone of information literacy, while using and evaluating are made possible by the former. This includes how to use a catalogue, how to locate a book on the shelves and how to access an electronic databases. Being information literate requires knowing how to clearly define a subject or area of investigation; select the appropriate terminology that expresses the concept or subject under investigation; formulate a search strategy that takes into consideration different sources of information and the variable ways that information is organized; analyze the data collected for value, relevancy, quality, and suitability; and subsequently turn information into knowledge (Abilock, 2004 and Eisenberg, Lowe and Spitzer 2004).

According to Rockman, (2003) Virkus, (2003) and Ouwsu-Ansah, (2005) information literacy to students does not merely involve library instruction or the ability to use various information sources effectively, but teaching critical and analytical thinking skills regarding the use of information which can be useful in studies and research and later in business organisation, knowledge management and decision making.

Bruce (2002) described information literacy skills as the foundation for learning in our contemporary environment of continuous technological change. It focuses on content and communication; it encompasses authoring, information finding and organization, research, and information analysis, assessment, and evaluation. It is not uncommon to think of information literacy as the fusion or integration of library literacy, computer literacy, media

literacy, technological literacy, critical thinking, ethics, and communication skills (Langford, 2001).
Kurbanoglu (2003) stressed the significance of the development of confidence in using information and computer literacy skills and emphasized the importance of practice and feedback in developing this confidence, information literacy augments students' competency with evaluating, managing, and using information, it is now considered by several regional and discipline-based accreditation associations as a vital competency for all university students. It could be easily said that the inclusion of information competencies as a graduation requirement is the key that will fully integrate information literacy into the curricula of academic institutions. Information literacy skill enables individuals to recognize not only when information is needed, but also when different kinds of information are needed. It provides users of information resources with methods by which they can cope with the huge quantity of information coming from all directions, through all varieties of information resources.
There were seven categories of information literacy in higher education. These categories are information technology conception, information source conception, information process conception, information control conception, knowledge construction conception, knowledge extension conception, and the wisdom conception. The categories build upon the process of selecting the appropriate tools for finding information to finally inculcating the information into the student's own knowledge and applying it wisely to decision-making.
Williamson, Bernath, Wright, and Sullican (2007) found that students needed direction to be provided by both librarians and faculty, in all three aspect of information literacy which includes the use of information sources, knowing when sufficient data had been collected, and managing the information that they had collected. While Adeyemi (2010) stressed that students and researchers need to know what databases and other resources to access, how to extract the relevant data, and how to organize and analyze the data and develop recommendations. They recommended three steps which includes finding relevant sources, evaluating the data, and drawing conclusions and reporting findings.
Information literacy skills are crucial to the future success of students of all ages (Plotnick, 2000). Information literacy is a transformational process that allows the learner to manipulate information for personal, social, or global purposes. An information literate person, according to Julien (2002), must have the ability to select appropriate search terminology, logical as well as appropriate search strategy and competent information evaluation skill. However, one barrier to the efficient utilization of information resources especially digital resources in developing countries is the relatively low level of information literacy skill (Tilvawala, Myers and Andrade, 2009).

Methodology:
A quantitative method was used for this study. The measuring instrument used for data collection was the questionnaire on information literacy developed by the researchers. The questionnaire included closed ended type questions aiming at gathering information relevant to the following aspects students' perception, attitude and experience of information literacy. It was face validated through expert opinions. The questionnaire was divided into four sections. Section A contained demographic data, B contained questions on students' experience, Section C contained question on students' attitude and Section D contained questions on students' perception on information literacy. The questionnaire was based on a four point Likert Scale of (1. Strongly agree, 2. Agree, 3. Strongly disagree and 4. Disagree).
The respondents were made up of 3000 students from of the three public universities in Ogun state; Federal University of Agriculture, Abeokuta, Olabisi Onabanjo University, Ago Iwoye and Tai Solarin University of Education, Ijebu Ode, Ogun state, Nigeria. Three thousand copies of the questionnaire were administered to students in these three public universities and two thousand, nine hundred and seventy eight copies were returned and found useful for this study. (Cronbatch's Alpha) reliability coefficient was found as 0.7812. Three factors namely perception, attitude, and experience for which mean scores, alpha coefficients and regression were calculated. One-sample t-test, independent samples t-test and one-way ANOVA were employed for significance and variance analysis.

Result Presentation

Table 1: General Information

Universities	Quantity Administered	Quantity Returned	Percentage
Federal University of Agriculture, Abeokuta	1200	1190	40.0
Olabisi Onabanjo University, Ago Iwoye	900	897	30.1
Tai Solarin University of Education, Ijebu Ode	900	891	29.9
TOTAL	**3000**	**2978**	**100**

Fig 1: Analysis of respondents by institutions

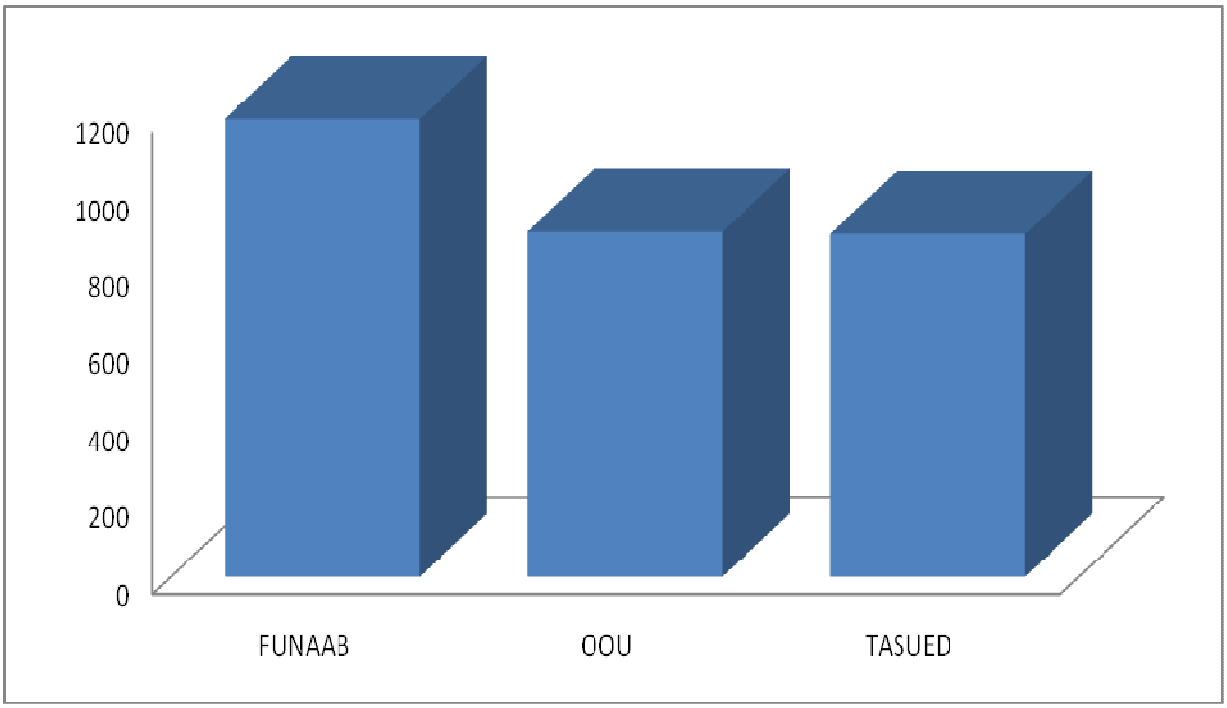

Table 1 above shows the number of respondents obtained from each university and their percentage contribution to the study.

Research Question 1: Is there any significant difference in students' perception, between male and female, on information literacy skill?

Table 2: Different between perceptions of male and female students on Information Literacy Skill.

Sex	N	Percentage (%)	Mean	SD	Df	T	Sig.
Male	1655	55.6	21.428	7.631	2976	1.152	NS
Female	1323	44.4	22.183	7.512			

Table 2 above shows that 1655 (55.6%) of respondents were males while 1323 (44.4%) were females. The means representing the students' perception of male and female are 21.428 and 22.183 and the standard deviation are 7.631 and 7.512 respectively. The result shows that the t-calculated value of 1.152 at $p< 0.05$ is lower than the critical value of t which is 1.98, thus suggests that no significant differences in male and female perception of information literacy skill.

Research Question 2: Does **s**tudents' perception, **s**tudents' attitude and **s**tudents' experience have any significant relationship with information literacy skill?

Table 3: Relationship between students' perception, attitude and experience on independent variable (Information Literacy Skill)

Variables	P	r	Sig. of r
Students' Perception	0.001	2978	0.4593
Students' Attitude	0.031	2978	0.4781*
Students' Experience	0.042	2978	0.4598*

*significant at $p<0.05$

Table 3 shows the regression summary of students' perception, attitude and experience variables on information literacy skills. The result shows that only students' perception is not significant as revealed by the result. From the table 3 above, In terms of magnitude of the weight of regression coefficient, students' attitude is found to be the most powerful determinant of information literacy skill and this is followed by perception and experience.

Table 4: Regression Summary of information literacy by students' perception, students' Attitude and students' experience on Information Literacy Skill

Multiple R	0.68303
R Square (R^2)	0.42425
Adjusted R Square	0.35777
Standard Error	8.26989

Where R Square is the coefficient of determination

From table 4, the contribution of all the variables (perception, attitude and experience) has a multiple correlation (R) of 0.68303 and a multiple correlation square (R^2) of 0.35777. The combination of these variables explained 8.3 per cent of the variance in information literacy skill as revealed by the coefficient determinant R^2 (0.42425).

Table 5: Analysis of Variance of the effects of students' perception, attitude and experience on information literacy Skill

Source of Variation	Df	Sum of square	Mean square	F-ratio
Regression	15	71105.459	243.1539	56.519
Residual	2963	96478.862	77.81741	

* Significant at $p<0.05$.

Table 5 shows the ANOVA of the effect of students' perception, attitude and experience to predict information literacy skill yielded a coefficient of multiple regression (R) of 42.4% and multiple regression square (R^2) of 0.35777. The result indicate that analysis of variance of the multiple regression showed a significant F-ratio [$F(15,2963) =56.519$, $P<0.05$].

Table 6: Relative Effect of independent variables on information literacy Skill

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	12.121	3.096		3.915	.000
Students' Perceptions	.836	.079	.677	11.236	.000
Students' Attitude	.186	.074	.124	2.353	.020
Students' Experience	5.865E-02	-.025	-.032	-.558	.577

*significant at P<0.05

Table 6 shows the Standardised Regression Weight, Standardised Error of Estimate, Beta, T-ratio and at the level at which T-ration is significant. The table shows the relationship between relative contribution of students' perception, attitude and experience. Students' perception, students' attitude were significant at 0.05 level and the table also shows relationship of students' perception, attitude and experience toward information literacy skills. From the values of the Beta weight and T-ratios for each variable, it is apparent that students' perception has the highest contribution.

Summary of Findings

Table 1 shows general information of distribution. The table reveal the number of respondents obtained from each university and their percentages in the study. 40% of the respondents are students of Federal University of Agriculture, Abeokuta, while 30.1% and 29.9% are students of Olabisi Onabanjo University and Tai Solarin University of Education respectively.

Table 2 shows that majority of the respondents1655 (55.6%) are males while 1323 (44.4%) were females. In response to research question 1, table 2 shows the perception of male and female on information literacy skills. The result of the data analysis revealed that there is no significant different between male and female perception of information literacy skills. The result agreed with Adeyemi (2009) who found among other determinant that female perception and attitude to information literacy skills are more positive than that of male. It is however necessary to observed that though female perception is high than their male counterpart, the mean score for students' perception is low for both male and female. This may be explained considering the fact that both male and female are in the same University and they are exposed to the same information literacy skill and university system. This study reveals that students' perception is below average.

The table 3 shows 8.27% of the overall causes. This means that 97.73% of the factors responsible are outside the finding of this study. Also, the observed F-ratio on table 3 indicates the effectiveness of the combined effects of the component variables in predicting information literacy skills of students could not be attributed to chance. The result also shows that only students' perception is not significant as revealed by the result. In terms of magnitude of the weight of regression coefficient, students' attitude is found to be the most powerful determinant of information literacy skill and this is followed by perception and experience. The result is consistent with Adebamigbe (2004) who found that the most prominent and consistent determinant of information literacy skill is students' perception.

Results from table 4, 5 and 6 indicate that partial correlation of all the variables were positively related to information literacy skills. The standardised regression coefficient was used to determine the relative by these variables (students' perception, attitude and experience) on information literacy skills. The significance of these variables were determined and only students' perception is significant at $p<0.05$. From table 4, the contribution of all the variables (perception, attitude and experience) has a multiple correlation (R) of 0.68303. The combination of these variables explained 42.425 per cent of the variance in information literacy skill as revealed by the coefficient determinant R^2. The finding corroborates with Middleton (2005) study on students' confidence and competence, Adeyemi, (2009) research on various determinants of information literacy skills.

The beta values are greater than 0.1 however students' perception contributes more significantly to information literacy skills followed by students' attitude. The beta value for perception is 0.074 while attitude is 0.79 while experience .025 also fairly contributes to information literacy skill as the significant is very close to 0.05. The result on table 6 above though weak but contributed indirectly to information literacy skills. The is due to the fact that students approaches situation with their own unique knowledge and experience, and with differing personal attributes, which in turn influence perception and attitude to learning, as well as competencies and abilities and thus differing challenges encountered.

Students' information literacy skills vary as this study shows the mixed and explained differences in terms of their perception, attitude experience and other personal attributes. Combining the findings, it can be deduced that each of the variables contributed either directly or indirectly to information literacy skills.

Conclusion and Discussion

This study indicates that students regard information literacy as a valuable skill, and believe that a certain level of information literacy skill should be attained. In conclusion, this study has established the fact that the three variables: students' perception, students' attitude and student' experience significantly related to information literacy skills. The results of this study should be utilized in providing guidelines for designing the new information literacy skills programme.

Interestingly students' attitude towards information skills had the greatest relative contribution, this mean 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.

The study recommended that more work must be done to define what constitutes information literacy skills. There is a high degree of need for development of information literacy skills for the students**.** Information literacy skills poses a great challenge to all stakeholders; lecturers, researchers and librarian to put student on the right path so that negative attitude, perception should be reduced. Information skill and knowledge should be part of the curriculum and should be made compulsory for all students. Concepts of information literacy devoid of any technicality should be put in place.

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