



## **Students' Satisfaction with the Availability of Electronic Resources in Nigerian Colleges of Education**

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### **Abstract**

*This study was conducted to determine the students' satisfaction with the availability of e-resources in academic library of Colleges of Education and to compare the differences in students' satisfaction with the availability of e-resources based on gender and age. The research design of this study is based on quantitative approaches. The data of this study were obtained through the use of a questionnaire, which was administered to the sample of lecturers and students (n= 406). Data analysis was used using statistical package for social sciences (SPSS) version 22 to analyze the descriptive statistics. The findings of this study indicated that moderately students satisfaction with the availability of e-resources in academic library. An independent sample t-test was conducted to compare male and female on students' satisfaction with the availability of e-resources. The findings showed that there is a significant difference in the mean scores for male (M=53.99; SD=6.32) and female (FM=51.68; SD=7.22);  $t(406) = 3.42, p = .001$ . Also, there is a significant difference in age groups on students' satisfaction with the availability of e-resource ( $F(2, 403) = 11.109, p = .000$ ). Thus, the Post-Hoc Multiple comparison test based on Turkey HSD indicated a significant difference between the respondents in age groups of 18 – 24 year and 25 – 31 years mean difference (Md = -2.53,  $p < .05$ ); and respondents with age groups of 18 – 24 years and 32 years and above (Md = -6.70,  $p < .05$ ).*

**Keywords:-** Resources, Students Satisfaction, Academic library, Availability of Electronic Information Resources

### **Introduction**

E-resources are increasingly becoming essential in students' learning mainly due to the availability and ease of access over the Internet. Like most libraries, the higher educational institution's library has undergone major changes over the last two decades, mostly with the advent of rapidly changing technology and its ensuing impacts of how students learn and access information resources. In many developed countries the idea of e-libraries and virtual libraries is a reality (Ali, 2015). However, in African, it seems "inaccessible" from the perspectives of many students, especially those from lower socioeconomic backgrounds. Libraries play an important role in raising intellectual, social and emotional development of societies (Sharma & Sharma, 2010).

### **Problem Statement**

Students' need information for a variety of activities and the academic library has vast electronic resources that can meet any of these purposes. There is a daily explosion of information resources and the challenges of using these effectively and responsibly (Ji, Michaels, Waterman, 2014; Nikolopoulou & Gialamas, 2011). In this regard, students are



lacking in realizing the potentials of e-resources (Issa, Blessing and Daura 2009). Therefore, there are a number of studies related to the e-resources by the students and researchers in various institutions and colleges. The related studies discuss some of the issues regarding the current study based on previous studies.

Students from less developed countries often point out the inadequate ICT infrastructure (Agboola, 2010; Boumarafi, 2010; Hadagali, Kumbar, Nelogal, & Bachalapur 2012; Okello-Obura, 2010; Thanuskodi, 2011; Malliari, Korobili, & Zapounidou 2011) Moreover, it is very imperative for the academic library to satisfy their e-resources in the 21<sup>st</sup> century. The e-resources are acquired, organized, stored and disseminating information for the students. The new information technologies which are integral mechanisms that influence of information systems have the possible of changing the status of e-resources (Nkanu and Okon, 2010; Bashorun, Abdulmumin, and Adisa, 2011; Gilchrist and Oakleaf, 2012).

### **Objectives of the Study**

The main objective is to examine students' satisfaction with the availability of e-resources in Colleges of Education in Northeastern Nigeria is while, the specific objective is:

1. To determine the students' satisfaction with the availability of e-resources
2. To compare the differences in students' satisfaction with the availability of e-resources based on gender a
3. To ompare the differences on Students Satisfaction with e-resources based on age groups.

### **Literature Review**

Studies have addressed the issue of service quality and student satisfaction. For instance, Hasan, Ilias, Rahman, & Razak (2009) in their study of Service quality and student satisfaction: A case study of private higher education institutions has observed service quality dimension that is tangible, responsiveness, reliability, assurance, and empathy as positive contributions towards student satisfaction. The term satisfaction has been defined by Kotler, (2009) define satisfaction as a person's feeling of pleasure that result from comparing a product's perceived performance or outcome to their expectation. Norliya, (2009) describes the student satisfaction as an individual, emotional reaction to a library service or product. Petruzzellis, D'Uggento, and Romanazzi (2006) defined student satisfaction as a result of students' assessment of a service based on the association of perception of service delivery with their previous expectations. Sivathaasan (2013) understands it as the view that a service provides a enjoyable fulfillment of a service. Students' satisfaction is generally definite as fulfillment of one's wishes, expectations or needs (Sivathaasan & Chandrasekaran, 2013). Also, Availability has been defined as the extent to which clients need for a specific information resources are punctually satisfied and direct access to known items sought (Nisonger, 2011).

Tyagi (2011) pursued to determine the use of Information Resources and Services at Delhi Public Library, Delhi. The study proved and clarified the various aspects of e-resources and its services, physical facilities available and collection of DPL. He knew the levels of various services provided, problem faced by users and their satisfaction level with a central library collection. Alasandi and Bankapur, (2014) described the library satisfaction of students and faculty members of Bharatesh's Global Business School, Belgaum, Karnataka: A user study. The majority of the respondents are aware about internet facility 85% in the library, 51% users are using a digital repository, 43% of Users are using Library Web page and 41% users are aware of EBSCO Database and only OPAC 36% and e-journals 32%. Sir, (2013) studied a satisfactory level of undergraduate students with academic library in University of Jaffna, Sri Lanka. A self-developed questionnaire was used to measure the satisfaction relating to four dimensions with a sample of 202 students. The facilities are information sources, library



environment, library staff and library general services offered by the main library. The results shown that respondents are moderately satisfied with the competency and helpfulness of library staff ( $M= 2.84$ ), followed by information sources ( $M= 2.75$ ) and library environment ( $M= 2.74$ ) and lastly library general services ( $M= 2.72$ ) in order. Also, students' satisfaction is portioned by the library facilities by 0.201. Thus, library facilities have an effect on the undergraduate satisfaction at a rate of 20.1 %, which is significant at the 5 % level.

E-resources have stood an important challenge to the e-libraries. Since the late nineteenth century, libraries have faced competition from other professions while struggling to define themselves and learning how to manage an ever increasing amount of information (Stachokas, 2014). The notion of e-resources has made a lot of debates in recent years. Various scholars view the concept from different angles. Bajpai, Mal & Bajpai (2009) have defined e-resources as resources that requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections... as a commercially available title that has been published with the aim of being sold. The burst of e-resources have had a major impact on the way the academic community uses stores and preserves information. The benefits of e-resources have drawn attention of the library users to a great extent. Madhusudhan, (2010) commands that the types of e-resources which have attracted the interest of users are ease of delivery, merger of multimedia contents, hyper linking, browse and search facility. Rafiq & Ameen (2012) pronounced a strong demand for information in digital formats and also stressed the need for an information literacy program for users, which could enable them to access and retrieve the desired information well. Thus, accepting users' demands to improve the value and value of e-resources has become a great task for e-resource producers and providers. This way, libraries can draw more possible users and improve service quality and users/students' satisfaction.

In the late 1990s, the Gap Theory and LibQual Model were widely accepted by research libraries. Before then, library services evaluation and student satisfaction issues have been discussed in various subject literatures. Researchers have observed that students' satisfaction in central variables in most user oriented research (Hernon & Altman, 1996). Scholars have adopted the knowledge model from other disciplines such as psychology, marketing and computer science. Later, it was found that, a sequence of variables contributing students satisfaction with the availability of e-resources other than performance alone (Applegate, 1993). The user/student satisfaction model was developed (Applegate, 1993). User satisfaction at micro level concern only one student service, user satisfaction contributes to the dimensions of library service quality (concrete, consistency, openness, assurance and accepting) (Cullen, 2001). User satisfaction at macro level concerns all academic e-resources which students interconnect. User satisfaction is a global view of the quality of library services and adds all the dimensions mentioned above. It adds to the overall student satisfaction within the institution (Cullen, 2001). The researchers usually approach students' satisfaction in an old way in which researchers focus the study of students' information needs and satisfaction usual from libraries (Yu, Sullivan & Woodall, 2006). In a study the relationship between user satisfaction and four factors such as: system effectiveness, students' effectiveness, students effort and students features (Al-Maskari & Sanderson, 2010).

### **Methodology**

A survey approach was used for this study. The methodology of the study which consists of research designs of this study, location of study, population and sample size, instrumentation, validity and reliability, pilot study and final study, data collection procedure, and data analysis. Research design is the basic form conducted for the process of data collection and data analysis



gives a conceptual structure to researchers to collect, measure and analyze data (Ary, Jacobs, Sorensen, and Walker, 2013). In addition, it helps the researcher to answer research questions based on the research design (Ary et al., 2013). This study adopts the survey method, specifically descriptive research design. The questionnaire for students satisfaction was adopted based on the previous researches which were validated. These were questions asked on students satisfaction with availability of e-resources students. In this study, sample refers to a group of the population in which the data is obtained. An ideal sample size must be calculated the stability, cost of errors, cost of sampling and chances of making errors. Ideally, the sample size should have a minimize error (Hoaglin, Mosteller, and Tukey, 2011). To calculate a sample size, different statistical apparatuses and equations were used by the researchers. Furthermore, Cochran, (1977); Kotrlik and Higgins, (2001) has proposed a formula in determining the sample;

$$n = \frac{Z^2 \cdot p \cdot q}{e^2}$$

=

n = Sample size

Where =

= 95% confidence interval

### 1. Students Satisfaction with the Availability of E-resources

The table 1 showed the descriptive statistical analysis of students' satisfaction with the availability of e-resources in which out of 406 respondents only 3.7% (15) of the respondents have low-level of satisfaction with the availability of e-resources in Colleges, while, 47.0% (191) were reported to have moderate students satisfaction with the availability of e-resources and 49.3% (200) of them were reported to have high-level of students satisfaction with the availability of e-resources. Based on the Mean score of 2.75 and standard deviation of .57, the result indicated that there is a moderate level of students' satisfaction with the availability of e-resources in Colleges of Education.

**Table 1: Students Satisfaction with the availability of E-resources (n= 406)**

Levels	Frequency	Percent	Mean	SD
Low (1 – 2.33)	15	3.7	2.75	.57
Moderate (2.34 – 3.66)	191	47.0		
High (3.67 – 5.00)	200	49.3		

### 2. Compare the differences in Students Satisfaction with the availability of e-resources based on gender

An independent sample t-test was conducted to compare male and female in students' satisfaction with the availability of e-resources. The findings shown that there is a significant difference in the mean scores for male (M=53.99; SD=6.32) and female (M=51.68; SD=7.22);  $t(406) = 3.42, p = .001$ . These findings suggest that students' satisfaction with the availability of e-resources do have a difference in gender. Therefore, it can be conclude that there is a significant difference in students' satisfactions with the availability of e-resources based on gender.

**Table 2: Independent t-test based on Gender (n= 406)**

Gender	N	Mean	SD	t	Sig.
Male	238	53.99	6.32	3.42	.001
Female	168	51.68	7.22		
Total	406				



### **3. Compare the differences in Students Satisfaction with the availability of E-resources based on Age**

The one-way analysis of variance (ANOVA) was conducted to compare whether there is a significant differences in age groups on students' satisfaction with the availability of e-resource. The analysis shown that there is a significant different in age groups on students' satisfaction with the availability of e-resource ( $F_{(2, 403)} = 11.109, p = .000$ ). Therefore, the Post-Hoc Multiple comparison test based on Turkey HSD indicated a significant difference between the respondents in age groups of 18 – 24 year and 25 – 31 years ( $Md = -2.53, p < .05$ ); and respondents with age groups of 18 – 24 years and 32 years and above ( $Md = -6.70, p < .05$ ).  
Findings and Discussions

The findings in relation to students satisfaction with the availability of e-resources clearly support with the studies (Sivathaasan and Chandrasekaran, 2013; Chandrasekaran and Murugathas 2013) reported that there was moderate students satisfaction with the academic library information resources (e-resources, archives, lending collection, reference collection, exams results, chatting, email, e-books, e-journals, downloading, staff performance, library facilities, library staff, helpfulness of the students and library services, selective dissemination of information, current awareness services, interlibrary loan and periodicals). The findings of satisfactory level of undergraduate students with academic library showed that moderately were satisfied with information resources, library environment, library staff and general library services (Kaur, 2013). Yusuf and James-Iwu (2010) in their studies on use of academic library in Nigeria revealed that, students' were satisfied with the availability of e-resources (e-journals, e-books and online public access catalogue). Thus, may lead to the increase in their satisfaction and overcomes the challenges facing the students (Abubakar and Adetimirin, 2015).

The findings supported by Anunobi and Mbagwu (2009) shown that there was no difference between male and female in students satisfaction with the availability of e-resource. This finding supported (Nduka, 2013) revealed that (138) 60.3% male respondents have highest, whereas (91) 39.7% of female were significant difference on students' satisfaction with the availability of e-resources. Sir, (2013) in his study on satisfactory level of students in academic library shown that, male have 52.0% and female having 48.0% with the availability of e-resources. Similarly, Sivathaasan and Chandrasekaran (2013) in their studies showed that majority of respondents were males and 45% were female. Moreover, Ani, (2010) revealed that 67.7% were male, while 32.3 with the satisfaction of e-resources. Thus, it can be concluded that male were more satisfied than the female with the availability of e-resources.

The findings supported by Anunobi and Mbagwu, (2009) in their studies shown that there is significant difference in age group. In the same vein Kim, Ng, and Kim, (2009) who were of the views that there is a significant difference in age group of the respondent with the e-resources. Zha, Li, and Yan (2013) described that, there is significant different in age group on students' satisfaction with the availability of e-resources. Meanwhile, the age 32 years and above are more satisfied on e-resources among students'. Therefore, age groups are having significant difference in students' satisfaction with the availability of e-resources.

### **Conclusion**

The knowledge and ability to acquire the e-resources becomes important to the students in respective of their age, gender and need to be justified their time spending on e-resources. Acquiring knowledge becomes necessary to the students whenever using information e-resources. Also, the need to improve on the students' satisfaction with the availability of e-resources based on the gender and age groups. Therefore, models/theory provided could serve





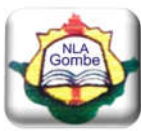
as an effective for students' satisfaction with the availability e-resources and address many of their problems related to academic libraries.

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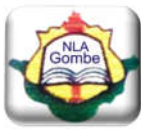


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