Students' Satisfaction with Utilization of Electronic Information Resources in Rivers State University for National Digital Development

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Abstract
This study investigated student's satisfaction in the utilization of Electronic Information Resources in Rivers State University for National Digital Development. The study adopted a survey research design and the population of the study consisted of 6,344 students. A total of 450 registered students constitute the sample of the study. A structured questionnaire was the instrument for data collection, titled Students satisfaction in the utilization of Electronic Information Resources (SSUEIRS). The reliability of SSUEIR was established using Cronbach Alfa method to obtain an index of 0.87.The mean and standard deviation were used to analyze the data collected while regression analysis was used to test the hypothesis at 0.05 level of significance.. The overall mean rating of the respondents over satisfaction of EIR was low. The regression shows that the mean difference between the male and female students over satisfaction in the utilization of EIRs was not statistically significant at .05 alpha level (t=.000, df =390, p > .05) and there is no significant difference in the satisfaction of students over utilization based on age (t=.011, df=390, p>.05). The study recommended that departments should be adequately equipped with modern ICT facilities and more skillful staff be employed.

Keywords: **Satisfaction, Electronic Information Resources, Digital development**.

Introduction

Electronic information resources have become an integral part of information needs of library users especially the students; it is a good substitute to conventional resources. Moreover, users have different perceptions with regards to making use of resources through this medium. Libraries from time to time needs to evaluate users' satisfaction with the services they render to determine the sustainability of such services. This is a way in which users judge the adequacy of library information resources and services rendered to them and also if their expectations are met. Users' satisfaction implies how users feel after making use of the library resources and services and their willingness to return to the library when next they need information (Ikenwe & Adegbiler, 2014).

Students' satisfaction could also be considered as the satisfaction, students drive from the library by using the various types of information resources to fulfil their information needs for their various academic activities towards their personal empowerment for national development.

Development is critical and essential to the sustenance and growth of any nation. A nation is classified as developed when it's able to provide a qualitative information and life to its citizenry. National development therefore can be described as the overall development or a collective socio-economic, as well as information advancement of a country or nation. According to Gboyega (2003), development is captured as an idea that embodies all attempts to improve the conditions of human existence in all ramifications, it implies improvement in material well-being of all citizens, to reap such benefits, people as individuals and as a nation must be information literate. Libraries make an important contribution to national development. Increased access to information and knowledge through the effective use of Electronic Information Resources and other information resources are an essential pillar to development.

According to Ijiekhuamhen, Aghojare and Ferdinand (2015), they asserts that the level of using the library depends on user`s satisfaction, with the available information resources rendered to them. The effective utilization of the available Electronic Information Resources in the library over the traditional services is alarming. Electronic information resources have drawn more readers to the library than before. Thus, when electronic information resources are available in the library and appropriately used, it do have a significance influence on users' satisfaction. When a user is satisfied with the library resources, they not only come back but speaks well of the library to other users (Ijiekhuanhen *et al*., 2015). An evaluation on students satisfaction with the use of library resources in library at the University of Limpopo, South Africa which was conducted by Motiang, Wallis and Korodia (2014), shows that the level of student satisfaction with the library opening hours, library registration, duration of loan services and available library resources such as books, journal, was generally high. It was also discovered that access to electronic resource databases and quality of photocopying was very high. Libraries are established to provide information resources and to meet students' information needs. The purpose of academic library is defeated if its students are not satisfied with the resources. This study is set to find out if students of the library are satisfied with the use of electronic information resources in Rivers State University Library.

Objective of the Study

The objectives of the study are:

1. To determine the extent to which the use of electronic information resources contributes to the satisfaction of information needs of the students.
2. To ascertain the difference in the satisfaction of students over utilization of EIRs based on gender.
3. To determine the difference in the satisfaction of students over utilization of EIRs on age.

Research Questions

1. To what extent are the users satisfied with the use of electronic information resources available in the institution studied?
2. What is the difference in the satisfaction of students over utilization of EIRs based on gender?
3. What is the difference in the satisfaction of students over utilization of EIRs based on age?

Research Hypotheses

H_{01}: There is no significant difference between the male and the female students over utilization of EIRs.

H_{02}: There is no significant mean difference in the satisfaction of students over utilization of EIRs based on age.

Methodology

This study adopted descriptive survey research design. The survey method is concern with the collation of data and sequentially describing the characteristic features of facts, and opinion of a given population. The population of the study consisted of 6344 registered students, and out of which 450 were selected as sample for the study. The instrument for data collection was a questionnaire on students' satisfaction with the use electronic information resources titled (SSUEIRI). The instrument had a multiple responses pattern and including a modified four point like scale of varying option based on the variables measured. The calculation was made easier using statistical package for social science (SPSS) Version 17.0. The data were analysed using

frequency count, mean, standard deviation to answer the research questions while t-test was used for data analysis. The hypotheses were tested at 0.05 level of significance.

Findings and discussion

Research Question 1: To what extent are students satisfied with the use of electronic information resources available in the institution studied.

Table 1: Mean and Standard Deviation on the extent to which students are satisfied with the use of electronic information resources available in the institutions

S N	Satisfaction with EIRS	Responses N=392				Mean	SD
		Very satisfied	Satisfied	Somewhat Satisfied	Not Satisfied		
1	Quality of computers	0 (0.0)	167(42.6)	133 (33.9)	92 (23.5)	2.19	0.79
2	Surfing the net	0 (0.0)	21 (5.4)	185 (47.2)	186 (47.4)	1.58	0.59
3	Searching document	50 (12.8)	100 (25.5)	137 (34.9)	105 (26.8)	2.24	0.99
4	Emailing	0(0.0)	173(44.1)	158 (40.3)	61 (15.6)	2.29	0.72
5	Modern network speed	0(0.0)	35 (8.9)	183 (46.7)	174 (44.4)	1.65	0.64
6	E-journal search	0 (0.0)	176 (44.9)	215 (54.8)	1 (.3)	**2.50**	0.50
7	Doing assignment	57(14.5)	86 (21.9)	145 (37.0)	104 (26.5)	2.24	1.00
8	Research activities	0 (0.0)	105 (26.8)	151 (38.5)	136 (34.7)	1.92	0.78
9	Leisure	0 (0.0)	8 (2.0)	206 (52.6)	178 (45.4)	1.57	0.54
	Grand mean and SD					**2.01**	**0.73**

Table 1 shows the mean rating and standard deviation on user satisfaction of the electronic information resources in Rivers State University, Port Harcourt. It further shows that students were only satisfied with the e-journal search =2.50. The overall mean rating of the respondents over satisfaction of electronic information resources was low =2.01

Research Question 2: What is the difference in the satisfaction of students over utilization of EIRs based on gender?

H01: There is no significant difference between the male and the female students over utilization of EIRs.

Table 2: Mean rating and summary of independent sample t-test on the difference in the satisfaction of students in the utilization of EIRs based on gender

S/N	Items	Male n=196 mean	SD	Female n=196 mean	SD	t	df	p-value	Ds
1	Quality of computers	2.16	0.80	2.22	0.78	-.702	390	.483	ns
2	Surfing the net	1.58	0.61	1.58	0.58	-.085	390	.932	ns
3	Searching document	2.24	1.00	2.24	0.98	-.051	390	.959	ns
4	Emailing	2.26	0.71	2.32	0.72	-.843	390	.400	ns
5	Modern network speed	1.63	0.64	1.66	0.64	-.553	390	.581	ns
6	E-journal search	2.42	0.50	2.47	0.50	-.1.10	390	.270	ns
7	Doing assignment	2.20	0.99	2.29	1.02	-.905	390	.366	ns
8	Research activities	1.91	0.80	1.93	0.77	-.194	390	.846	ns
9	Leisure	1.59	0.53	1.55	0.54	.754	390	.452	ns
	Grand mean	**2.00**	**0.27**	**2.03**	**0.26**	**-.1.18**	**390**	**.237**	**ns**

Table 2 shows that the mean satisfaction on the quality of computers among male students was 2.16, SD=0.80, whereas that of the female was 2.22, SD=0.78. The mean satisfaction on surfing the net among male students was 1.58, SD=0.61 whereas that of the female was 1.58, SD=0.58. The mean satisfaction on the searching of documents among male students was 2.24, SD=1.00 whereas the female students had mean satisfaction was 2.24, SD=0.98.The mean satisfaction on the Emailing among male students was 2.26, SD=0.71 whereas the female students had mean satisfaction was2.32, SD=0.72.The mean satisfaction on the modem network speed among the male students was 1.63, SD=0.64 whereas the female students mean satisfaction was 1.66, SD=0.64. The mean satisfaction on the E-journal search among male students was 2.42, SD=0.50 whereas the female students mean satisfaction was 2.47, SD=0.50.The mean satisfaction on the Doing assignment among the male students was 2.20, SD=0.99 whereas the female students had mean satisfaction was 2.29, SD=1.02. The mean satisfaction on the research activity among the male students was 1.91, SD=0.80 whereas the female students mean satisfaction was 1.93, SD=0.77. The mean satisfaction on the leisure among the male students was 1.59, SD=0.53 whereas the female students mean was 1.55, SD=0.54.

Table 2 further shows that the mean difference between the male and the female students over the satisfaction in the utilization of EIRs was not statistically significant at .05 alpha level (t=1.18, df =390, p>.05). The null hypothesis one was retained at .05 alpha level.

Research Question 3: What is the difference in the satisfaction of students over utilization of EIRs based on age?

What is the difference in the satisfaction of students over utilization of EIRs based on age?

H02: There is no significant mean difference in the satisfaction of students over utilization of EIRs based on age

Table 3: Mean rating and summary of independent sample t-test on the difference in the satisfaction of students in the utilization of EIRs based on age

S/N	Items	Male n=196 mean	SD	Female n=196 mean	SD	t	df	p-value	Ds
1	Quality of computers	2.21	0.78	2.17	0.80		390	.583	ns
2	Surfing the net	1.58	0.58	1.58	0.61		390	.989	ns
3	Searching document	2.26	1.00	2.22	0.98		390	.664	ns
4	Emailing	2.32	0.72	2.25	0.72		390	.346	ns
5	Modern network speed	1.66	0.64	1.63	0.64		390	.652	ns
6	E-journal search	2.48	0.50	2.42	0.50		390	.224	ns
7	Doing assignment	2.29	1.02	2.20	0.99		390	.379	ns
8	Research activities	1.93	0.77	1.91	0.79		390	.739	ns
9	Leisure	1.54	0.54	1.59	0.53		390	.390	ns
	Grand mean	**2.03**	**0.26**	**2.00**	**0.27**		390	.192	ns

The Table 3 shows that the mean satisfaction on the quality of computers among 20-25 age bracket students was 2.21, SD=0.78 whereas the 26years and above students mean satisfaction was 2.17, SD=0.80. The mean satisfaction on surfing the net among students within the ages of 20-25 was 1.58, SD=0.58 whereas the 26years and above students mean satisfaction was 1.58, SD=0.61.The mean satisfaction on searching document among students within the ages of 20-25 years was 2.26, SD=1.00 whereas the 26 years and above students mean satisfaction was2.22, SD=0.72. The mean satisfaction on Emailing with students within the age bracket 25-26years was 2.32, SD=0.72 whereas the 26years and above students mean satisfaction was 2.25, SD=0.64. The mean satisfaction on the modern network among students within the ages of 25-26 years bracket was1.66, SD= 0.64 whereas the 26 years and above students mean satisfaction was 1.63, SD= 0.64. The mean satisfaction on the E-journal search among students within the age bracket of 25-26 years was 2.48, SD= 0.50 whereas the mean satisfaction of students above 26 years and above was 2.42, SD= 0.50. The mean satisfaction on the Doing Assignment among 20-25 years age bracket students was 2.29, SD= 1.02 whereas the 26 years and above students mean satisfaction was 2.20, SD= 0.99. The mean satisfaction on the Research Activity among 20-25 years age students was 1.93, SD=0.77 whereas the 26 years and above students mean satisfaction was 1.91, SD=0.79. The mean satisfaction on the Leisure among students within the age bracket

of 20-25 was 2.03, SD= 0.26 whereas the mean satisfaction of 26 years and above students was 2.00, SD= 0.27.

Table 3 further shows that there is no significant mean difference in the satisfaction of students over utilization of EIRs based on age (t=1.308, df =390, p>.05). The null hypothesis two was retained at 0.05 alpha level.

Test of Hypotheses

Hypothesis 1: There is no significant difference between the male and the female students over the utilization of EIRs.

Table 4: Summary of Independent Sample t-test on the difference between the male and the female students over on the utilization of EIRs

Gender	N	Mean	SD	T	Df	p-value	Decision
Male	196	29.0051	4.00064	.000	390	0.982	NS
Female	196	29.0102	4.00255	.000	390	0.982	NS

Decision rule: *if p<.05 reject H$_o$, else retain H$_o$.   NS= Significant, p>.05, * significant, p<.05*

Table 4 shows that gender has no significant influence on students utilization of EIRs (t $_{(390, .025)}$ =.000, p=0.982). The null hypothesis was retained. The mean difference was relatively close. The implication is that both the male and female students do not differ in their utilization of EIRs; hence, the male and female students both utilized EIRs.

Hypothesis 2: There is no significant difference in the satisfaction of students over the utilization of EIRs based on age.

Table 5: Summary of Independent Sample t-test on the difference in the satisfaction of students over on the utilization of EIRs based on age

Age	N	Mean	SD	T	Df	p-value	Decision
20-25 years	197	29.0152	3.99295				
26 years and Above	195	29.0000	4.01030	.011	390	0.917	NS

Decision rule: *if p<.05 reject H$_o$, else retain H$_o$.   NS= Significant, p>.05, * significant, p<.05*

Table 5 shows that age has no significant influence on students utilization of EIRs (t $_{(390, .025)}$ =.011, p=0.917). The null hypothesis was retained. The mean difference was relatively close. The implication is that students (between the age bracket of 20-25 years and those from 26 years and above) do not differ in their utilization of EIRs; hence, the students both ages utilized EIRs.

Discussion of Findings

The findings of this study were discussed below on the variables over which data was collected, analysed and interpreted.

To what extent are the students satisfied with the use of electronic information resources in the institution studied? This research question is relevant to the objective which is to determine the extent which the use of electronic information resources contribute to the student satisfaction of information needs of the students. The results shows that, students were satisfied with the e-journal search. The overall mean rating of the respondents over satisfaction may not be unconnected with the low availability and use of the facilities. This finding is in agreement with an earlier work by Aina (2007). Who found out that since the ICT drives the library and information science profession, it is a necessity for any library and information science (LIS) school to have an ICT Laboratory that will be widely accessible to students. It should be equipped with, at least a minimum of twenty personal computers and increased annually to take care of the increase in the number of students. Aina (2007) further added that equipped ICT laboratory with widely accessibility by the students, and with all the computer internet access, managed by a trained technician while Aguolu (2002) added that properly used, shall enhanced librarian job performance in electronic information handling, and also make them have more time to formulate good policy and management decisions. Aina (2007) also added that students when satisfied shall be well place in the labour market and shall not lack job.

The result in Table 4 revealed that gender has no significant influence on students' utilization of EIRs. This finding aligns with that of Mcginty and Moore (2008) that issues related to gender are vogue of public concern associated in tertiary education. In order to develop our educational standard in Nigeria, both male and females should be given an equal opportunity to obtain information for the attainment of their goals. Applegate (2008), Nackerud et al (2013), and Samson (2014).Samson's (2014) says that students, male and female study electronic information resources at similar rates. However, female were not using them at higher percentage than the

male. The results in this study resembled Nackerud et al (2014) finding that electronic resources were used the most. McGinty and Moore (2008) went further to state that in the university system, students rely exclusively on library to obtain their vital information resources. Both males and females of university maximize their search skills and study the moment they are admitted to the university. Gender as a crucial phenomenon in the learning is applied in the library services in order to ascertain how library resources is patronised and accessed. There is greater involvement of both males and females in accessing the vast library resources from different perspective. They further added that both gender use the available resources in the library because the library is meant to serve all irrespective of sex., This result is explicitly show that shows that the gender difference in the accessibility of library information resources is not significant because both males and females participate in the accessibility of the information resources, only that both gender happen to get higher preference in certain specific variables, but in the end, the difference observed is not significant

The result in Table 5 revealed that age has no significant influence on students' utilization of EIRs. This finding is in agreement with earlier findings by Ugwu, C.I & Ugwu, M.E.(2017) that the librarian working in university libraries in South East Nigeria have different personal characteristics. These characteristics can be explained from their age, gender, etc.

Conclusion

Based on the findings of the study it could be concluded that the joint contribution of the available resources and use of EIR to the satisfaction of the students was statistically significant. This indicates that when students have access to the available resources and utilize same, satisfaction will improve.

Recommendation

Based on the findings of the study the following recommendations were made;

1. The staff should go for acquisition of ICT skills for improvement in the management of the EIR systems.
2. The departments should be adequately equipped with modern ICT facilities.
3. With the two above the satisfaction of students will technologically be empowered for national development.

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