

Gender Differences in Students' Utilization of Electronic Information Resources in Ramat Library, University of Maiduguri, Nigeria

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Abstract

The study determined gender differences among students in the utilization of electronic information resources in Ramat Library, University of Maiduguri. One objective, with corresponding hypotheses guided the study. The survey research method was used. The population for the study comprised 13,995 (thirteen thousand, nine hundred ninety five) non-degree, undergraduate, and postgraduate students that registered the use Ramat Library, University of Maiduguri. A sample of 170 registered respondents was selected using stratified sampling technique. Data was analysed using descriptive statistics of percentage and frequency counts as well as inferential statistics of chi-square. Hypothesis was tested at 0.05 levels significance. Results showed significant difference in students' accessibility and utilization while no significant difference in challenges of electronic information resources according to gender. Based on the findings and within the limitation of this study, it was concluded that gender was not a barrier in the utilization of electronic information resources in Ramat Library, University of Maiduguri. This study, thus recommended among others that registered students should utilize and access electronic information resources available in the Ramat Library for the purpose of enhancing learning outcome.

Keywords: gender, e-resources, Ramat library, access, Nigeria

Introduction

Utulu (2006) observed that the issue of the gender gap in the digital divide and the impact of new technologies on gender in particular on the economic and political spheres of women lives are of major importance. This is because gender influences factors such as income, time, constraints, literacy, education, language and cultural context that effect access to facilities, training and employment in information technology. According to McGinty and Moore (2008), gender issues have been in the forefront of impassioned public discussion regarding higher education. Waldman (2003) reported that the faculty member use of electronic resources was influenced by such factors as computing skills of academics.

Gender as a possible factor influencing the use electronic information resources and ICT has widely identified in the literature yet, Steinerova and Susol (2007) noted that research on gender differences still remains open. The literatures are also replete with studies on human information behaviour which shows tendencies of men and women to manifest differences in the characteristics when using digital resources. In spite of this, studies on gender based differences among Nigeria information professionals are pertaining to use of electronic Information resources appear to be little or non-existent.

Igun (2010) reported that there is no significant difference in the challenge encountered by librarians in south-south zone of Nigeria in their utilization of ICT due to gender. While, Steinerova and Susol (2007) assert that gender as cultural and social construction of a personality can be manifested in qualities and behaviour of men and women. Fallows(2005) has shown that women appreciate especially the communicative features of the internet, while men are more likely to use online transactions, get information, play games and use entertainment. The general objective of the study is to establish the

differences, if any, that which exist between male and female on gender utilization of electronic information resources. Similarly, Jenson (1999) reported computer inexperience for female use as an important factor in determining their attitude and anxieties towards computers.

One objectives

1. Determine gender utilization of electronic resources in Ramat Library University of Maiduguri, Nigeria.

Hypotheses

The following hypotheses were tested:

HO1: There is no significant difference in students' accessibility of electronic information resources in Ramat Library, University of Maiduguri, Nigeria.

HO2. There is no significant difference in gender utilization of electronic information resources in Ramat Library, University of Maiduguri, Nigeria.

HO3: There is no significant difference between gender and students' programme on challenges of utilizing electronic information resources by students in Ramat Library, University of Maiduguri,

Literature review

In a study on gender analysis of electronic information resources use, Manda and Mukangara (2007) used a sample of 100 postgraduate students using stratified proportionate random sampling to select the sample. Data were analysed using cross –tabulation and qualitative descriptions and they reported that gender is associated with the use of electronic information resources and male postgraduates' students were more likely to use electronic information resources than female students. The findings further showed that even when their attitude towards the use electronic information resources or training in the use of e-resources, the relationship between gender and electronic information resources use was maintained.

Ikolo's (2010) study on gender difference based on use of electronic

resources revealed that the gender digital divide is manifested in the low number of female users of ICTS compared to men. In their contribution, Ford, Miller and Moss (2001) observed that females tended to experience more difficulty finding information online, feel less competent and uncomfortable using the internet, use internet less frequently than males and make use of a less varied set of internet applications. A study by Obaje, Sani and Lawal (2008) on internet access and usage by staff and students university of Jos revealed that there exists difference in the usage of internet by gender between January-December, 2006, were males 6520 (88%) and 925 (12%) were females only. Similarly, Amkpa's (2007) study on gender and age difference in computer use and attitude among students of University of Maiduguri used 350 part IV students from five faculties. Data generated were analysed using chi-square. He reported that male and female students differ significantly in their attitude toward computer applications which has implications in their job acquisition and educational pursue. This agreed with the studies of Koohang (1986) found that neither age nor gender was seriously correlated to computer anxiety, computer confidence or liking but that computer experience was. However, sex seems to enjoy information sources use. Colley, Gale and Harris (1994), on effects of gender role identify and experience on computer attitude components.

Ikolo and Okiy (2012) found that females use internet more than males in their study on gender differences in computer literacy among medical students in selected southern Nigerian Universities. Bassi and Camble (2011) reported that there exists a statistical difference between males and females in using electronic resources as females have more difficulty in finding information online than males. Ono and Zovadry (2003) also found women to be less frequent and less intense users of the internet. On the other hand,

Bimber (2000) argued that the gender gap in the internet is larger where more intensive web use is concerned, women are substantially less likely to be frequent users, equally likely to be infrequent users, and more likely to be intermediate users. Scealy Phillips & Stevenson (2002) these findings appear to reinforce the widespread assumption that men prefer to use the web for information gathering and entertainment and women prefer to use the internet for communication. Ozoemelem's (2009) on use of electronic resources by postgraduate students of the department of library and Information Science University of Abraka reported that there is high frequency of usage of e-resources by both male and female postgraduate students there gender gap in electronic resources usage is quite negligible. Bimber (2000) attributed this finding to a combination of gendered technology embodying male values, content that favours men, sex differences in cognition and or communication and socio economic differences. Furthermore, McGuigan (2001) reported that the level of computing and internet experience with which students enter higher education might dictate whether or not they will use the library's electronic resources. Tella and Mutulu (2008) noted that one of the recurring themes in underutilization of ICTs is the lack of relevant competences with females often cited as more affected than males. Similarly, Jenson (1999) reported computer inexperience for female use as an information factor in determining their attitude and anxieties towards computers. Fallows (2005) has shown that women appreciate especially the communicative features of the internet, while men are more likely to use online transactions, get information, play games and use entertainment. Alshankity and Aishawi (2008) examined the gender differences in internet usage among faculty members in Saudi Arabia and did not see a significant gender differences in the overall internet usage. Enochsson (2005) has

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shown that the socio-cultural background of gender still leaves women with more computer anxiety and feelings of lower self-efficiency.

Methodology

The descriptive survey method was the design adopted for this study. It was aimed at examine information on gender differences between male and female in Ramat Library, University of Maiduguri .The population of the study was made up of 13,995 as non-degree, undergraduate

and postgraduate students that have registered for the use of Ramat Library, University of Maiduguri The stratified Sampling technique was used to select a sampling size of 170 of the registered students was selected in Ramat Library which is representing 68% of the population. Data was analysed using frequency counts and percentage scores and inferential statistics of chi-square to test hypotheses at 0.05 level of significance.

Findings

Hypothesis 1. There is significant difference on gender utilization of electronic information resources in Ramat Library

Table 1 Summary of Chi-square analysis on gender utilization of electronic information resources in Ramat Library

GENDER	RESPONSES					Df	χ^2	p. value
	Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed			
Male	21(12.4%)	20(11.8%)	12(7.1%)	37(21.8%)	10(5.9%)	4	10.26	.036
Female	11(6.5%)	13(7.6%)	5(2.9%)	21(12.4%)	20(11.8%)			

Field work, 2013. Critical value $\chi^2_{.95}$ for 4 degree of freedom is 9.46

Table 1 shows the summary of chi-square analysis on gender utilization of electronic information resources in Ramat Library by students. Result indicates the distribution of respondents according to gender differences. The Chi-square calculated value of 10.265 at degree of freedom 4 on the table value 9.46, $P < 0.05$ respectively. By this therefore, the null hypothesis regarding gender difference in utilization of electronic information resources was rejected. This means that male

students have the same usage of electronic information resources. so there is significant difference of at 0.05 at significant levels. The implication of this result was that there is significant difference in gender utilization of electronic information resources in Ramat Library.

Hypothesis 2: there is no significance difference between male and female students' program on challenges of utilization Electronic information resources by students in Ramat Library

Table 2 Summary of Chi-square on challenges of utilization of electronic information resources by students in Ramat Library

PROGRAM	GENDER	RESPONSES					Df	χ^2	p.value
		Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed			
Postgraduate	Male	3(6.4%)	8(17.0%)	12(25.5%)	6(12.8%)	4(8.5%)	4	4.693	.320
	Female	4(8.5%)	5(10.6%)	3(6.4%)	1(2.1%)	1(2.1%)			
Undergraduate	Male	9(9.0%)	10(10.0%)	11(11.0%)	11(11.0%)	12(12.0%)	4	5.340	.254
	Female	12(12.0%)	5(5.0%)	8(8.0%)	5(5.0%)	17(17.0%)			
Non- degree	Male	4(17.4%)	3(13.0%)	2(8.7%)	3(13.0%)	2(8.7%)	4	4.257	.372
	Female	1(4.3%)	1(4.3%)	3(13.0%)	4(17.4%)	0(0.0%)			

Field work, 2013. Critical value $\chi^2_{.95}$ for 4 degree of freedom is 9.49 significance level 0.05 and also critical value $\chi^2_{.99}$ for 4 degree of freedom is 13.3 at significance level 0.01. (Not significant)

Table 2 is summary of Chi-square analysis on challenges of utilization of electronic information resources by students in Ramat Library. The result of this analysis shows the gender distribution of the respondents on postgraduate, undergraduate and non-degree students. The Chi-square calculated value for postgraduate, undergraduate and non-degree

were 4.693, 5.340 and 4.257 at degree of freedom 4 on the table value 9.46, $P > 0.05$ respectively. This showed that there was no significant difference in challenges facing male and female students of different programs utilizing electronic information resources in Ramat Library. Therefore, the null hypothesis regarding gender difference in challenges of the utilization of electronic information resources is upheld. This implies that there is no gender difference in challenges of utilization of electronic information resources on students in Ramat Library

Hypothesis 3: There is significance difference on students' accessibility of electronic information resources in Ramat Library.

Table: 3 Summary of Chi-square analyses on students' accessibility of electronic information resources in Ramat Library

Programme	Responses				Df	χ^2	p. value
	Highly Accessible	Accessible	Fairly Accessible	Not Accessible			
Post graduate	6(3.5%)	24(14.1%)	13(7.6%)	4(2.4%)	6	40.367	.000
Undergraduate	10(5.9%)	20(11.8%)	30(17.6%)	40(23.5%)			
Non- degree	10(5.9%)	7(4.1%)	4(2.4%)	2(1.2%)			

Field work, 2013. Critical value $\chi^2_{.95}$ for 6 degree of freedom is 10.6

Table 3, Shows the Summary of chi-square analysis on students' accessibility of electronic information resources in Ramat Library, giving the distribution of respondents on postgraduate, undergraduate and non-degree students. The Chi-square calculated value 40.367 at degree of freedom 6 on the table value 10.6 respectively.

By this result, hypothesis one was rejected. This means that there is significant difference on students' accessibility of electronic information resources at the 0.05 significant levels. The essence of these results of hypotheses testing proves that there is significant difference on students' accessibility of electronic information resources in Ramat library, University of Maiduguri, Nigeria.

Discussions

The findings of the research showed that there is significant difference in gender in the utilization of electronic information resources. The finding supports Ford; Miller and Moss (2001) work which reported that females tended to experience more difficulty finding information online but these disagrees with the observation of Ozoemelem (2009) on use of electronic resources by postgraduate students of the department of Library and information science University of Abraka who reported that there is high frequency of usage of electronic resources by both male and female postgraduate students therefore gender gap in electronic resources usage is quite negligible. A study by Obaje, Sani and Lawal (2008) on internet access and usage by staff and students of the university of Jos revealed that there exits difference in the usage of internet by gender between January-December, 2006, were males 6520 (88%) and 925 (12%) were females only. Ikolo and Okiy (2012) found that females use internet more than males in their study on gender differences in computer literacy among medical students in selected southern Nigerian Universities. Ikolo's (2010) study on gender difference based on use of

electronic resources revealed that the gender digital divide is manifested in the low number of female users of ICTS compared to men. In their contribution, Ford, Miller and Moss (2001) work which reported that female tended to experience more difficulty finding information online, feel less competent and uncomfortable using the internet, use internet less frequently than males and make use of a less varied set of internet applications. Similarly, Amkpa's (2007) study on gender and age difference in computer use and attitude among students of University of Maiduguri used 350 part IV students from five faculties. Data generated were analysed using chi-square. He reported that male and female students differ significantly in their attitude toward computer applications which has implications in their job acquisition and educational pursue. This agreed with the studies of Koohang (1989) on attitude towards computer, anxiety, confidence, liking and perception of usefulness and Colley, Gale and Harris (1994) on effects of gender role identify and experience on computer attitude components.

Secondly, the findings of this study showed there is no significant difference between the gender and students programme on challenges of utilization of electronic information resources. This finding agrees with Kumar (2009) who reported that an academic Library has a function as a central gate way for library users to access, locate, transform, and utilize information resources in a variety of printed and electronic formats via applications, databases networks, platform, and system. Deng (2010) in his assessment towards access and use of electronic resources, publishers try to produce and develop qualitative collections which are further collected and managed in better ways by Librarians to substitute services and satisfy their users. Igun (2010) reported that there is no significant difference in the challenge encountered by librarians in south-south zone of Nigeria in their utilization of ICT due to gender. On their part Musoke and Kinengyere (2008)

found out that although most institutions had access to e-resources, access was still limited by lack of skills, lack of awareness of available resources or lack of interest, time and commitment to use the resources.

Tompseth and Alsop (1997) reported that barriers to library use of electronic information resources include lack of skills on how to use information sources, lack of appropriate reward for electronic scholarly communication as well as lack of consistent technical support and provision. Adebayo (2013) examined the challenge associated with cataloguing electronic resources in six randomly selected University Libraries southwest Nigeria and revealed lack of adequate physical description of some electronic resources and inadequate workflow in cataloguing sections as well as Copy right issue among others.” Bidyut, Bajpai and Chakraborty (2013) observed that an electronic resource has posed new challenges for Library professionals to manage the electronic information resources properly. Santhi, Radhakrishanan, and Swaroop (2010) examined “the relationship between computer Literacy of academic staff and their use of electronic information resources” and investigated” The impact of other factors such as age, gender and educational background on the use of electronic information resources.”

Lastly, there is significant difference on students’ accessibility of electronic information resources in Ramat library, University of Maiduguri, Nigeria. Adebore (2011) pointed out accessibility and desktop access, home access, ease of retrieval and hyperlinks to outside content were the arguments cited most often as the advantages of electronic journals. The disadvantages mentioned most often were lack of back issues and problems with reading a text from the computer screen. Kumar (2009) noted that an academic library has a function as a central gateway for library users to access, locate, transform, and utilize information resources in a variety of printed and electronic formats via applications, databases, networks, platform, and system.

Oketunji (2004) argued that the convergence of ICTs as a basis for the provision of information in the educational arena has created need for libraries to access and exploit ICTs in support of their core business. He observed that as the amount of information available in electronic form grows, so are the challenges that libraries face in their efforts to deploy appropriate information and communication technologies (ICTs) to deliver or enable users access to electronic information sources(EIS). Bropphy (1993) argued that libraries must “reach a position where the acquisition of information skills is acknowledged as one of key learning objectives for every student entering a university, so that no student leaves without being fully equipped to cope up with the information intensive world-the information society-as an end-user.” Langlois (1998) submitted that: new information technologies and in particular the internet, is drastically transforming access to information in changing the learning and research process, how we search, discover, teach and learn. Never has an invention had such an impact on education.

Iyoro (2004) examined the contribution of accessibility to learning processes and reported that respondents made use of the library when information was easily and conveniently accessible to them. According to Agaba (2005) the shift from printed forms of information resources to electronic information materials should lead to better quality and efficient and effective research, if used by academic staff and students. Jagboro (2007) revealed that respondents use the internet to access research materials and for e-mail. The study concludes that the use of internet for academic activities would improve significantly with more access in department.

Ferguson, Collins and Grogg (2006) revealed that when e-journals first become common, libraries typically provided access to them in two ways: via static web pages and the library catalogue, libraries created one or more web pages which included links,

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holdings information, and notes on access. Ozoemelem (2009) stated that students rarely access and make use of electronic resources. According to Ajayi and Adetayo (2005) if Nigeria is to advance, the young people are to grasp the opportunities now open to them; they must be given access to books, periodicals, technical data and opinion which will bring them into contact with cultural, scientific, technical and social ideas. Winker (2005) reported that gender studies can then make a concrete contribution to the task of overcoming the gender differentiated in equalities in the access to and the use of the internet. Anunobi and Okoye (2008) revealed that consortium of Nigerian University Libraries (NULIB) has subscribed to EBSCO host,

Conclusion and recommendations

From the finding of the study, it is clear that there is no basis for gender differences in Ramat Library. Both male and female must be accorded the same priority in scheme of things especially on issues related to opportunities for enhancement of capacity through the utilization information resources. This is because the hypotheses revealed that there is significant difference in gender use of electronic information resources, while the second result there is no gender difference in challenges of utilization of electronic information. Finally, it shows there are significant differences on students' accessibility of electronic information. It was concluded that gender was not a barrier in the use of electronic information resources in Ramat Library, University of Maiduguri, Nigeria. It is therefore recommended that:

Management of should seek opinion of the students on effective service delivery in their libraries.

The Library management should train their staff on the acquisition of relevant skills on regular basis.

Internet portals include Access to Global Online Research in Agriculture (AGORA), Health Internetwork Access to Research initiatives (HINARI), Online Access to Research in the Environment (OARE), Database of African Theses and Dissertation (DATAD), and many offline databases including MEDLINE. These are global information resources which can be accessed electronically through academic library gateways.

Mallaiah, Kumbar and Patil (2008) stated that the extent to which library resources and services satisfy the needs of its users will determine how effective and efficient a particular library is. For a library to be worth its salt, the resources and services it renders must strive to meet the needs of its users.

The Library management should not take gender as a factor to consider in building and development of Ramat Library.

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