

Information Seeking Anxiety and Use of Electronic Resources among Postgraduate Students in the University of Ilorin, Kwara State, Nigeria

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Abstract

Academic libraries house a vast array of electronic resources for research purposes. However, Post-Graduate students oftentimes may experience anxiety in their information seeking and searching tasks; due to several barriers associated with the use of e-resources such as non-availability, non-accessibility to relevant information resources, lack of searching and evaluation skills, poor technological skills among others. This study investigated information anxiety and use of electronic resources among post-graduate students in the University of Ilorin, Kwara State, Nigeria. 150 post-graduate students were selected from five faculties using the convenience sampling technique. A survey research design was adopted using a validated questionnaire to collect data. Data were analyzed using descriptive and inferential statistics. Findings revealed that post-graduate students of the University of Ilorin utilize e-resources immensely. However, some challenges were faced in the use of e-resources such as erratic powersupply, poor network connectivity and lack of adequate knowledge to access e-resources among others. Furthermore, results revealed a high level of information-seeking anxiety, however, no significant difference was found in the information-seeking anxiety between males and females. Demographic characteristics such as gender and age did not influence post-graduate students' information seeking anxiety, while programme of the study had the strongest contribution to information seeking anxiety of postgraduate students. In conclusion, recommendations were made towards improving the use of e-resources among the post-graduate students; and also suggesting ways of managing information seeking anxiety experienced among students.

Keywords:

Introduction

The digital age has contributed to the vast use of electronic resources in Higher Institutions of learning for teaching, learning, and research. Most of these electronic resources are found in Academic libraries in various Institutions across the globe, apart from the enormous internet resources. Electronic resources can therefore be referred to as information materials in electronic form which include electronic books, electronic journals, electronic newspapers as well as internet resources (Sharma, 2009). It also includes databases, magazines, archives, theses, conference reports, government papers, scripts, and monographs in electronic form (Edem & Egbe, 2016). These resources are often utilized by students and lecturers, perhaps, it poses less stress when compared to accessing library resources.

Over the years, academic institutions have benefitted from the use of electronic resources due to several advantages it has over print resources. These benefits include availability at any time of the day, quick accessibility, hyperlinks to other resources, ease in storage and dissemination, flexibility, ease in uploading, and search options among others (Tekale & Dalee, 2012). However, there are constraints in the use of electronic resources in an academic environment as identified in the literature such as lack of ICT skills, non-availability of desired electronic resources, lack of time due to tight schedule, lack of publicity on the contents available, the irrelevance of contents of electronic and inadequate training among others (Amusa & Atinmo, 2016).

Besides, Information Seeking Anxiety (ISA) is also another major constraint that can hinder the use of electronic resources among students. This may be due to their inability to locate the right and relevant information sources that would meet their research needs, thereby heightening their anxiety levels. Information seeking anxiety can be defined “as a feeling of abundant data or inability to interpret them properly” (Aghaei, Soleymani, & Rizi, 2017). According to Wilson (1999), “anxiety is fundamental, ubiquitous and persistent characteristics in the information search process”. Therefore, it can manifest during the information-seeking process, and it comes in the form of illfeelings such as frustration, fear, heart palpitation, restlessness among others. Abusin and Zainah (2010) pinpointed that students oftentimes feel sad and depressed if they are not successful in their information search.

Very few researchers have examined information-seeking anxiety among students in Nigerian Institutions. There are more of these researches from countries outside Nigeria, along with variants such as internet anxiety, library anxiety, computer anxiety among others. Findings from these studies have revealed both positive and negative results among students; and it has also shown significant and non-significant differences along gender, disciplines, and faculties among others (Aghaei, Soleymani & Rizi, 2017; Ojo 2016; Naveed & Ameen, 2016). However, the results of some of these studies cannot be extrapolated to the Nigerian environment, hence there is an urgent need to investigate information seeking anxiety and the use of electronic resources among research students in a Nigerian institution.

Research students at the Masters's and Ph.D. levels are often involved in diverse information-seeking tasks due to the need to seek for relevant information materials to satisfy their research needs. In their bid to satisfy their information needs, they experience ISA. ISA is a major problem for students and can have a negative effect on their ability to seek relevant information in their choice of career (Khadivi, 2006). Also, students especially those in developing countries oftentimes experience information seeking anxiety relating to the use of electronic resources in the library due to several barriers such as lack of searching skills, non-availability of materials, inadequate computers, lack of connectivity, low speed, lack of electricity, and difficulty in accessing electronic resources among others. Due to these constraints that are peculiar to developing countries, it is therefore expedient to investigate information-seeking anxiety and the use of electronic resources among post-graduate students within an academic environment.

In the light of the above, this study intends to investigate information-seeking anxiety and the use of electronic resources among Postgraduate students in the University of Ilorin, Ilorin. Kwara State, Nigeria.

Objectives of the Study

The main aim of this study is to investigate information-seeking anxiety and the use of electronic resources among Postgraduate students in the University of Ilorin, Ilorin. Kwara State, Nigeria.

The specific objectives were to:

1. find out the frequency of use of electronic resources among Postgraduate students in the University of Ilorin, Kwara State, Nigeria.
2. find out the level of information seeking anxiety among Postgraduate students in the University of Ilorin, Kwara State, Nigeria.
3. determine whether there is a significant difference in information-seeking anxiety levels between male and female postgraduate students in the University of Ilorin, Kwara State, Nigeria.
4. determine the joint influence of gender, age and program of study on information seeking anxiety of post-graduate students in the University of Ilorin, Kwara State, Nigeria.
5. determine the relative contribution of gender, age and program of study on information seeking anxiety among post-graduate students in the University of Ilorin, Kwara State.
6. identify the challenges hindering the use of electronic resources of post-graduate students at the University of Ilorin, Kwara State.

Research Questions

The following research questions raised for this study are listed below:

- i. What is the frequency of use of electronic resources among Postgraduate students at the University of Ilorin, Kwara State, Nigeria?
- ii. What is the level of information-seeking anxiety among Postgraduate students at the University of Ilorin, Kwara State, Nigeria?
- iii. What is the relative contribution of gender, age and program of study on information seeking anxiety among post-graduate students in the University of Ilorin, Kwara State, Nigeria?
- iv. What are the challenges hindering the use of electronic resources of post-graduate students at the University of Ilorin, Kwara State, Nigeria?

Research Hypothesis

The null hypothesis listed below was tested at a 95 % (0.05) level of confidence

1. **H₀₁**: There will be no significant difference in information-seeking anxiety levels between male and female post-graduate students in the University of Ilorin, Kwara State, Nigeria.
2. **H₀₂**: Gender, age, and program of study do not jointly influence information seeking anxiety of post-graduate students in the University of Ilorin, Kwara State, Nigeria

3. **H₀₃:** Gender, age, and program of study do not contribute relatively to information-seeking anxiety of post-graduate students at the University of Ilorin, Kwara State, Nigeria.

Review of Literature

Use of Electronic Resources among Students in Higher Institutions of Learning

Several researchers have examined the use of electronic resources among students in Nigeria and Countries outside Nigeria in terms of frequency of use, types of electronic resources accessed by students, benefits, and challenges faced in the use of these resources. For instance, Owolabi, Idowu, Okocha, and Ogundare (2016) investigated the utilization of electronic resources by undergraduate students in the Faculty of Education and Social Sciences at the University of Ibadan. Findings revealed the availability of electronic resources such as internet services, email services, online databases, electronic databases, and Cybercafés. However, challenges faced in the use of these resources were identified such as inadequate power supply. Poor network internet connectivity and limited access to a computer terminal. In the same vein, Okon and Lawal (2012) examined the use of electronic resources by graduate students of the Department of Educational Technology and Library Science, University of Uyo. Findings revealed that the majority of the respondents accessed electronic resources mainly from the internet and Cybercafés. However, in terms of frequency of usage, there was no difference between male and female postgraduates in the Department of Educational Technology and Library Science.

Electronic Resources are tools that are beneficial to both students and lecturers alike. It provides accurate and timely information; it helps in the collaborative efforts with other researchers within and outside Nigeria (Ukpebor, 2012). In terms of challenges in the use of electronic resources, Okiki (2012) pinpointed that computer illiteracy, technophobia, erratic power supply, dislike in reading from a screen are hindrances to the effective utilization of electronic resources among students. Besides, low bandwidth, and unclear institutional policy also hinder the use of electronic resources (Mammo & Ngulube, 2015) and lack of assistance from library staff (Khan, 2016). Another barrier to effective utilization of electronic resources is information-seeking anxiety as identified in the literature (Naveed & Ameen, 2016; Khadivi, 2006). There is a dearth of studies in this area by Nigerian researchers. Given this, this study will examine Information seeking anxiety and the use of electronic resources among post-graduate students in the University of Ilorin, Kwara State, Nigeria.

Information Seeking Anxiety among Students in Higher Institutions of Learning

Information Seeking Anxiety can be caused by too little or too much information that occurs in a given information-seeking task (Ojo, 2016). This can lead to an anxiety state for students, due to the inability of students to cope with the large volume of information retrieved, or not being able to meet their information needs. It can also be seen as a menace that is very common among students due to the inability to seek or find relevant information as the need arises. Anxiety is a

natural feeling during the information-seeking process which may appear in any of the six stages of research namely: task initiation, research subject selection, pre-focus exploration, focus formulation, information gathering,, and search closure (Kuhlthau. 1998)

Several studies in the literature have examined information-seeking anxiety among students in countries outside Nigeria in varying dimensions. These studies examined ISA in terms of levels of occurrence among students, the relationship between age, gender, faculty, discipline, and information seeking anxiety; and barriers contributing to information seeking anxiety. However, positive and negative results have been reported in these areas.

Erfanmanesh (2012) examined the effects of gender, level of study, and age on various dimensions of the information-seeking anxiety construct among postgraduate students at a research-intensive university in Kuala Lumpur, Malaysia. The 38-item Information Seeking Anxiety Scale was employed using a stratified random sampling method. Gender, level of study, and age were found to influence information seeking anxiety. Conversely, the interaction of gender and level of study on various dimensions of the information-seeking anxiety construct was not statistically significant. This study has shown that the demographic characteristics of students have an impact on their level of information-seeking anxiety. In the same vein, Naveed and Ameen (2016) investigated levels of anxiety in information-seeking tasks among post-graduate students of the University of Punjab, Lahore. Results revealed that the majority of the students experienced more than low anxiety in the information-seeking process. It further revealed that there was no significant relationship between age, gender, faculty, and ISA. On the other hand, it revealed a significant difference in anxiety scores based on programme of study, stage of study, and computer proficiency.

Ojo (2016) examined the influence of age and gender on information anxiety as well as information overload by undergraduates at the University of Ibadan and Tai-Solarin University of Education in South West Nigeria. 193 undergraduates selected from four faculties in both universities sampled serve as the sample size of this study. Findings of this study showed that both age and gender had no influence on information anxiety and information overload by undergraduates. Again, Aghaei, Soleymani and Rizi (2017) investigated information-seeking anxiety among post-graduate students of Isfahan University of Medical Sciences. Results revealed that topic selection contributed more to ISA among students. It further revealed that female students had higher ISA compared to male students.

Barriers Relating to Information Seeking Anxiety among Students in Higher Institutions of Learning

Erfanmanesh (2012) identified seven barriers associated with information-seeking tasks of students in Institutions of learning. The author developed and validated ISA scale comprising of seven barriers that made up the sub-scales of ISA scale. These barriers associated with information-seeking activities can trigger and heighten ISA levels of students (Chowdhury & Gibb, 2009).

- i. Barriers associated with library use include library policies and procedures, services, furniture, temperature, lighting, library staff as well as library website, and OPAC which contribute to students' feeling of anxiety during the information-seeking process in libraries.
- ii. Barriers associated with information resources include quality of information resources, the relevance of information resources, the novelty of information resources, familiarity with information resources, and information resources ease of use.
- iii. Barriers associated with computers, the Internet, and electronic resources. computers and the Internet for seeking information resources as well as using electronic resources.
- iv. Technological barriers include system malfunction, mechanical issues, computer errors, computer damages, and slow downloading of pages and resources during the information-seeking process in information systems.
- v. Affective barriers are associated with negative feelings during the information- seeking process.
- vi. Barriers associated with topic identification centers on determining search terms, selecting general, and narrowing down the general topic to formulate a focused topic in the process of information seeking.
- vii. Finally, the seventh barrier of the Information Seeking Anxiety is associated with the accessibility of information resources.

Five out of the seven barriers highlighted were examined in this study namely: barriers relating to information resources barriers, searching for information barrier, computer and internet barrier, library barrier and topic identification barrier respectively.

Methodology

Research Design

A survey research design was adopted using a structured and validated questionnaire to elicit responses from the respondents in the study locale. Descriptive and inferential statistics were used to analyze data such as frequency counts, percentages, and t-test. Statistical Package for Social Sciences (SPSS) version 17.0 was used to process and analyze data.

Sample Size and Sampling Technique

The random sampling technique using the balloting method was used in the selection of Five Faculties out of 15 in the University of Ilorin. A total of 30 post-graduate students were selected from each of the five Faculties using convenience sampling, thereby making a total of 150. These Faculties are namely: Communication and Information Science (CIS), Arts, Management Science, Sciences and Law respectively.

Instrument for Data Collection

A structured and validated questionnaire was used to collect data. The questionnaire was divided into five sections. Section A focused on the Biodata of respondents, Section B comprised of a checklist on the various types of e-resources along with their usage patterns; Section C comprised of items on challenges hindering the use of e-resources, while Section D contained a 25 items scale measuring ISA, developed and validated by Erfanmanesh (2012). However, the researcher adopted and revalidated the ISA scale comprising of five sub-scales which are: Information Resources Barrier subscale, searching for Information Barrier subscale, Computer/ Internet Barrier subscale, Library Barrier subscale, and Topic Identification Barrier subscale respectively.

Validity and Reliability of the Research Instrument

The face validity of the research instrument was accomplished after several corrections, and proofreading of the questionnaire items by two experts in the field of Library and Information Science. The instrument was said to have high face validity by the experts. Content validity of the instrument was achieved by establishing the Cronbach Reliability scores of the adapted scale to determine the internal consistency of the questionnaire items showing that it measures what it purports to measure. The Cronbach Reliability score of the subscales was moderately high ranging from 0.60 to 0.90 as shown in Table 1.

Table 1 Showing Cronbach Alpha Reliability Scores of the Adapted Scales

S/N	Scale	Source	Number of Items	Cronbach Alpha Score
	Information Seeking Anxiety Scale	Erfanmanesh (2012)	25	0.9
	Sub Scales:			
1	Information Resources Barrier sub-scale,	“	5	0.72
.2	Searching for Information Barrier sub scale	“	5	0.60
3	Computer/Internet Barrier sub scale	“	5	0.82
4	Library Barrier sub scale	“	5	0.78
5	Topic Identification	“	5	0.85

sub scale

Procedure for Data Collection:

The researcher employed the services of two Research Assistants who visited the five Faculties. 150 copies of the questionnaire were distributed to the postgraduate students through their respective PG Coordinators in the selected faculties. Out of the 150 copies distributed, 125 were returned, found valid, and usable which gave a rate of return of 83%.

Presentation of Results

The collected field data was analyzed with the aid of Statistical Package for Social Sciences (SPSS) version 17.0. The results of the analyzed data are presented in Table 2: .

Demographic Attributes of Respondents

Table 2: Demographic Attributes of Respondents

Variables	Classification	Frequency	Percentage
Gender	Male	69	55.2
	Female	56	44.8
		125	100.0
Age	Below 25 years	1	.8
	25-30 years	33	26.4
	31- 35 years	25	20.0
	36- 40 years	46	36.8
	41- 45 years	8	6.4
	46-50 years	4	3.2
	51-55 years	4	3.2
	56-60 years	2	1.6
	61 years and Above	2	1.6
		125	100.0

		67	
Level of Education	PhD	38	30.4
	Masters	87	69.6
		125	100.0

Table 3 revealed the demographic attributes of respondents in the study area. In terms of gender, Males constitute 69(55.2%), while Females are 56(44.8%). This shows that the majority of the respondents are male students. The majority 46(36.8%) of the students fall in the age category between 36-40 years. In terms of gender, Males constitute 48.3% while female respondents are 51.7% respectively. In terms of programme of study, 38(30.4%) were Ph.D.students, while 87(69.6%) were Masters's students.

Analyses of Research Questions

What is the frequency of use of electronic resources among Postgraduate students at the University of Ilorin, Kwara State?

Table 3: Frequency of Use of Electronic Resources among Postgraduate Students in the University of Ilorin, Kwara State

	Types of Electronic Resources	Very Often F(%)	Often F (%)	Occasionally F (%)	Rarely F (%)	Mean \bar{x}	Std. Dev
1	Internet/Websites	84 (67.2)	31 (24.8)	10 (8.0)	-	3.59	.636
2	E-journals	35 (28.0)	63 (50.4)	21 (16.8)	6 (4.8)	3.02	.803
3	E-newspaper,	36 (28.8)	45 (36.0)	36 (28.8)	6 (4.8)	2.90	.883
4	E-books	31 (24.8)	55 (44.0)	29 (23.2)	10 (8.0)	2.86	.886
5	E-magazines	32 (25.6)	44 (35.2)	36 (28.8)	11 (8.8)	2.79	.934
6	Web Search Tools	42 (33.6)	35 (28.0)	22 (17.6)	25 (20.0)	2.76	1.129
7	E-images	31 (24.8)	26 (20.8)	52 (41.6)	15 (12.0)	2.59	.916
8	Online Public Access Catalogue (OPAC)	13 (10.4)	53 (42.4)	41 (32.8)	16 (12.8)	2.51	.853
9	E-audio	20 (16.6)	37 (29.6)	48 (38.4)	20 (16.0)	2.46	.946
10	E- databases,	14 (11.2)	42 (33.6)	47 (37.6)	18 (14.4)	2.43	.883
11	E-theses	18 (14.4)	34 (27.2)	49 (39.2)	23 (18.4)	2.38	.951
12	E-pictures/photographs	20 (16.0)	23 (18.4)	48 (38.4)	32 (25.6)	2.25	1.021

13	E-reports	3 (2.4)	43 (34.4)	46 (36.8)	28 (22.4)	2.18	.816
14	E-newsletter	36 (28.8)	45 (36.0)	36 (28.8)	6 (4.8)	2.16	.847
15	CD-ROM/ DVD	13 (10.4)	24 (19.2)	41 (32.8)	42 (33.6)	2.07	.994
16	E-conference proceedings,	9 (7.2)	28 (22.4)	46 (36.8)	42 (33.6)	2.03	.924
17	E-manuscripts	4 (3.2)	29 (23.2)	52 (41.6)	37 (29.6)	2.00	.823
18	E-subject guide	7 (5.6)	21 (16.8)	54 (37.6)	61 (48.8)	1.95	.857
19	E-maps	4 (3.2)	15 (12.0)	41 (32.8)	60 (48.0)	1.69	.818
20	E-exhibitions	4 (3.2)	11 (8.8)	47 (37.6)	61 (48.8)	1.66	.777

Table 3 shows the frequency of use of electronic resources by postgraduate students on a four-point scale. The electronic resources which had the highest usage were the internet with a mean score of ($\bar{x}=3.59$), followed by e-journals ($\bar{x}=3.02$), while the electronic resource had the least usage was e-exhibitions with a mean score of ($\bar{x}=1.66$). This result shows that post-graduate students used electronic resources considerably for their research work. However, electronic resources such as e-subject guides ($\bar{x}=1.95$) and e-maps ($\bar{x}=1.66$) were among the resources with the least means, which shows that post-graduate students were not very familiar with those resources. This result depicts that the post-graduate students utilize e-resources in varying degrees as reflected in Table 3.

(ii) What is the level of information-seeking anxiety among Postgraduate students in the University of Ilorin, Kwara State?

Table 4: Level of Information Seeking Anxiety among Post Graduate Students in University of Ilorin, Ilorin Kwara State

S/N	Information Resources Barrier	SA	A	D	SD	Mean \bar{x}	Std. Dev.
1	I feel anxious when I find very few relevant information resources during the information-seeking process.	40 (32.0)	61 (18.8)	23 (18.4)	-	3.14	.702
2	I feel anxious when what is retrieved during the information-seeking process is obsolete.	27 (21.6)	78 (62.4)	18 (14.4)	2 (1.6)	3.04	.653
3	I feel anxious when the quality of information retrieved are unreliable.	32 (17.6)	79 (63.2)	22 (17.6)	2 (1.6)	2.97	.647
4	Making judgement on the relevance of the retrieved information makes me anxious.	18 (14.4)	74 (59.2)	30 (24.0)	3 (2.4)	2.86	.680
4	I feel anxious when I find too much unfamiliar information during the information-seeking process.	25 (20.0)	60 (48.0)	37 (29.6)	3 (2.4)	2.86	.759

5	Group Mean = 2.97						
	Searching for Information Barrier						
6	I am worried about not being able to find the necessary information during the information-seeking process.	32 (25.6)	80 (64.0)	8 (6.4)	4 (3.2)	3.13	.662
7	I feel worried when my search terms do not bring about my desired information needs.	28 (22.4)	84 (67.2)	10 (8.0)	3 (2.4)	3.10	.628
8	I feel anxious when I need information related to my research.	37 (29.6)	58 (46.4)	22 (17.6)	8 (6.4)	2.99	.857
9	When seeking information, I usually experience negative feelings like anxiety and frustration.	8 (6.4)	55 (44.0)	54 (43.2)	8 (6.4)	2.50	.714
10	I feel embarrassed in the library because I don't know how to find information resources	10 (8.0)	39 (31.2)	66 (52.8)	10 (8.0)	2.39	.750
	Group Mean=2.82						
	Computer/Internet Barrier						
11	I feel overwhelmed when I use the Internet for seeking information resources.	8 (6.4)	66 (52.8)	44 (35.2)	7 (5.6)	2.60	.696
12	I am uncertain about how to complete the information seeking process	11 (8.8)	42 (33.6)	62 (49.6)	9 (7.2)	2.44	.758
13	My Internet skills are not adequate for success in information seeking.	7 (5.6)	50 (40.0)	48 (38.4)	20 (16.0)	2.35	.816
14	I don't feel comfortable using online resources when seeking information resources.	14 (11.2)	34 (27.2)	55 (44.0)	22 (17.6)	2.32	.894
15	When I try to use computers for seeking information resources, I feel frustrated.	6 (4.8)	36 (28.8)	62 (49.6)	21 (16.8)	2.22	.779
	Group Mean=2.39						
	Library Barrier						
16	I feel uncomfortable asking for help from the library staff when seeking information resources in the library.	19 (15.2)	42 (33.6)	53 (42.4)	11 (8.8)	2.55	.856
17	I don't have enough skills to access the e-resources in the library.	12 (9.6)	48 (38.4)	52 (41.6)	13 (10.4)	2.47	.809
18	I feel uncomfortable sitting in the library and seeking information.	6 (4.8)	60 (48.0)	35 (28.0)	23 (18.4)	2.40	.844
19	Librarian and library staff don't have time to help me when searching information resources.	10 (8.6)	35 (28.0)	67 (53.6)	13 (10.4)	2.34	.772
20	I am not comfortable using library services for seeking information resources.	13 (10.4)	31 (24.8)	62 (49.6)	19 (15.2)	2.30	.854
	Group Mean=2.41						
	Topic Identification Barrier						
21	Selecting a general topic is a difficult part of information-seeking process.	13 (10.4)	77 (61.6)	28 (22.4)	7 (5.6)	2.77	.709
22	I feel anxious when selecting a general topic for my research	16 (2.8)	53 (42.4)	45 (36.0)	11 (8.8)	2.59	.824
23	Exploring information on a general topic to finding a focus makes me anxious.	8 (6.4)	63 (50.4)	46 (36.8)	8 (6.4)	2.57	.711
24	Gathering information related to my specific topic makes me anxious.	12 (9.6)	57 (45.6)	43 (34.4)	13 (10.4)	2.54	.808
25	I am not sure how to start searching for information	6	29	62	28	2.10	.801

resources.	(4.8)	(23.2)	(49.6)	(22.4)		
Group Mean=2.51						
Grand Mean=2.62						

The result on Table 4 was interpreted based on a four-point Likert scale type ranging from very low to very high as follows: 1-1.49= (Very Low), 1.5-2.49= (Low), 2.5-3.49= (High), 3.5-4= (Very High).

Table 4 shows varying levels of information seeking anxiety among post-graduate students in the study locale in terms of barriers in the use of information resources, searching for information, use of computer/internet, library usage, and topic identification respectively.

In the area of information resources barrier, the statement “*I feel anxious when I find very few relevant information resources during the information-seeking process*” had the highest mean (\bar{x} = 3.14), followed by “*I feel anxious when what is retrieved during the information-seeking process is obsolete*” (\bar{x} = 3.02), while the statements “*making a judgment on the relevance of the retrieved information makes me anxious*”, and “*I feel anxious when I find too many unfamiliar information during the information-seeking process*” had the least mean (\bar{x} = 2.86). The group means for information resources barrier (\bar{x} = 2.97) implies that the respondents showed a very high level of anxiety in accessing information resources.

In the area of searching for information barrier, the statement “*I am worried about not being able to find the necessary information during information seeking process*” had the highest mean (\bar{x} = 3.13), followed by “*I feel worried when my search terms do not bring about my desired information needs*” (\bar{x} = 3.10), while the statement “*I feel embarrassed in the library because I don't know how to find information resources*” had the least mean score (\bar{x} = 2.39). The group mean score of (\bar{x} = 2.82) on a four-point scale shows the respondents had a high level of anxiety in searching for information.

In addition, in terms of computer/internet barriers, the statement “*I feel overwhelmed when I use the Internet for seeking information resources*” had the highest mean score of (\bar{x} = 2.60), followed by “*I am uncertain about how to complete the information seeking process*” (\bar{x} = 2.44). The statement “*when I try to use computers for seeking information resources, I feel frustrated*” had the least mean score (\bar{x} = 2.22). The group mean score of (\bar{x} = 2.39) on a four-point scale shows low or minimal anxiety in the use of computers and the internet. In the area of library barrier, the statement “*I feel uncomfortable asking for help from the library staff when seeking for information resources in the library*” had the highest mean score of (\bar{x} = 2.55), followed by “*I don't have enough skill to access the e-resources in the library*” (\bar{x} = 2.47), while the statement “*I am not comfortable using library services for seeking information resources*” had the least mean score (\bar{x} = 2.30). The group mean of (\bar{x} = 2.41) on a 4 point Likert scale type depicts that postgraduate students show a low level of anxiety in the use of the library.

Lastly, in terms of the topic identification barrier, the statement “*selecting a general topic is a difficult part of information seeking process*” had the highest mean score of ($\bar{x}=2.77$), followed by “*I feel anxious when selecting a general topic for my research*” ($\bar{x}=2.59$), while the statement “*I am not sure how to start searching information resources*” had the least mean score ($\bar{x}=2.10$). The group mean ($\bar{x}=2.51$) on a 4 point Likert scale type show a high level of anxiety due to the topic identification barrier was exhibited by post-graduate students.

On the whole, the grand mean score ($\bar{x}=2.62$) on the information-seeking anxiety scale shows that post-graduate students exhibited a high level of anxiety in the use of electronic resources. The highest anxiety was experienced by students in the area of information resources barrier, in terms of evaluating the retrieved materials for quality, obsolesce, and relevance.

Testing of Hypothesis

(iii) Hypothesis 1: There will be no significant difference in information-seeking anxiety levels between male and female post-graduate students in the University of Ilorin, Kwara State.

Table 5: Independent T-test table on Significant Difference in Information Seeking Anxiety in the Use of Electronic Resources between Male and Female Post Graduate Students in the University of Ilorin

Gender	N	F	T	DF	Mean		Sig
					Difference	SD	(2-tailed)
Males	67	.057	1.205	119	66.64	9.87	.231
Females	54				64.43	10.29	P>.05

The third objective hypothesized no significant difference in information-seeking anxiety levels between male and female post-graduate students in the University of Ilorin.

Table 5 shows the independent t-test analysis showing no significant difference in the information-seeking anxiety levels between male and female post-graduate students. (M=66.64, SD=9.87) (F=64.43, SD=10.29, t(119) =1.205, p= .231).Therefore, P-value is greater than .05 showing no significant difference in the information-seeking anxiety levels between male and female post-graduate students. The null hypothesis was therefore accepted.

(iv) Hypothesis 2: Gender, Age and Programme of study do not jointly influence information seeking Anxiety of Post-Graduate Students in University of Ilorin, Kwara State, Nigeria

Hypothesis 2 revealed the relationship among the three independent variables (Gender, Age and Program of Study) and dependent variable (information seeking anxiety). To test this hypothesis, multiple regression analysis was used.

Table 6: Regression Analysis of Gender, Age and Program of Study on Information Seeking Anxiety among Post- Graduate Students in University of Ilorin, Kwara State, Nigeria

Model	DF	R	AdjR2	F	Sig
Regression	3	.418	.154	8.259	.000
Residual	117				p<.05
Total	120				

The result of regression analysis as shown in Table 6 reveals a positive and significant relationship among the three independent variables (gender, age and program of study) and information-seeking anxiety of post-graduate students ($R=.418$, $P<.05$). The R-square value of .154 implies that 15.4% of the total variance of information-seeking anxiety of post-graduate students was accounted for by these three factors. The remaining 74.6% is due to other external factors. Therefore, the null hypothesis was rejected.

(v) Hypothesis3: Gender, age and program of study do not contribute relatively to information seeking anxiety of post-graduate students in the University of Ilorin, Kwara State.

Table 7: Relative Contribution of Gender, Age and Program of Study to Information Seeking Anxiety of Post-Graduate students in University of Ilorin, Kwara State

Model	B	Beta	AdjustedR2	T	Sig
(Constant)	51.927			9.772	.000
Gender	-2.888	-.143	.154	-1.697	.092
Age	.463	.070	.154	-716	.075
Program of study	9.720	.435	.154	4.464	.000

Table 7 shows the relative contribution of each of the independent variables to information-seeking anxiety. Results revealed the relative contribution of each of the independent variables: Gender ($\beta=-.143$, $t=-1.697$, $P>.05$), Age ($\beta=.070$, $t=-716$, $P>.05$), Program of study ($\beta=.435$, $t=4.464$, $P<.05$). This result implies that programme of study made the strongest contribution in explaining information seeking anxiety; while gender and age made no significant contribution to information seeking anxiety. On the whole, this result has shown that students' programme of study, whether Ph.D. or Masters's level contributes to information-seeking anxiety. This means that post-graduate students exhibit information anxiety in their search for relevant and quality information for their research work.

(vi) What are the challenges hindering the use of electronic resources of post-graduate students at the University of Ilorin, Kwara State?

Table 8: Challenges Hindering the Use of Electronic Resources of Post Graduate Students in University of Ilorin, Kwara State

S/N	Challenges Hindering Use of Electronic Resources	SA F(%)	A F(%)	D F(%)	SD F(%)	Mean	Std. Dev.
1	Inadequate power supply	56 (44.8)	54 (43.2)	11 (8.8)	2 (1.6)	3.33	.709
2	Poor network/internet connectivity	51 (40.8)	63 (50.4)	6 (4.8)	5 (4.0)	3.28	.736
3	Limited access to computer terminals in the library.	43 (34.4)	59 (47.2)	18 (4.4)	3 (2.4)	3.15	.758
4	It makes my data subscription finish up quickly.	34 (27.2)	56 (44.8)	25 (20.0)	10 (8.0)	2.91	.889
5	There is too much information retrieved that I can cope with.	21 (16.8)	54 (43.2)	42 (33.6)	8 (6.4)	2.70	.823
6	The uncooperative attitude of library staff to facilitate easy access	17 (13.6)	41 (35.2)	55 (41.0)	9 (7.2)	2.55	.818
7	I do not have adequate skills to search for e-resources in the library	12 (9.6)	45 (36.0)	45 (36.0)	22 (17.6)	2.38	.889
8	Using electronic resources often distracts me from doing my other work	11 (8.8)	41 (32.5)	54 (43.2)	19 (15.2)	2.35	.845
9	It is time-consuming and wastes a lot of my time	6 (4.8)	39 (31.2)	62 (49.6)	18 (14.4)	2.26	.764
10	lack of knowledge to effectively utilize the resources	4 (3.2)	39 (31.2)	56 (44.8)	23 (18.4)	2.20	.778

Table 8 revealed the challenges experienced by post-graduate students in the study locale in the use of electronic resources. The three most frequently experienced challenges by the students were: Inadequate power supply ($\bar{x}=3.33$), Poor network /internet connectivity ($\bar{x}=3.28$), and limited access to computer terminals in the library ($\bar{x}=3.15$) respectively. On the other hand, the least experienced challenge was the lack of knowledge to effectively utilize the resources ($\bar{x}=2.20$). Each of the items on challenges posed by the use of e-resources had means above ($\bar{x}=2.00$) which depicts that post-graduate students were confronted with one challenge or the other in the use of e-resources.

Discussion of Findings

The study investigated information-seeking anxiety and the use of electronic resources among post-graduate students at the University of Ilorin, Kwara State, Nigeria. The findings of this study will be discussed in line with the objectives earlier stated and the extant literature.

The first objective of this study was to determine the frequency of use of electronic resources among post-graduate students in the University of Ilorin, Kwara State, Nigeria. Findings revealed that postgraduates used electronic resources. The electronic resources which had the highest usage was the internet with a mean score of ($\bar{x}=3.59$), followed by e-journals ($\bar{x}=3.02$), while the electronic resource which had the least usage was e-exhibitions which a mean score of ($\bar{x}=1.66$). On the whole, this result shows that post-graduate students used electronic resources extensively for their research work. However, other electronic resources such as e-subject guides ($\bar{x}=1.95$) and e-maps ($\bar{x}=1.66$) were minimally utilized. The result of this study supports the findings of

previous studies on the use of e-resources among students (Owolabi, Idowu, Okocha & Ogundare, 2016; Okon & Lawal, 2012).

The second objective of this study was to find out the level of information-seeking anxiety among Postgraduate students in the University of Ilorin, Kwara State, Nigeria. Findings revealed a moderately high level of information-seeking anxiety among postgraduate students in the study locale with a grand mean score of (\bar{x} = 2.62). Postgraduate students showed varying levels of anxiety in their information seeking in the following areas based on their mean scores : Information resources barrier (\bar{x} = 2.97), searching for information barriers (\bar{x} = 2.82), topic identification barrier (\bar{x} = 2.51), library barrier (\bar{x} = 2.41), computer/internet barrier (\bar{x} = 2.39). This finding is in tandem with Naveed and Ameen (2016) who reported a moderately high level of anxiety among post-graduate students in Punjab, India.

The third objective hypothesized that there will be no significant difference in the information-seeking anxiety levels between male and female postgraduate students. Findings revealed no significant difference in their information seeking anxiety level between males ($M=66.64$, $SD=9.87$) and females ($F=64.43$, $SD=10.29$, $t(119) = 1.205$, $p = .231$). Therefore, the P-value is greater than .05 showing no significant difference in the information-seeking anxiety levels. Hence, the null hypothesis was accepted. The result of this study negates the findings of Aghaei, Soleymani & Rizzi, (2017) who reported a significant difference in ISA between male and female postgraduate students at Isfahan University of Medical Sciences.

The fourth objective hypothesized that gender, age, and program of study will not jointly influence information-seeking anxiety of post-graduate students in the University of Ilorin, Kwara State. Findings revealed a positive and significant relationship between the three independent variables (gender, age and program of study and information-seeking anxiety ($R = .418$, $P < .05$). The findings of this study support Erfanmanesh (2012) who found that demographic characteristics such as gender, age, and level of study influenced information-seeking anxiety of post-graduate students in Kuala Lumpur University, Malaysia. Therefore, the null hypothesis was rejected.

The fifth objective hypothesized that gender, age, and program of study would not relatively contribute to information-seeking anxiety of post-graduate students at the University of Ilorin, Kwara State. Findings revealed that programme of the study had the strongest contribution to information-seeking anxiety. This finding supports Naveed and Ameen (2016) who found a significant difference in anxiety scores based on programme of study and stage of the study. This shows that students' program of study whether the Ph.D. or Masters program heightens their information-seeking anxiety as a result of the need to have relevant information materials for research purposes. Also, gender and age did not contribute significantly to the information-seeking anxiety of post-graduate students. This finding affirms Ojo (2016) who found that age and gender did not influence information-seeking anxiety.

The sixth objective was to determine the challenges faced by students in sourcing electronic resources. Challenges mostly faced by the post-graduate students include inadequate power supply, Poor network/internet connectivity, limited access to computer terminals in the library, and lack of knowledge to effectively use the resources among others. This result supports previous findings in the literature on challenges faced by students in the use of e-resources in developing countries (Amusa & Atinmo, 2016; Mammo & Ngulube, 2015 & Okiki, 2012).

Conclusion

This study has shown that electronic resources are well utilized by post-graduate students of the University of Ilorin regardless of the challenges posed in their bid to utilise these resources. Again, students exhibited moderately high levels of anxiety in their information-seeking tasks. Gender differences were not found in the information-seeking anxiety levels of male and female post-graduate students. In addition, gender, age, and program of study jointly influenced information-seeking anxiety among post-graduate students. However, in terms of relative contribution, gender and age did not contribute to ISA levels; while programme of study contributed significantly and positively to ISA levels of the postgraduate students in the University of Ilorin.

Recommendations

In the light of the findings of this study, the following recommendations are hereby made towards improving the utilization of e-resources; and equally combating the anxiety levels of post-graduate students:

- i. Orientation programmes should be organized by academic libraries to train post-graduate students on effective ways of searching e-resources. This will boost their confidence in evaluating e-resources for quality, currency, and timeliness.
- ii. Libraries should generate alternative sources of power that will allow students to search e-resources 24/7 without being hindered by power failure.
- iii. Libraries should provide help desk services to post-graduate students to facilitate easy searching and retrieval of e-resources. By this, information-seeking anxiety will be better managed.
- iv. Libraries should make available computer terminals for easy access to e-resources on the internet.
- v. Library management should provide in-house training for staff on ways of handling information requests of students without being a threat to them. With this moral support, the information-seeking anxiety levels of students can be easily surmounted.

References

- Abusin, K. A. & Zainab, A. N. (2010). Exploring library anxiety among Sudanese university students. *Malaysian Journal of Library & Information Science*, 15(1): 55-81.
- Aghaei, F., Soleymani, M.R. & Rizi, H.A. (2017). Information seeking anxiety among M.A. Students of Isfahan University of Medical Sciences. *Journal of Education and Health Promotion*, 6(14)
- Chowdhury, S. & Gibb, F. (2009). Relationship among activities and problems causing uncertainty in information seeking and retrieval. *Journal of Documentation*, 65(3): 470-499.
- Edem, N.B. & Egbe, N. (2016). Availability and utilization of electronic resources by postgraduate students in a Nigerian University library: A case study of University of Calabar, Nigeria. *Information and Knowledge Management*, 6(12): 60-69.
- Erfanmanesh, M. (2012). Investigating information seeking anxiety among postgraduate students: development and validation of a multidimensional scale (PhD dissertation), University of Malaya, Kuala Lumpur.
- Khadivi S. A. (2006). Study of library and electronic resources anxiety among the students at the Medical University of Isfahan. *Student Educational Psychology*, 14(3):117-34.
- khan, J. (2016). Awareness and use of digital resources and services in the IIT Delhi Library. *International journal of research-granthaalayan*, 4 (6), 64-71.
- Mammo, Y., & Ngulube, P. (2015). Academics use and attitude towards open access in selected higher learning institutions of Ethiopia. *Information Development*, 31(1):13-26.
- Naveed, M. A. & Ameen, K. (2016). Measuring students' level of anxiety in information seeking tasks. *Pakistan Journal of Information Management and Libraries*. 17: 56-68.
- Okiki, O. C. (2012). Electronic information resources awareness, attitude and use by academic staff members of University of Lagos, Nigeria. *Library Philosophy and Practice (e-journal)*. 828 <http://digitalcommons.unl.edu/liphiprac/828>
- Okon, H.I. & Lawal O.O. (2012). Use of electronic resources by graduate students of the Department of Educational Technology, University of Uyo. *Global Journal of Educational Research*, 12 :9-17.
- Ojo. O.J. (2016). Information anxiety and Information overload of Undergraduates in Two Universities in South-West Nigeria. *Library Philosophy and Practice (e-journal)*. 1368 <http://digitalcommons.unl.edu/libphilprac/1368>
- Owolabi, S., Idowu, O.A., Okocha, F. & Ogundare, A.O. (2016). Utilization of electronic information resources by undergraduate students of University of Ibadan: A case study of Social Sciences and Education. *Journal of Education and Practice*, 7(13): 30-36.
- Sharma, C. (2009). Use and impact of e-resources at Guru Gobind Singh Indraprastha University (India): A case study. *Electronic Journal of Academic and Special Librarianship*, 10(1).

http://southernlibrarianship.icaap.org/content/v10n01/sharma_c01.html.

Tekale, R. B. & Dalve, D. B. (2012). E-resources review of research.

<http://www.reviewofresearch.net/>

Ukpebor, C.O. (2012). Availability and use of electronic resources in African universities: The Nigerian perspective. *PNLA Quarterly*, 76(3): 190-199. www.pnla.org

Wilson, T.D. (1999). Models in information behaviour research. *Journal of Documentation*, 55(3), 249-270.