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INFORMATION SEEKING ANXIETY AMONG UNIVERSITY OF IBADAN POSTGRADUATE STUDENTS

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ABSTRACT

This study investigated the level of information seeking anxiety (ISA) among postgraduate students at Nigeria's premier tertiary institution, University of Ibadan. It focused on understanding the ISA of the students, as well as the demographic differences in their ISA levels. Descriptive survey design was adopted. A standardized and validated ISA scale consisting of six dimensions was used for the data collection. A total of 288 postgraduate students participated in the study. Findings showed that only 42% of the students exhibited mild ISA. Over 90% were in the no, low and mild categories of ISA, while less than 10% had moderate and severe ISA. Information resources dimension was the major source of ISA and the most important cause of this was the lack of access and frustration due to lack of user-friendly information resources. The study found statistically significant gender differences in the overall ISA and information resources, technical and topic identification dimensions, as female students exhibited greater ISA than males. Age differences in ISA were also found in the overall ISA scale and the dimensions of library and information search where the oldest students showed the highest level of anxiety followed by students in the youngest category. No statistically significant differences in ISA were found based on faculty and program of study, except with topic identification dimension where master's students had the highest ISA. This study concludes that generally, the postgraduate students are comfortable with their information seeking experience. The findings of the study amongst others recommends the need for institutional programs aimed at enhancing students' information and digital literacy and further studies in other Nigerian universities for a holistic understanding of ISA among postgraduate students.

Keywords: *Information seeking anxiety; demographic variables; postgraduate students; University of Ibadan; Nigeria.*

INTRODUCTION AND LITERATURE REVIEW

Information seeking anxiety (ISA) has been described as the psychological distress that an information seeker experiences while navigating various sources, including the library, the internet, and other people, for necessary information (Erfanmanesh et al. 2014a; Jan et al., 2024). The prevalence of anxiety and stress has always been seen as a significant barrier to learning that affects students of all ages as they look for solutions to their desired information needs (Naveed & Anwar, 2019; Yang & Khan, 2023).

In the context of higher education, research has traditionally been seen as an essential activity alongside teaching and volunteer work. According to Delaney et al. (2020) and Heron et al. (2021), the growth and quality of a higher education institution should be correlated with the significance of the research. The intricacy of students' research work necessitates the use of real, trustworthy material for topic selection and development, research proposal writing, and literature review preparation. However, a significant portion of research students experience worry, frustration, and anxiety if they are unable to get reliable information and their information search is unsuccessful (Erfanmanesh, 2011). Using the ISA scale by Erfanmanesh et al. (2012), existing literature

consistently shows that the anxiety encountered by students in the course of seeking information is a real phenomenon that could be severe, moderate or low (Aghaei et al., 2017; Akbarzadeh et al., 2020; Erfanmanesh, 2016). According to Salauddin (2024), the inherent, prevalent and persistent characteristics of information seeking significantly impact students emotionally, cognitively and behaviourally. Moreover, authors have also reported the influence of socio-demographic characteristics of students on their ISA with varied findings reported (Afolayan, 2022; Aghaei et al., 2017; Erfanmanesh, 2016; Karim and Ansari, 2011; Khan et al., 2023; Rahimi and Bayat, 2015).

In Malaysia, Erfanmanesh et al. (2014b) investigated the prevalence of ISA among 375 postgraduate students. The study reported that overall, about 70 percent of the students experienced mild ISA, while generally, over 60 percent experienced mild ISA for all the dimensions of ISA investigated which included barriers related to libraries, information resources, computers, technologies, affective, access and topic identification. Also, while female students had higher levels of ISA than male students in five out of the seven dimensions, statistically significant differences were observed only in “information resources” and “access” dimensions. Age also had a weak negative but statistically significant relationship with the dimensions of libraries, information resources and affective barriers. Moreover, one-way ANOVA result showed no statistically significant differences in the dimensions of ISA based on the faculty of the students.

Aghaei et al. (2017) investigated ISA among 265 postgraduate students of Isfahan University of Medical Sciences, Iran. The results show that apart from ISA related to topic selection and information resources which showed above average, all other dimensions were less than average. The study also showed significant differences in ISA across different departments. Gender difference in ISA was also observed as female students experienced higher level of ISA than males, although the study did not show these differences according to the different dimensions of ISA. Akbarzadeh et al. (2020) also investigated ISA among postgraduate students at the Shahid Beheshti University of Medical Sciences, Iran. The results showed that the medical students experienced average level of ISA. Also, a significant gender difference in ISA was observed for ISA related to information resources as well as computer and internet use.

In a study among postgraduate students of faculties of Science and Behavioural Sciences in Pakistan at the University of the Punjab, Pakistan, Naveed and Ameen (2017b) examined socio-demographic differences in six ISA dimensions of resource, ICT, thematic, mechanical, library and search anxieties. Findings showed that more than low ISA was observed among the majority of the respondents both overall and in all the ISA dimensions. The authors found no statistically significant differences in ISA based on age. It however reported that males exhibited higher ISA in the ICT dimension while female postgraduate students had higher ISA in the mechanical dimension and both findings were statistically significant. However, the study found statistically significant differences in ISA based on faculty in the ICT and thematic dimensions. Students in the Behavioural Sciences faculty were observed to have higher levels of anxieties in these two dimensions. A similar study was carried out by Khan et al. (2023) among 283 business students at a university in Pakistan. The study investigated the relationship between the students' socio-academic variables and their ISA. Majority of the students were not really comfortable with information searching and had mild to moderate levels of anxiety. Moreover, socio-academic factors such as gender, program type, school background, regional background, English language proficiency and information communication technology skills were not significant predictors of students' ISA.

In India, ISA levels have been investigated among students in two agricultural universities. Bala et al. (2023) investigated the ISA of postgraduate students at Punjab Agricultural University. The

authors reported mild level of ISA experienced by about 70 percent of the students. Also, gender difference in ISA was found only in the dimension related to computer and internet use with male students experiencing more anxiety than females. There were no differences in overall ISA levels based on students' program of study except with the library anxiety which showed master's students exhibiting higher ISA than other categories. Similar findings among agricultural students were reported by Salauddin (2024) study which adopted both quantitative and qualitative approaches to investigate ISA of 122 students at Dr Balasaheb Sawant Konkan Krishi Vidyapeeth. The author reported that the intensity of ISA was moderate for about 70 percent of the students. Also, gender difference in ISA related to only the use of computer and the internet was observed and females were found to be less anxious. Other dimensions of ISA investigated which included information sources, library resources, familiarity with search techniques, technical anxiety, information search and topic identification showed not significant differences. However, contrary to Bala et al. (2023), which reported higher level of ISA in the use of library resources among master's students, Salauddin (2024) found significant difference in ISA level in the use of library resources among PhD students as these students exhibited higher ISA than students in other categories.

In Nigeria, there is a dearth of studies that have investigated ISA among postgraduate students. Afolayan (2022) used convenience sampling technique to select 150 postgraduate students from five faculties in the University of Ilorin in Kwara State, to investigate their ISA and usage of electronic resources. The results showed a high level of ISA, although there were no significant differences in ISA based on age and gender. A holistic understanding of ISA among postgraduate students in Nigerian universities is quite important considering the fact that the academic expectations for students in this category are higher than those of undergraduates. Postgraduate students often engage in independent and complex research that involves advanced information seeking skills. Moreover, authors have emphasized the need to examine the concept of ISA among diverse groups and cultures (Erfanmanesh et al., 2012; Naveed and Ameen, 2017a). Such holistic understanding can facilitate institutional interventions and support that can help students navigate the information landscape with more confidence. It can enhance their information literacy, research capabilities and overall academic success (Salauddin, 2024). Hence, this study adapted the ISA scale by Erfanmanesh et al. (2012) to investigate ISA among postgraduate students at the University of Ibadan, Nigeria. It specifically examined the level of ISA of the postgraduate students as well as the demographic differences in their ISA.

METHODOLOGY

This study adopted the descriptive survey design. Postgraduate students at the University of Ibadan were the participants of this study. The Postgraduate College has twenty (20) disciplines and hundred and twenty-nine (129) programs, with a population of twelve thousand, two hundred and sixty-nine (12,269) postgraduate students.

The multistage sampling was adopted. In the first stage, faculties with more than 1,000 students were selected and these were Arts, Education and Science. The population of students in these three faculties was 5,147. In the second stage, Yamane (1973) formula with a 95% confidence level was used for the determination of the sample size. The calculation yielded a sample size of 371. In the third stage, proportionate-to-size sampling was used in getting the target sample in each faculty. This ensured a representative sample of postgraduate students across the faculties (Arts – 99; Education – 158; Science – 114).

Measurement of constructs, instrumentation, data collection and analysis

Structured questionnaire was used for the data collection. It was selected as the tool for data collection because it is affordable, time-saving, ensures anonymity, and removes the respondent's prejudice (Busha & Harter, 1980). There were two sections of questionnaire, and each of them contained relevant questions about the study's key variables. The items used were adapted from ISA Scale previously developed and validated by Erfanmanesh et al. (2012). The first section was used to collect data on the demographic characteristics of the respondents, while the second section was used to collect data on the six dimensions of ISA scale. Naveed and Ameen (2017b) provided a description of these six dimensions as shown:

Information resources anxiety: includes anxieties associated with access, reliability, originality, quality and use of information resources.

Computer and Internet anxiety: this refers to anxieties related to the use of ICTs for searching information resources.

Library anxiety: this dimension addresses issues associated with library services and policies, as well as the library environment and staff.

Information search anxiety: this dimension involves issues such as difficulty in defining an information need, choosing search terms and determining how and where to search for information resources.

Technical anxiety: this refers to anxieties from dealing with mechanical issues including system malfunctioning, computer errors, hardware/software changes and fear of using special equipment or damaging computers.

Topic identification: this dimension addresses issues associated with the selection of research theme or topic and gathering relevant information on the selected topic.

The ISA scale contains 47-items distributed among the six dimensions: information resources anxiety (14 statements); computer and internet anxiety (6 statements); library anxiety (11 statements); information search anxiety (5 statements); technical anxiety (6 statements); topic identification anxiety (5 statements)

All items for measuring responses to each variable were assessed through a Likert scale format of 1 to 5 where a higher mean score shows higher level of anxiety. The reliability of the 47-item scale was acceptable with Cronbach's alpha coefficient for each dimension being not less than 0.70 as shown in Table 1.

Table 1 Result of the Reliability Test

S/N	Items	Cronbach Alpha Coefficient	No of Items
1	Information Resources Anxiety	0.916	14
2	Computer and Internet Anxiety	0.843	6
3	Library Anxiety	0.843	11
4	Information Search Anxiety	0.847	5
5	Technical Anxiety	0.895	6

The instrument was administered to 371 postgraduate students and a total of 336 copies were returned, showing a response rate of 90.6%. However, 48 copies were not usable due to incomplete responses. Only 288 of the questionnaire copies were usable. Data were analysed using the Statistical Package for Social Science (SPSS) version 28. Descriptive statistics were used to describe the respondents' demographic characteristics. Inferential statistics which included independent t-test and one-way ANOVA were used to determine the demographic differences in the respondents' ISA.

RESULTS

Demographic Profile of the Respondents

Table 2 presents the demographic characteristics of the respondents.

Table 2: Demographic characteristics of respondents

Demographics	Frequency	Percentage (%)
<i>Gender</i>		
Male	132	45.8
Female	156	54.2
<i>Age (years)</i>		
20-30	227	78.8
31-40	48	16.7
41-50	10	3.5
51 and above	3	1.0
<i>Faculty</i>		
Arts	67	23.2
Education	122	42.4
Science	99	34.4
<i>Program</i>		
Master	276	95.8
MPhil-PhD	2	0.7
PhD	10	3.5

As seen in Table 2, more females (54.2%) participated in the study and majority of the respondents (78.8%) were between 20-30 years. For the three faculties selected, 23.3% were from the Faculty of Arts, 42.4% from Education and 34.4% were from Science. Also, most of the respondents were master's students (95.8%).

Information seeking anxiety assessment of respondents

The postgraduate students assessed their perceived ISA using a likert scale of 1 to 5 where a higher mean score shows higher level of anxiety. The mean score for overall ISA for the postgraduate students was 2.66 with SD = 0.63 and this suggests that the student's ISA levels did not vary significantly from the average score of 2.66. Mean scores of three and above were observed in only 9 statements. The postgraduate students experienced anxiety in their information seeking when the information resources found were not easy to use, when they lacked access to information resources identified and when they could not find necessary information on the web. The need for special skills and equipment to access information resources also caused some anxiety. Poor quality and unreliable information resources and unknown computer errors were also sources of uneasiness for the postgraduate students. The use of computer and required internet skills were the least causes of ISA among the postgraduate students.

However, based on the six dimensions, anxiety related to information resources had the highest overall mean with 3.08, followed by technical anxiety with 2.72. The dimension with the lowest perception of ISA was computer and internet with 1.80.

Level of ISA

The level of ISA of the students (Table 3) was classified using Anwar et al. (2004) criterion which has five levels based on the average mean of the ISA: No anxiety (0.00-2.21), Low anxiety (2.22-2.65), Mild anxiety (2.66-3.54), Moderate anxiety (3.55-3.98) and Severe anxiety (3.99-5.00). This classification has been adopted by other studies on ISA among postgraduate students (Erfanmanesh et al. 2014b; Khan et al., 2023; Naveed and Ameen, 2017b; Salauddin, 2024).

Table 3: ISA Levels of postgraduate students

Dimensions	ISA Levels (%)				
	No anxiety	Low anxiety	Mild anxiety	Moderate anxiety	Severe anxiety
Information resources	19.8	10.6	33.9	17.7	18.0
Computer and Internet	75.7	8.3	11.1	1.0	3.8
Library	28.5	17.6	44.7	3.2	6.0
Information Search	49.7	11.1	22.8	4.2	12.2
Technical	38.5	10.1	23.6	7.6	20.1
Topic identification	41.0	14.2	23.6	5.9	15.3
Overall ISA	24.3	25.4	42.1	6.1	2.1

As seen in Table 3, overall, a little above 40% of the postgraduate students experienced mild anxiety, while 24.3% and 25.4% experienced no anxiety and low anxiety respectively. Only half of the students experienced ISA at mild to severe levels. Based on dimensions, it is interesting to note that over 75% of the students experienced no anxiety in the use of computer and internet, followed by about 50% for information search anxiety, 41% in topic identification and about 40% in technical anxiety. The students experienced more anxiety in the information resources dimension as about 70% experienced mild to severe levels of ISA. As high as 20.1% of the students also experienced severe anxiety in the technical dimension.

Demographic differences in ISA

In addressing this objective, this study utilized independent sample t-test to test for gender differences, while one-way ANOVA was used to test for differences based on age, faculty and program of study. The pre-test level of significance was 0.05%.

Gender differences

Table 4 presents the findings from independent sample t-test for gender differences in ISA of postgraduate students based on the overall ISA and the six dimensions.

Table 4: Gender differences in ISA

Dimensions	Male		Female		p-value
	Mean	SD	Mean	SD	
Overall ISA	2.5426	0.60137	2.7618	0.63620	0.003
Information Resources	2.9134	0.94266	3.2262	0.83881	0.003
Computer and Internet	1.8409	0.83037	1.7660	0.88187	0.461
Library	2.5739	0.77329	2.7373	0.71677	0.065
Information Search	2.3045	0.94051	2.5385	1.14308	0.062
Technical	2.5568	1.04476	2.8590	1.13469	0.020
Topic Identification	2.4424	0.97481	2.8064	1.10025	0.003

Table 4 shows the average ISA levels for males and females. It shows that for the overall ISA, females generally had higher mean scores for ISA than males. The independent t-test shows that this result is statistically significant ($t=-2.972$, $p<0.05$). Also, females generally had higher mean scores for ISA in all the dimensions except computer and internet anxiety. However, statistically significant differences were observed in only information resources ($t=-2.979$, $p<0.05$), technical ($t=-2.335$, $p<0.05$) and topic identification ($t=-2.946$, $p<0.05$) anxieties. In all these three dimensions, females exhibited greater ISA than males. There were no statistically significant differences in ISA related to computer and internet ($t=0.737$, $p>0.05$), library ($t=1.850$, $p>0.05$) and information search ($t=1.875$, $p>0.05$) anxieties. This indicates that both genders have similar levels of anxieties in these dimensions.

Age differences

Table 5 shows findings from One-way ANOVA test for age differences in ISA of postgraduate students based on the overall ISA and the six dimensions. Overall and for each dimension, students in the oldest category (51 years and above) had the highest mean score for ISA. However, the differences in ISA of the postgraduate students based on age was only significant overall, and in the library and information search dimensions. Overall, postgraduate students who were 51 years and above (Mean=4.000, SD 1.000) exhibited the highest level of ISA, followed by 20-30 years (Mean=2.3545, SD=0.9800), 31-40 years (Mean=2.3191, SD=0.9580) and 41-50 years (Mean=2.300, SD=0.9487). This trend was also observed for library anxiety. However, in the information search dimension, while postgraduate students who were 51 years and above (Mean=4.6667, SD =0.5774) exhibited the highest level of ISA, this was followed by students in the 41-50 years category (Mean=3.0000, SD =1.6997. Students in the 31-40 years category had the lowest level of ISA.

Table 5: Age differences in ISA

Dimensions	20-30		31-40		41-50		51 and above		p-value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Overall ISA	2.3545	0.98004	2.3191	0.95795	2.3000	0.94868	4.0000	1.00000	0.037
Information Resources	3.0402	1.33702	3.0851	1.42691	2.3333	0.86603	4.0000	1.00000	0.253
Computer and Internet	1.4670	0.97876	1.5833	1.14545	1.4000	0.69921	2.0000	1.00000	0.706
Library	2.4509	1.05766	2.2340	1.25478	1.7000	0.94868	4.0000	1.73205	0.008
Information Search	2.1630	1.33862	1.9375	1.47902	3.0000	1.69967	4.6667	0.57735	0.002
Technical	2.5771	1.53341	2.5833	1.58226	3.0000	1.63299	4.0000	1.00000	0.364
Topic Identification	2.4317	1.42309	2.2083	1.55684	2.3000	1.56702	3.6667	1.15470	0.351

Faculty differences

One-way ANOVA was used to test for faculty differences in ISA. As shown in Table 6, for the overall ISA, students from Faculty of Science had the highest mean score for ISA, and this was closely followed by Arts and Education. However, the differences in ISA levels among students in these faculties were not statistically significant. Based on the six dimensions, students from Faculty of Science had the highest mean score for ISA in the information resources and topic identification dimensions and this was followed by Arts. However, students from Faculty of Arts had the highest mean score for ISA in the computer and internet, library, and information search dimensions, while Education had the highest mean score for technical anxiety. However, at a significant level of 0.05, the one-way Anova results showed that the differences observed in the mean scores by faculty were not statistically significant for all the six dimensions. This indicates that the differences observed were not sufficient to conclude that postgraduate students in these faculties exhibited ISA differently.

Table 6: Faculty differences in ISA

Dimensions	Arts		Education		Science		p-value
	Mean	SD	Mean	SD	Mean	SD	
Overall ISA	2.6859	0.63568	2.6227	0.61779	2.6911	0.64173	0.681
Information Resources	3.0437	0.89706	2.9643	0.90062	3.2554	0.88317	0.052
Computer and Internet	1.9080	0.88443	1.8456	0.84010	1.6717	0.85464	0.164
Library	2.6947	0.64529	2.6386	0.76773	2.6688	0.78954	0.881
Information Search	2.5791	1.05723	2.4049	1.06219	2.3636	1.05960	0.412
Technical	2.6990	1.00346	2.7527	1.16720	2.6953	1.09525	0.914
Topic Identification	2.6896	0.96815	2.5672	1.05654	2.6949	1.12280	0.611

Program of study differences

As seen in Table 7, postgraduate students on PhD program had the lowest level of ISA overall and in all the dimensions with the exception of library and topic identification dimensions. However, statistically significant difference in ISA level based on program of study was not observed in the overall ISA but only in the topic identification dimension where postgraduate students on Master's program exhibited the highest mean score for ISA (Mean=2.4529, SD=1.45526), followed by students on PhD (Mean=1.3000, SD=0.67495).

Table 7: Program of study differences in ISA

Dimensions	Master		M.Phil-PhD		PhD		p-value
	Mean	SD	Mean	SD	Mean	SD	
Overall ISA	2.3657	0.98712	3.0000	0.00000	2.2000	1.03280	0.575
Information Resources	3.0369	1.34389	3.5000	0.70711	2.9000	1.44914	0.844
Computer and Internet	1.5036	1.01084	2.0000	1.41421	1.0000	0.00000	0.226
Library	2.3897	1.10799	2.0000	1.41421	2.9000	1.19722	0.319
Information Search	2.1848	1.39815	2.5000	0.70711	2.0000	1.63299	0.873
Technical	2.6159	1.55071	3.5000	0.70711	2.2000	1.39841	0.504
Topic Identification	2.4529	1.45526	1.0000	0.00000	1.3000	0.67495	0.018

DISCUSSION OF FINDINGS

A total of 288 postgraduate students participated in the study. Slightly more females participated in the study than males. Majority of the respondents were between 20-30 years. It is quite encouraging that the respondents pursued postgraduate education (Masters) at an early and active stage of their lives. The study examined the prevalence of ISA among the postgraduate students based on the ISA scale by Erfanmanesh et al. (2012) which has six dimensions of ISA. The six sub-dimensions were information resources anxiety, computer and internet anxiety, library anxiety, technical anxiety, information search anxiety and topic identification anxiety. The study also investigated demographic differences in the postgraduate students' ISA based on age, gender, faculty and program of study.

Findings showed that the ISA levels for over 90% of the students were in the no, low and mild categories, with a little over 40% with mild ISA. Less than ten percent had moderate and severe ISA. Results from previous studies by Erfanmanesh et al. (2014b), Naveed and Ameen (2017b), Jan et al. (2024), Khan et al. (2023) and Salauddin (2024), also reported mild ISA among postgraduate students with a range of 60 to 69% of sample in these studies. However, in the current study, while the mild ISA category was more prevalent, only 42% of postgraduate students were in this category, whereas majority of other students either had low ISA or none at all. Hence, postgraduate students in the current study exhibited lower level of ISA compared to others that have been investigated in other climes. The fact that only half of the students experienced greater than low anxiety and mostly in the mild category makes it plausible to say that these students are comfortable with their information seeking process and do not have serious occurrence of ISA. It is likely that these students on their own have developed their research competencies or they enjoy sufficient support for their academic activities from their institution especially since the

institution prides itself as the flagship of postgraduate education in Nigeria (<https://pgcollege.ui.edu.ng/>).

Based on the six dimensions, information resources was the major source of ISA, while computer and internet category was the least. The most important cause of information resources anxiety was the lack of access and frustration due to lack of user-friendly information resources. Although previous findings on the prevalence of ISA dimensions are varied, majority support this study's finding which showed information resources usage as the major contributor to the students' ISA from mild to severe levels. For instance, Erfanmanesh et al. (2014b) reported library and information resources as the main sources of mild to severe ISA and topic identification as the least source among postgraduate students in Malaysia. Aghaei et al. (2017) study also showed the prominent role of access to information resources in creating ISA among medical postgraduate students in Iran. However, while Naveed and Ameen (2017b) also found information resources usage as the most contributor to ISA at the mild to severe levels and search anxiety the least, thematic anxiety (topic identification) was the major source of severe anxiety among postgraduate students in the faculties of Science and Behavioural Sciences at University of Punjab, Pakistan. Moreover, Khan et al. (2023) reported information resources usage as the major contributor to mild, moderate and severe ISA among business students in Pakistan, but with library anxiety as the least source of ISA.

The study found statistically significant gender differences in the overall ISA and information resources, technical and topic identification dimensions as female students exhibited greater ISA than males. These findings contradict studies by Akbarzadeh et al. (2020), Khan et al. (2023), Naveed and Ameen (2017b) and Salauddin (2024), which found no statistically significant gender difference in overall ISA of postgraduate students. Based on dimensions, however, Khan et al. (2023) found significant gender difference in the dimension of information search anxiety where males exhibited higher anxiety than females. Salauddin (2024) also reported significant gender difference in the computer and ICT dimension with females experiencing greater ISA than males. Naveed and Ameen (2017b) found significant gender difference in ICT and technical anxiety dimensions. The current study however agrees with Aghaei et al. (2017) which found significant gender difference in ISA of medical students in Iran, with females having greater anxiety. It also partially corroborates Erfanmanesh et al. (2014b) and Akbarzadeh et al. (2020) which showed significant gender difference in information resources usage with females showing higher level of ISA. It is interesting to note that majority of the studies above were conducted outside Nigeria which could suggest the influence of contextual factors in study findings. However, due to the novelty of the current study, it is difficult to compare findings with other studies within the context of postgraduate students in Nigerian universities. Hence, further related studies within the Nigerian university environment are crucial in order to have a holistic understanding of the differences observed based on gender.

Age differences in ISA were also found in the overall ISA scale and the dimensions of library and information search where the oldest students showed the highest level of anxiety followed by students in the youngest category (20-30 years). These results contradict Naveed and Ameen (2017b) which found no significant correlation between age and overall ISA and dimensions except in ICT anxiety where the ISA levels of the students increased as they grew older. It however partially corroborates Erfanmanesh et al. (2014b) which reported age as a correlate of ISA in the library and information resources dimensions. The study found that older students had lower ISA than younger students. In the current study, it was observed that apart from the few students in the oldest category (51 years and above), generally, students in the youngest category (20-30 years) exhibited the highest level of ISA. These students (20-30 years) constitute the largest category and this finding is surprising considering the fact that most of these young

postgraduate students had only recently finished their undergraduate studies and had been exposed to using the library and engaging in information search activities. Whereas the high level of ISA found among the oldest students is not surprising since it is most likely that these students had finished their undergraduate studies many years earlier and now have to gradually get used to the process of information seeking for their academic activities.

This study found no significant differences in students' ISA mean score based on their faculties. These differences were not observed in the overall ISA as well as in the dimensions. The slight differences observed in the scores were not sufficient to conclude that postgraduate students in these faculties exhibited ISA differently. This outcome of the study corroborates Erfanmanesh et al. (2014b) which found no significant differences in ISA based on faculty among 375 postgraduate students. It however conflicts with Aghaei et al. (2017) and Naveed and Ameen (2017b). At the University of the Punjab in Pakistan, Naveed and Ameen (2017b) reported higher levels of anxieties in the ICT and thematic dimensions among students in the faculty of Behavioural Sciences compared to students in the faculty of Science.

Differences in ISA was not significant overall for program of study. This indicates that generally, the students do not exhibit ISA differently irrespective of their program of study. However, based on the dimensions, a significant difference was observed in the identification of topics and students at the master's level exhibited higher ISA levels than others. These findings sharply contrast with Naveed and Ameen (2017b) which reported significant differences in the overall ISA as well as in the resources, ICT and thematic dimensions. In all these aspects, PhD students reported greater fear than those in the MPhil program. Findings from the current study however partially agree with Bala et al. (2023) and Salauddin (2024) which found no statistically significant difference in overall ISA levels based on program of study except in the dimension of library anxiety. While Bala et al. (2023) noted higher ISA level among master's students in the use of library resources, Salauddin (2024) study reported such higher level of ISA among PhD students. In the current study, the differences observed in the topic identification dimension with higher level of ISA among master's students, is somewhat surprising considering the fact that the PhD program is perceived to be more demanding, requiring students to work more independently on topics that are original and would contribute new knowledge to the field. However, a plausible reason for the higher level of anxiety for master's students in the identification of topics is the shorter duration of their program compared to PhD students. These master's students may exhibit the fear of not having sufficient time to go through different topics before concluding on a topic they would be able to finish within the timeframe of their program.

Conclusion

This study investigated the information seeking anxiety of postgraduate students at Nigeria's premier university, as well as the differences in anxiety based on age, gender, faculty, and program of study. The results showed that generally, the postgraduate students are comfortable with their information seeking experience as less than half of the sample showed mild anxiety whereas majority had low or no anxiety at all. While these findings may suggest that ISA is not a very crucial problem with these students, institutional interventions aimed at reducing ISA through information literacy programs that improve access to information resources and promote ease of use of these resources can be explored. Overall, the study also found significant differences in ISA based on age and gender but not with faculty and program of study. Female postgraduate students generally exhibited a higher level of ISA and this was also observed among much older students and students in the youngest category. These findings may suggest the need for institutional programs in form of seminars and workshops aimed at enhancing postgraduate students' digital literacy and research strategies. Moreover, deeper insight into study findings is crucial through comparisons with findings across other universities in the country.

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