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Prevalence and Levels of Information Seeking Anxiety among Business Students

by

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Abstract

This research assessed the prevalence and levels of information seeking anxiety among business students at Lahore School of Economics, Lahore, Pakistan so that remedial measures could be taken to reduce anxiety. The data were collected from 283 students using a survey questionnaire, containing an Information Seeking Anxiety Scale along with certain demographic and academic variables, and analyzed using descriptive and inferential statistics. The results indicated the prevalence of information seeking anxiety among these students across different dimensions and overall scale at mild to moderate levels. There was no significant relationship between nature of MBA program, gender, school background, geographical origin, ICT skills, English language competency, and information seeking anxiety. However, gender appeared to predict the dimension of search anxiety as female students were more anxious than males when searching for information. The results are very useful to inform policy and practice for development of information capabilities in the digital information landscape. These findings could be used as a guide for developing and designing information literacy programs aimed to reduce information seeking anxiety resulting in the improvement of students' academic performance. This study has made a reasonable contribution to the existing literature on information seeking anxiety as a limited number of studies appeared focusing specifically on information seeking anxiety.

Keywords: Information seeking anxiety, Information anxiety, Library anxiety, Business students, Information literacy, Pakistan.

Introduction

The feelings of discomfort and uncertainty are cardinal, omnipresent, and persistent in the process of information seeking (Kuhlthau, 1988; 1991; 1993). These feelings might arise anytime and anywhere while looking for information either at the library or being online (Naveed, 2016; Naveed, 2017). Kuhlthau (1991) described the information seeking process as "the user constructive activity of finding meaning from information to extend researcher knowledge on a particular problem or topic" (p. 361). She encountered the information problem by using the information search process and applied a variety of information seeking strategies to solve the problem (Marchionini, 1997). Erfanmanesh, Abrizah, and Karim (2012) coined the term 'information seeking anxiety' which refers to patrons' feelings of discomfort while looking for information from varied sources including the library, the web, and human. It goes beyond the physical space of a library that may include – but is not limited to library anxiety (Naveed and Anwar, 2019, 2020). The course of information seeking may be either manual or computer-

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based and may be performed anywhere either at home or at a library (Erfanmanesh, Abrizah, & Karim, 2012).

Such feelings cause "different cognitive, emotional, and behavioral effects in students", hamper students' self-efficacy for information seeking, and impedes their academic performance and achievements (Erfanmanesh, Abrizah, & Karim, 2012; Kohrman, 2003, Naveed and Ameen, 2017b). The intricacy of students' research work requires authentic and credible information for topic identification and formulation, writing a research proposal, and preparing the literature reviews. If students fail to retrieve credible information and their information search end up with failure, it not only causes fear, frustration and anxiety in a huge section of research students (Kohrman, 2003; Van Kampen, 2003) but also leads to impatience, poor concentration, and even depression (Erfanmanesh, 2011; Naveed & Ameen, 2016a). It also triggers certain avoidance behaviours such as search avoidance, task avoidance, and research avoidance in postgraduate students (Naveed, 2016).

An extensive search for literature on information seeking anxiety revealed a limited amount of research studies addressing this construct. The results of these studies reported the prevalence of information seeking anxiety across various dimensions and at different levels such as low, mild, moderate, and severe (Erfanmanesh, Abrizah, & Karim, 2014a, 2014b; Naveed, 2016; Naveed & Ameen, 2017b). In Pakistan, only a few studies were conducted to assess information seeking anxiety among postgraduate students from the discipline of science and behavioral science. However, no other study appeared to have been conducted with students of other disciplines such as business science, engineering, health science, arts, and humanities. Erfanmanesh, Abrizah, and Karim (2012) and Naveed and Ameen (2017a) also emphasized the need for more inquiries examining this construct in various groups having different cultures and locales to check the validity and reliability of the ISAS. No study appeared so far measuring this construct in masters' students. Therefore, the present research aimed to investigate this phenomenon using ISAS among the master's students of business administration at Lahore School of Economics, Lahore.

Research Questions

1. Which components of information seeking anxiety have the most and the least prevalence among the business students?
2. What is the level of information seeking anxiety among the master's business students when they are seeking information?
3. Is there any relationship between gender, school background, geographical origin, ICT skills, English competency, and information seeking anxiety?

Literature Review

Research examining anxiety associated with information can be divided into three categories, namely, library anxiety (Mellon, 1986), information seeking anxiety (Erfanmanesh, Abrizah, & Karim, 2012), and information anxiety (Wurman, 1989). These concepts existed parallelly and captured the interest of researchers from different fields. Library anxiety and information seeking anxiety appeared in LIS literature whereas information anxiety came from the field of computer science. Naveed and Anwar's (2019) nested model explained these three distinctive but related concepts and posited information anxiety as the general concept embracing information seeking anxiety as its sub-set and library anxiety as a further sub-set. Since the development of these constructs, several scholars developed and validated certain scales to measure these concepts

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quantitatively with a varied focus such as Bostick's LAS (1992), Van Kempan's MLAS (2004) Anwar's AQAK (2012), and Erfanmanesh's ISAS (2012).

Bostick (1992) developed library anxiety scale (LAS) for undergraduate students that comprised of 43-items clustered into five sub-dimensions, namely, staff barriers, affective barriers, comfort with the library, barriers with library knowledge, and mechanical barriers. Since its development, LAS has been extensively used and had a few modifications and translations on account of different educational, cultural, and geographical environments (e.g. Anwar, Al-Kandari & Al-Qallaf, 2004; Shoham and Mizrachi 2004; Song, Zhang, & Clarke, 2014; Swigon 2011; Van Kampen 2004). LAS was also reported as unsuitable for its continued application to measure library anxiety in the digital library environment (Anwar, Al-Kandari & Al-Qallaf, 2004; Kwon, 2004). Van Kampen (2003, 2004) expanded Bostick's (1992) LAS with 11 more items considering Kuhlthau's (1988) information search process. She developed and validated a 54-item instrument for doctoral students and called it the Multidimensional Library Anxiety Scale (MLAS). MLAS consisted of six components: library comfort and confidence, information search process anxiety, staff barriers, perceived library importance, library technologies competence, and library comfort. She reported no correlation between computer anxiety and library anxiety indicating that technology might not be the reason for anxiety. Considering the unsuitably of LAS in the modern library environment, Anwar, Al-Qallaf, Al-Kandari, and Al-Ansari (2012) developed and validated library anxiety scale for undergraduate students and named it as AQAK. This scale consisted of 40 statements divided into five factors: library resources, library staff, user knowledge, library environment, and user education. It was the first scale that reported user education as a component of library anxiety.

Patrons' anxiety while seeking information from multiple sources, including the library, the web, and human needed to be addressed. Considering the digital information landscape, Erfanmanesh, Abrizah, and Karim (2012) decided to develop a valid and reliable Information Seeking Anxiety Scale (ISAS) for the postgraduate students. ISAS comprised of 47 statements having six sub-dimensions, namely, information resources barriers (14 statements, α= 0.868), computer and internet barriers (10 statements, α= 0.726), library barriers (11 statements, α= 0.815), search barriers (7 statements, α= 0.802), technical barriers (7 statement, α= 0.809), and topic identification barriers (5 statements, α= 0.825). ISAS was the only reliable and valid instrument due to its high value of Cronbach Alpha, that is, .902. A cross-cultural evaluation of ISAS among postgraduate students of a research-intensive university of Pakistan also demonstrated a six-factor solution: resource anxiety (11 items, α= 0.834), ICT anxiety (9 items, α= 0.771), library anxiety (6 items, α= 0.772), search anxiety (5 items, α= 0.867), mechanical anxiety (5 items, α= 0.821), and, thematic anxiety (4 items, α= 0.872). These six factors were consistent with that of Erfanmanesh, Abrizah, and Karim (2012), but slightly differed towards item loadings on each factor, labeled differently from the original study, and dropped seven items during reliability analysis. The results indicated the psychometric soundness and stability of ISAS when tested in the Pakistani environment (Naveed & Ameen, 2017a). A qualitative inquiry by Naveed (2016) explored the manifestation of information seeking anxiety in eight areas, namely, 1) procedural anxiety, 2) information overload, 3) resource anxiety, 4) library anxiety, 5) competence anxiety, 6) ICT anxiety, 7) language anxiety, and 8) thematic anxiety. These results not only corroborated some of the dimensions identified by Erfanmanesh, Abrizah, and Karim (2012) but also expanded by adding 'procedural anxiety', 'information overload', 'competence anxiety' and 'language anxiety'.

Since the development of ISAS, it had been used by multiple research studies to measure information seeking anxiety in students from different cultural contexts and geographical locales

(Erfanmanesh, Abrizah, & Karim, 2014b; Erfanmanesh, 2016; Naveed, 2015; Naveed & Ameen, 2016a, 2016b, 2016c; Naveed & Ameen, 2017b; Rahimi & Bayat, 2015). These studies revealed the manifestation of information seeking anxiety among students across different dimensions at varying levels. For instance, Naveed and Ameen (2017b) reported the dimension of 'thematic anxiety' as the most prevalent among postgraduate students when looking for information followed by 'resource anxiety', 'mechanical anxiety', 'ICT anxiety', and 'search anxiety' whereas the dimension of 'library anxiety' was the least prevalent. One the other hand, the study of Erfanmanesh, Abrizah, and Karim (2014a, 2014b) reported 'library barriers' and 'info resource barriers' as the most prevalent dimensions. While the dimensions of 'computer and internet barriers' and 'barriers associated with topic identification' as the least prevalent among postgraduate students at a research-intensive university in Malaysia. The results of these studies also indicated that a large majority of the participants faced different levels (low, mild, moderate, and severe) of information seeking anxiety.

A perusal of published research also discovered certain socio-demographic and academic variables as correlatives of information seeking anxiety. Erfanmanesh, Abrizah, and Karim (2014b) and Erfanmanesh (2016) reported that the relationship of students' age, gender, levels of study, and library usage frequency with information seeking anxiety. The study of Naveed and Ameen (2017b) corroborated some of these relationships by reporting the age, gender, faculty, program of study, study stage, computer proficiency, and research experience of postgraduate students as predictors of information seeking anxiety. An inquiry by Rahimi and Bayat (2015) found gender differences in the index of information seeking anxiety and the Primary English Test (PET). This study also reported an inverse relationship between English language proficiency and information seeking anxiety. It concluded that the proficiency of students with English reading was a stronger element in reducing information seeking anxiety. Previous studies emphasized the need for more investigations addressing information seeking anxiety using ISAS for its cross-cultural validation and exploration of the proposed phenomenon qualitatively. The research reporting from Pakistan assessed information seeking anxiety among postgraduate students from the faculties of sciences and behavioural sciences. There was a need to assess levels of information seeking anxiety among students of other faculties such as business sciences, engineering, and health sciences.

Research Design

A quantitative research design using a survey method along with a questionnaire was adopted to conduct this research. Powell and Connanway (2004) considered it as the most appropriate method for large populations by studying comparatively a small number selected from the large population. The questionnaire contained the 47 items of Information Seeking Anxiety Scale (ISAS), developed by Erfanmanesh, Abrizah, and Karim (2012), along with certain demographic and academic variables such as nature of MBA program, gender, school background, geographical origin, ICT skills, and English language competency. ISAS was a reliable and valid measure to assess information seeking anxiety (Erfanmanesh, Abrizah, & Karim, 2012; Naveed, 2015; Naveed & Ameen, 2017a; Naveed & Anwar, 2021; Naveed, Jan & Anwar, 2020). Therefore, it was decided to use ISAS to assess the prevalence and levels of information seeking anxiety among business students.

All 365 business students of the Lahore School of Economics (LSE) were the population of this study. These students consisted of two groups: MBA-1, a two-year program, with 66 students and MBA-2, a one-year program, with 299 students. Since all students are the target population of this study, no sampling was needed. A total of 335 questionnaires out of 365 were

collected, including 16 students who were not present in classes but the researcher, after identifying them from the class list, contacted them and got the questionnaires completed. The researcher checked and reviewed the 335 questionnaires were reviewed and checked for their accuracy and completeness. Fifty-two questionnaires lacked important information which resulted in their rejection. The remaining 283 questionnaires (62 from MBA-1 and 221 from MBA-2) which were filled in completely and accurately and gave valuable data for the entire instrument were used for analysis. The response rate came to 77.5% which was quite high.

The composite variables were created by calculating the mean scores of each participant for overall scale and its subscales to determine the prevalence and levels of information seeking anxiety. The greater mean scores indicated higher anxiety. The average mean scores of 283 participants along with standard deviation were used to determine the prevalence of information seeing anxiety for overall ISAS and each its subdimensions. The levels of information seeking anxiety such as 'No', 'Low', 'Mild', 'Moderate', and 'Severe' were identified using the criterion proposed by Anwar, Al-Kandari and Al-Qallaf (2004). For significance testing, an independent sample t-test, one-way ANOVA were performed.

Data Analysis and Results

This study aimed to explore the information seeking anxiety among business students of the Lahore School of Economics, using a survey method. A questionnaire based on the Information Seeking Anxiety Scale (ISAS), developed by Erfanmanesh (2012) which was a valid and reliable scale and was recommended for use for further research, was used.

Information seeking anxiety prevalence

The students average scores for overall Information Seeking Anxiety Scale and its subscales were calculated to determine the prevalence of information seeking anxiety among participants. The related statistics are displayed in Table 1. The overall ISAS mean score is 3.13, which is very close to the median of 3.14. The minimum value of complete ISAS is 1.11, the maximum value is 4.68 and the standard deviation is .551. The composite mean scores of ISAS and its sub-scales can be examined from Table 1. These figures indicated that the most prevalent anxiety among these business students was in the dimension of "Information Resources Usage Anxiety" (μ=3.37, σ .594), "Thematical Anxiety" (μ=3.33, σ .690), and "Mechanical Anxiety" (μ=3.18, σ .713). This was followed by "Search Anxiety" (μ=3.08, σ .688), and "Library Anxiety" (μ=2.97, σ .720). The least prevalent Anxiety is "ICT Anxiety" (μ=2.92, σ .647).

Table1

Descriptive statistics of overall ISAS and its sub-scales (n=283)

Composite Variables	Mean	Median	Mode	Std. Dev.	Variance	Min	Max
Info Resources Usage Anxiety	3.37	3.38	3.62	.594	.353	1.08	4.69
ICT Anxiety	2.92	2.90	2.82	.647	.419	1.18	4.73
Library Anxiety	2.97	3.00	3.11	.720	.519	1.00	4.67
Search Anxiety	3.08	3.20	2.80	.688	.475	1.00	4.80
Mechanical Anxiety	3.18	3.20	3.60	.713	.510	1.20	4.80
Thematical Anxiety	3.33	3.50	3.50	.690	.476	1.00	5.00
Information Seeking Anxiety Scale	3.13	3.14	3.15	.551	.304	1.11	4.68

Level of Information Seeking Anxiety

The levels of information seeking anxiety were calculated using the criterion suggested by Anwar, Al-Kandari and Al-Qallaf (2004) such as 'No', 'Low', 'Mild', 'Moderate', and 'Severe' as it has been successfully used in the Erfanmanesh, Abrizah, and Harun (2014b) and Naveed and Ameen (2017b) to determine the levels of information seeking anxiety among postgraduate students. The figures for mean scores of anxieties are presented in Table 2. It was found that most of the participants (n=178, 62.9%) faced 'Mild' level of anxiety while they were seeking information whereas 71(25.1%) students experienced a 'Moderate' level of anxiety. Thirty (10.6%) respondents faced a 'Low' level of anxiety. Three (1.1%) respondents experienced 'no' anxiety and only one (0.4%) felt 'severe' anxiety. However, it is very important to note that a very large majority of these students did face 'Mild' anxiety for the overall ISAS. The Information Seeking Anxiety simple mean score is 3.14 with a standard deviation value of .551. The results indicate that the sub-dimension "Information Resources Usage Anxiety" of ISAS is the main source of Mild, Moderate, and Severe (n=259, 91.5%) anxiety among these students. Thematic Anxiety was the next higher (n=256, 90.5%). The results show that a small number of respondents faced severe anxiety in all domains except Thematic anxiety (n=11) which has the highest number. Similarly, a very small number of participants faced a low level of anxiety during the information-seeking process which is a very positive sign. However, most of these students do not feel comfortable while they are using information sources during the information-seeking process.

Table 2
Level of Information Seeking Anxiety (n=283)

Dimensions	No Anxiety	Low Anxiety	Mild Anxiety	Moderate Anxiety	Severe Anxiety
Info Resources Usage Anxiety	3 (1.1%)	21 (7.4%)	130 (45.9%)	124 (43.8%)	5 (1.8%)
ICT Anxiety	5 (1.8%)	65 (23%)	157 (55.5%)	54 (19.1%)	2 (0.7%)
Library Anxiety	8 (2.8%)	68 (24%)	137 (48.4%)	67 (23.7%)	3 (1.1%)
Search Anxiety	6 (2.1%)	50 (17.7%)	146 (51.6%)	75 (26.5%)	6 (2.1%)
Mechanical Anxiety	4 (1.4%)	43 (15.2%)	131 (46.3%)	98 (34.6%)	7 (2.5%)
Thematical Anxiety	2 (0.7%)	25 (8.8%)	107 (37.8%)	138 (48.8%)	11 (3.9%)
Information Seeking Anxiety Scale	3 (1.1%)	30 (10.6%)	178 (62.9%)	71 (25.1%)	1 (0.4%)

Nature of MBA program and information seeking anxiety

An independent sample t-test was applied to find out the differences in the mean scores of information seeking anxiety based on MBA-1 (n=62) and MBA-2 (n=221) program. Table 3 indicated no statistically significant mean differences in the index of information seeking anxiety for overall ISAS and its sub-scales based on these two groups.

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Table 3

MBA Programs and Information Seeking Anxiety

Dimensions	MBA-1 (62)		MBA-2 (221)		*P-value*
	Mean	SD	Mean	SD	
Info Resources Usage Anxiety	3.36	.513	3.37	.615	.901
ICT Anxiety	3.02	.651	2.90	.644	.177
Library Anxiety	2.98	.693	2.97	.729	.899
Search Anxiety	3.06	.599	3.08	.713	.761
Mechanical Anxiety	3.14	.663	3.19	.728	.630
Thematical Anxiety	3.32	.668	3.34	.697	.836
Information Seeking Anxiety Scale	3.15	.499	3.13	.566	.788

*P<0.05

Gender and Information Seeking Anxiety

An independent t-test was also utilized to examine the mean differences in information seeking anxiety based on males (n=125) and female (n=158) of these students. Table 4 indicated no statically significant differences of mean scores between males and females in all the sub-dimensions of ISAS except for the dimension of 'search anxiety' (p-value = .008 < .05). This indicated that female students (Mean=3.20) were more anxious than male students (Mean=2.98) for search anxiety. It meant that femininity can predict their information seeking anxiety students when searching for information.

Table 4

Information Seeking Anxiety and Gender

Dimensions	Male (125)		Female (158)		*P-value*
	Mean	SD	Mean	SD	
Info Resources Usage Anxiety	3.40	.556	3.34	.622	.423
ICT Anxiety	3.00	.582	2.87	.691	.105
Library Anxiety	3.05	.649	2.92	.768	.124
Search Anxiety	3.20	.653	2.98	.703	.008*
Mechanical Anxiety	3.18	.691	3.18	.733	.954
Thematical Anxiety	3.37	.641	3.31	.726	.466
Information Seeking Anxiety Scale	3.1942	.495	3.09	.590	.138

*P<0.05

School background and Information seeking anxiety

The results of an independent sample *t*-test also indicated no statistically significant differences in the mean score of information seeking anxiety based on school background such as public (n=22) and private (n=261). schools to examine if that background had any effect on student's anxiety while they were seeking information (p-values > .05).

Table 5

Information Seeking Anxiety and School Background

Dimensions	Public (22)		Private (261)		*P-value*
	Mean	SD	Mean	SD	
Info Resources Usage Anxiety	3.37	.508	3.37	.602	.997
ICT Anxiety	2.71	.660	2.95	.644	.117
Library Anxiety	2.79	.675	2.99	.723	.192
Search Anxiety	2.90	.724	3.10	.685	.228
Mechanical Anxiety	3.04	.631	3.20	.720	.266
Thematical Anxiety	3.45	.554	3.33	.700	.326
Information Seeking Anxiety Scale	3.03	.443	3.15	.560	.236

P<0.05

Geographical background and information seeking anxiety

The geographical background such as urban (n=260) and rural (n=23) of the students did also not predict students' information seeking anxiety as p-value in Table 6 were greater than .05 for overall ISAS and all its subscales. It might be due to the fact that the rural students while living in hostels and interacting with their peers from cities got the chance to develop themselves in areas that helped in the information-seeking process.

Table 6

Geographical Background and Information Seeking Anxiety

Dimensions	Urban (260)		Rural (23)		*P-value*
	Mean	SD	Mean	SD	
Info Resources Usage Anxiety	3.37	.604	3.33	.478	.686
ICT Anxiety	2.94	.659	2.87	.510	.569
Library Anxiety	2.98	.735	2.95	.536	.806
Search Anxiety	3.07	.700	3.17	.554	.427
Mechanical Anxiety	3.19	.722	3.14	.628	.720
Thematical Anxiety	3.36	.694	3.36	.606	.060
Information Seeking Anxiety Scale	3.14	.563	3.14	.407	.589

P<0.05

ICT skills and information seeking anxiety

One-way ANOVA was used to test the mean difference in the information seeking anxiety scores of students for overall ISAS and its subscales based on their level of ICT aptitude such high, moderate, and low. The results indicated no statistically significant mean differences for overall ISAS (F= .506, P= .732 > 0.05) and its subscales "Information Resources Usage Anxiety" (F= .782, P= .537 > 0.05), "ICT Anxiety" (F= 1.078, P= .367 > 0.05), "Library Anxiety" (F= .512,

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P= .727 > 0.05), "Search Anxiety" (F= .905, P= .461 > 0.05), "Mechanical Anxiety" (F= .783, P= .537 > 0.05), "Thematical Anxiety" (F= 1.119, P= .348 > 0.05).

English language competency and information seeking anxiety

The results of one-way ANOVA also no statistically significant mean differences for overall ISAS (F= .486, P= .746 > 0.05) and its subscales "Information Resources Usage Anxiety" (F= .506, P= .732 > 0.05), "ICT Anxiety" (F= .518, P= .722 > 0.05), "Library Anxiety" (F= .1.217, P= .304 > 0.05), "Search Anxiety" (F= .804, P= .523 > 0.05), "Mechanical Anxiety" (F= .138, P= .968 > 0.05), and "Thematical Anxiety" (F= .068, P= .992 > 0.05) based on levels of English competency such as high, moderate, and low.

Discussion

This research aimed to measure the level of prevalence of information seeking anxiety among the students of Master in Business Administration at Lahore School of Economics. The overall results of the Information Seeking Anxiety Scale (μ=3.13, σ .551) showed the presence of anxiety among these students. The results showed that "Information Resources Usage Anxiety" and "Thematical Anxiety" were the most prevalent among business students, followed by "Mechanical Anxiety", "Search Anxiety", "Library Anxiety", and "ICT Anxiety". It appeared that the business students experience anxiety in the initial stage of information seeking while using information resources and formulating focus for their topic of assignments. The reason might be because the participants of this study were novice researchers and do not conduct in-depth research. Therefore, they feel information resource usage anxiety and thematical anxiety more than other factors of ISAS. These results appeared to be in line with that of Naveed and Ameen (2017b) who also found that dimensions of 'thematic anxiety' and 'resource anxiety' as the most prevalent among postgraduate students at University of the Punjab, Lahore. This was followed by 'mechanical anxiety', 'ICT anxiety', 'search anxiety' and 'library anxiety'. However, these results partially disagree with that of Erfanmanesh, Abrizah, and Karim (2014a, 2014b) who reported 'library barriers' and 'information resource barriers' as the most prevalent dimensions, followed by 'computer and internet barriers' and 'barriers associated with topic identification' among postgraduate students in Malaysia.

The findings of the present study indicate that most of the participants (n=178, 62.9%) faced a 'mild' level of anxiety while they were seeking information while 71(25.1%) students experienced a 'moderate' level of anxiety. Thirty (10.6%) respondents faced a 'Low' level of anxiety. Only three (1.1%) respondents experienced 'no' anxiety and only one (0.4%) felt 'severe' anxiety. However, it is very important to note that a large majority of these students faced 'Mild' anxiety for the overall ISAS. The Information Seeking Anxiety means score was 3.13 and the standard deviation value was .551 (Table 1). The overall results of this study indicate that students did not feel comfortable while they were using information sources during the information-seeking process. However, a very small number of participants faced a low level of anxiety during the information-seeking process. It is a very alarming situation that might affect the academic performance of these students. These results were consistent with that of Erfanmanesh, Abrizah, and Harun (2014a) and Naveed and Ameen (2017b) who also reported that a large majority of the postgraduate students experience information seeking anxiety from mild to moderate levels. One the other hand, these findings were also supported by the results of Naveed and Mahmood (2019) who found that the business students at University of Management and Technology, Lahore lacked confidence for advanced levels of information competencies.

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This study found that there was no significant relationship between nature of MBA program, gender, school background, geographical background, ICT skills, English language competency, and Information Seeking Anxiety. No relationship between nature of MBA program and information seeking anxiety was quite surprising and unexpected. The reason for this surprise was due to the fact that MBA-1 was a two-year program that enrolled fresh students whereas MBA-2 is a one-year program that enrolled students who are working professionals from the market. There was an expectation that these professionals might had low levels of anxiety as compared to fresh students but it was not the case. However, it is important to raise question whether or not these professionals face information seeking anxiety at workplace. Future investigations needed to assess information seeking anxiety in the workplace environment. These results appeared to disagree with that of Erfanmanesh, Abrizah, and Karim (2014b) and Erfanmanesh (2016) who reported the relationship of students' age, gender, levels of study, and library usage frequency with information seeking anxiety. These results are also not in line with the study of Naveed and Ameen (2017b) reported such relationships of students' age, gender, faculty, study program, study stage, computer proficiency, and research experience with information-seeking anxiety. These findings also contradict the results of Rahimi and Bayat (2015) who found gender differences in the index of information seeking anxiety and Primary English Test (PET).

No relationship of ICTs skills and English language proficiency with information-seeking anxiety was not anticipated which meant that proficiency of ICTs and English language might not be the predictor of low or no information seeking anxiety. The result regarding no correlation between ICTs skills and information seeking anxiety was consistent with that of Van Kempan (2004) who reported no correlation between computer anxiety and library anxiety indicating that technology might not be the reason for lower levels of anxiety. However, this appeared to disagree with that of Erfanmanesh, Abrizah, and Karim (2014b) and Naveed and Ameen (2017b) who reported that the proficiency of information and communication technology was the predictor of information seeking anxiety. The finding concerning no relationship of English language competence and information seeking anxiety was also not consistent with that of Rahimi and Bayat (2015) who reported that the proficiency of students with English reading was a stronger element in reducing information seeking anxiety.

Conclusion

These results indicate that these students faced anxiety in the discourse of information-seeking that might leave a negative impact on their academic performances and quality of their research projects. If the university students navigate anxiety with digital information landscape rather than confidently, they might develop their research projects in the absence of credible information. The performance of research students' can be compromised if they fail to take right and timely decisions due to their low self-efficacy while seeking information. These results have greater implications for the future directions for information literacy as creating awareness and building capacity for skills about the information search process will help in reducing students' anxiety. Therefore, strategic and campus wide information literacy program is recommended to build capacity of university students for seeking information in the digital information environment. These results are not only helpful for professionals from quality enhancement cells for improving the quality of academic programs but also information professionals in planning a need-based information literacy program for university students. The library staff should also create awareness about information seeking anxiety among students as it would help them to manage their anxieties in the process of information seeking. These results would also be useful for

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library help desk staff for counseling of anxious students to reduce their information seeking anxiety.

The results of this research can also guide information professionals working in university libraries especially those engaged in information services to develop a need-based curriculum of information literacy which would ultimately help in the alleviation of anxiety and combating its effects on students' academic performance. Such programs can provide the right directions about how to find credible information efficiently and effectively that would ultimately build confidence and alleviate anxiety in the process of information seeking. The present study can attract the attention of other researchers to conduct more detailed research in this area as limited studies appeared addressing information seeking anxiety. It is hoped that this study contributed to the existing literature on information seeking anxiety in general and of business in particular as it the first study who studies business students as unit of analysis. In limitations, the results cannot be generalized for all business students of Pakistan or abroad as this study focused on the business students of a single university at Lahore.

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