Use of Multidimensional Library Anxiety Scale on Education and Psychology Students in Iran

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Introduction

Scientific and educational environments may give students the experience of an anxiety called “academic anxiety,” which may be different for different people. The library is one of frequently named sources of anxiety in students.

Most users making use of library services encounter different levels of undesirable feelings of fear, tension, and anxiety. Coming across the library building, the presence of modern technology in contemporary libraries, the enormous bulk of information resources, lack of necessary skills for library research as well as the difficulties to interact with librarians can bring out unwillingness to use libraries (Jiao and Onwuegbuzie, 1997). Such negative feelings are known as “library anxiety.” Library anxiety can be defined as “the fear and negative feelings when using library, making ready for use and even when thinking about use of library” (Mellon, 1986). In other words, library anxiety consists of any negative emotional symptoms such as fear, worry, uncertainty, perceiving lack of ability and efficiency, sense of loneliness, consternation, and etc. This phenomenon is a common thing among library users and has been the subject of a variety of studies.

Anxiety has always been known as a psychological barrier for library users, has caused different cognitive, emotional, and behavioral effects in users, and has had an impact on their performance. Library anxiety will lead users, when presenting at the library, to not feeling ease and comfort and consequently leaving the library before ending their research or feeling less interest in making use of library (Higgins 2001). Jiao and Onwuegbuzie state that students with higher library anxiety lose their interest in use of the library 2.5 times more than other students (Clivland 2004). They also argue that 95% of students, due to library anxiety, delay doing their library research. Such anxiety can have a negative affect on the quantity and quality of users’ library research (Van Kampen, 2003).

Although users of all kinds of libraries may encounter library anxiety, it has been studied more in scientific settings and among academic library users (Jiao and Onwuegbuzie, 1998). This study investigates aspects of library anxiety among college and university students of School of Education and Psychology, Shiraz.
**Literature Review**

Library anxiety has been the target of researches in a number of countries, but only a few studies have been done in Iran. A brief review of the most remarkable researches on library anxiety among the students of higher education levels will be offered. Jiao and Onwuegbuzie are key researchers on the matter, and much of the research reviewed here refers to them.

Match and Bruex (1995) studied college and university students to investigate library anxiety and to know whether it differs from the in-situation anxiety commonly experienced by every one at special situations or not. Their findings approved the difference between library anxiety and in-situation anxiety. They also reported the negative correlation between the self-confidence of students and their anxiety.

Onwuegbuzie (1997) conducted a study to investigate the relation between library anxiety and the quality of research projects done by college and university students. He concluded that writing research projects is more difficult for students with higher rates of library anxiety.

Jiao and Onwuegbuzie (1997) assessed the correlation between individual attributes of college and university students and their sense of library anxiety. It was revealed that the students with the highest level of library anxiety have the following attributes: male, young (18-29 years old), first or second semester student, with a first language other than English.

Investigating the relationship between the learning habits of college and university students and library anxiety, Jiao and Onwuegbuzie (1998) observe that of the 20 items under study, 13 have a relationship with at least one factor of the five-dimension library anxiety factors (Bostic Scale of Library Anxiety). Environmental temperature and noises, time of study, and the amount of movement while learning were some of the habits showing significant correlation with library anxiety.

Assessment of the relationship between perfectionism and library anxiety of college and university students was another study done by Jiao and Onwuegbuzie (1998) through which they found a significant correlation between perfectionism and library anxiety in students.

Jiao and Onwuegbuzie (1999) conducted another project investigating the relation between library anxiety and the personal perceptions of college and university students and concluded that four aspects out of the seven-dimensions of personal perception are related to two of the stress-generating factors consisting of emotional problems and lack of comfort in the library. Consequently, the students with negative self-perceptions are more encountered with library anxiety than other.

Bin Omran (2001) studied the students of Petersburg University to investigate the relation between library anxiety and Internet anxiety. He reported the presence of different levels of library and Internet anxieties in students and found significant correlation between the two kinds of anxieties.

Jiao and Onwuegbuzie (2001) investigated the relationship between study habits of M.A. students such as notetaking skills and time management with library anxiety. Students with lower levels of study skills experience more library anxiety.

Jiao and Onwuegbuzie (2002) studied the relationship between social dependence and library anxiety in college and university students and found that those students with a better collective attitude will encounter lower library anxiety. These researchers believe that improving collaborative and collective interests in students and encouraging them in group activities can be effective in reducing library
Jiao and Onwuegbuzie (2004) investigated the relation between M.A. students’ attitude towards computers and the extent of library anxiety. This research found a significant correlation between negative attitudes towards computers and their library anxiety.

Jiao and Onwuegbuzie (2004) investigated the relation between the gender of college and university students and their library anxiety and found that gender can also affect library anxiety. These same researchers (Jiao and Onwuegbuzie 2006) found that gender is a predictor of library anxiety.

Kovun, Onwuegbuzie, and Alexander (2007) assessed the relationship between critical thinking and library anxiety in college and university students. The results of this study show that students with low critical thinking will experience more sense of library anxiety. They stated that teaching critical thinking could result in reducing library anxiety in students.

Jiao and Onwuegbuzie (2008) after investigating the relationship between library anxiety in Ph.D. students of Educational Sciences and their errors in creating citations found a significant correlation between these two variables. They stated that students with more library anxiety will make more mistakes in citations on their thesis.

**Research Objectives**

This study aims to investigate different aspects of library anxiety among M.A. students of Education and Psychology in Shiraz University. To this end, the study follows undergoing sub-objectives:

1. Assessment of the extent of library anxiety in students
2. Investigating library anxiety among all students of different majors of the college
3. Investigation of library anxiety based on gender
4. Assessment of the library anxiety in students in different semesters
5. To compare the anxieties of students in eight aspects: access to resources, access to services, information search process, mechanical equipments, use of library, library literacy, staff, and the library building.

**Research Questions**

1. What is the extent of library anxiety among the M.A. students of the School of Education and Psychology?
2. Is there any significant correlation between library anxieties of the students of different majors?
3. Is there any significant correlation between library anxieties of male and female students?
4. Is there any significant correlation between library anxieties of students at different educational semesters?
5. Which of the eight aspects (access to resources, access to services, information search process, mechanical equipments, use of library, library literacy, staff, and library building) results in the highest mean of anxiety?

**Methodology**

This research uses a survey, and the population consists of the M.A. students of
School of Education and Psychology, Shiraz University. According to the statistics issued by the college, the number of students in those majors was more than 180 during 2009-2010. One hundred twenty-three students were selected based on the Kerjesi and Morgan number of sample table. The classified random sampling method was used to disseminate questionnaires among the students. The tool for data collection is the questionnaire applied by Van Kampen (2003). The questionnaire consisted of 57 statements scored between 1-5 (complete agreement, agreement, no comment, disagreement, and complete disagreement). The statements are described in detail through the following table.

Table 1. Sub-scales and related questions of LA questionare

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sub-scales</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Anxiety</td>
<td>Access to Resources</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td>Access to Services</td>
<td>9-13</td>
</tr>
<tr>
<td></td>
<td>Information Search Process</td>
<td>14-23</td>
</tr>
<tr>
<td></td>
<td>Mechanical Equipments</td>
<td>24-31</td>
</tr>
<tr>
<td></td>
<td>Use of Library</td>
<td>32-39</td>
</tr>
<tr>
<td></td>
<td>Library Literacy</td>
<td>40-45</td>
</tr>
<tr>
<td></td>
<td>Staff</td>
<td>46-51</td>
</tr>
<tr>
<td></td>
<td>Library Building</td>
<td>52-57</td>
</tr>
</tbody>
</table>

In order to assess the validity of the questionnaire, the factor analysis method was used in which the correlation coefficient of the statements of each sub-scale was calculated with its total score. The results showed high validity of the questionnaire statements. Questions numbered 8 (the sub-scale of access to resources), 2 (sub-scale of use of library), 1 (sub-scale of library literary), 5 & 6 (sub-scale of library building) respectively with 0.16, 0.11, 0.03, 0.05, and 0.06 showed low correlation with the total score of the sub-scale and therefore were omitted from the collection of questions related to the scale of library anxiety.

The test-retest method was used to calculate the external reliability of the library anxiety scale. After the first group of questionnaires was disseminated among 30 numbers of the students, the questionnaire was redelivered, two weeks later, to these 30 students. The results of external reliability represent the high external reliability for library anxiety scale. In addition to descriptive statistics, perceptive statistics (independent T-tests, ANOVA test, Repeated measures ANOVA) was used for data analysis. The 16 version of SPSS software did the tests and analysis.

**Analysis of Findings**

Question 1: How is the extent of library anxiety among the M.A. students of the School of Education and Psychology?

Mean and standard deviation of the scale were calculated to identify the extent of library anxiety among M.A. students. The results show that 61% of M.A. students...
of the college convey an average level of library anxiety, 21% experience library anxiety lower than the average level and 18% suffer from the library anxiety more than the average degree (Table 2).

**Table 2. The level of library anxiety among students**

<table>
<thead>
<tr>
<th>Level of anxiety Scale</th>
<th>Indices</th>
<th>Value</th>
<th>Lower than the average</th>
<th>Average</th>
<th>More than the average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Anxiety</td>
<td>M</td>
<td>21.82</td>
<td>21%</td>
<td>61%</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>4.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Furthermore, the extent of library anxiety in students was calculated at different aspects of anxiety on the basis of which most of students experience an average level of anxiety at all aspects (Table 3).

**Table 3. The level of library anxiety among students**

<table>
<thead>
<tr>
<th>Level of anxiety Scale</th>
<th>Indices</th>
<th>Value</th>
<th>Lower than the average</th>
<th>Average</th>
<th>More than the average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Resources</td>
<td>M</td>
<td>2.83</td>
<td>17.9%</td>
<td>65.1%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Services</td>
<td>M</td>
<td>3.04</td>
<td>24.4%</td>
<td>64.2%</td>
<td>11.4%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Search Process</td>
<td>M</td>
<td>2.63</td>
<td>11.4%</td>
<td>75.6%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Equipments</td>
<td>M</td>
<td>2.57</td>
<td>24.4%</td>
<td>62.6%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Library</td>
<td>M</td>
<td>2.67</td>
<td>11.4%</td>
<td>74%</td>
<td>14.6%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Literacy</td>
<td>M</td>
<td>2.95</td>
<td>17%</td>
<td>68%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>M</td>
<td>2.54</td>
<td>19%</td>
<td>68%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Question 2: Is there any significant correlations between library anxieties of the students of different majors?

In order to provide an answer to question 2, the ANOVA test was used. The result of ANOVA indicated that there is a significant correlation in all aspects of the library anxiety among the extent of anxieties in students of different majors (Sig.=0.001). Making a comparison on the mean of library anxiety of students of all majors showed that the students of library and Information Sciences are suffering from the lowest extent of library anxiety in most of aspects. The students of Educational Psychology did also show the lowest sense of anxiety at three aspects of access to resources (Mean=2.21), access to services (Mean=2.59) and library building (Mean=2). The students of Special Education and Physical Education showed the highest level of anxiety in most of aspects.

Generally, the students of Special Education suffer from the highest level of library anxiety. The students of Physical Education and Educational Administration are in second and third place. The lowest extent of library anxiety is felt by students of library and information Sciences (Figure 1).

Figure 1. Level of library anxiety among students in different fields

The significant difference between each major and all other majors was measured when investigating anxiety among students of all majors. The results showed no significant difference between the library anxiety of Library and Information Sciences students and that of the students of Educational Psychology (Sig.=1), Foundations of Education (Sig.=0.79), and Clinical Psychology (Sig.=0.06); but there was a significant difference between the anxiety of library and information Sciences students and that of the students of Special Education (Sig.=0.001), Physical Education (Sig.=0.001), and Educational Administration (Sig.=0.007). There is also a significant difference between the anxiety of Educational Administration students and the students of Educational Psychology (Sig.=0.004) and Library and Information Sciences (Sig.=0.007). The extent of library anxiety in Special Education students displayed a significant difference with the anxiety of the students of Library and Information Sciences (Sig.=0.001), and Educational Psychology (Sig.=0.001) and it did not present any significant difference with other majors available at the college. The amount of anxiety in Educational Psychology students demonstrates a significant difference with that of the students of Physical Education (Sig.=0.001) and Clinical Psychology (Sig.=0.03). There was no significant difference between the anxiety of Foundations of Education's students and the students of other majors.

Question 3: Is there any significant correlations between library anxieties of male and female students?

T-tests showed that male students, in general, encounter higher levels of anxiety than females (Table 4). Comparing the level of anxiety in both groups at different aspects of library anxiety also demonstrates no significant correlation between males' and females' anxiety through the three dimensions of access to resources (Sig.=0.08), library literacy (Sig.=0.35) and library building (Sig.=0.53).

<table>
<thead>
<tr>
<th>Sub-scale</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Of</th>
<th>T value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Anxiety</td>
<td>Male</td>
<td>79</td>
<td>2.1</td>
<td>3.98</td>
<td>121</td>
<td>2.71</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Table 4. The results of T-test related to comparing males and females
Question 4: Is there any significant correlations between library anxieties of students at different educational semesters?

The results of ANOVA test represent a significant correlation between the extents of anxiety in the college and university students at different semesters. Comparing the mean of anxiety in the students of different education semesters shows that the students of the second semester have experienced most amount of library anxiety. The students of 3rd semester have shown the lowest anxiety among all students (Table 5).

Table 5. The average of library anxiety among students in different semesters

<table>
<thead>
<tr>
<th>Sub-scale</th>
<th>Semesters</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Anxiety</td>
<td>First</td>
<td>52</td>
<td>22.06</td>
<td>4.04</td>
</tr>
<tr>
<td></td>
<td>Second</td>
<td>41</td>
<td>23.63</td>
<td>3.35</td>
</tr>
<tr>
<td></td>
<td>Third</td>
<td>30</td>
<td>18.91</td>
<td>3.35</td>
</tr>
</tbody>
</table>

Question 5: At which of the 8 aspects of access to resources, access to services, information search process, mechanical equipments, use of library, library literacy, staff, and library building do the students show the highest mean of anxiety?

Making a comparison amongst the mean of different aspects of anxiety illustrates that the anxiety of access to servicers comes to the highest mean. After that, the anxieties of library literacy and access to resources respectively show the highest levels of mean scores. Among the investigated aspects, library building gives the lowest amount of anxiety. The results of repeated measures ANOVA showed a significant difference among the means of different aspects of library anxiety (significant level = 0.001) (Table 6).

Table 6. The results of repeated measures ANOVA test

<table>
<thead>
<tr>
<th>Sub-scales</th>
<th>.N</th>
<th>Mean</th>
<th>Sum of Squares</th>
<th>df2M</th>
<th>F value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Resources</td>
<td>123</td>
<td>3.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Services</td>
<td>123</td>
<td>2.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Search Process</td>
<td>123</td>
<td>2.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Equipments</td>
<td>123</td>
<td>2.67</td>
<td>28.1</td>
<td>7</td>
<td>4.01</td>
<td>18.58</td>
</tr>
<tr>
<td>Use of Library</td>
<td>123</td>
<td>2.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Literacy</td>
<td>123</td>
<td>2.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>123</td>
<td>2.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Building</td>
<td>123</td>
<td>2.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion, Conclusion, and Suggestions

This study investigates the library anxiety in the M.A. students of Education and Psychology school, Shiraz University. The findings show the presence of library anxiety in most students, to the extent that 79% encounter an average to high level. As these students need to meet library and its services for subject selection, information acquisition, literature review needed for thesis and doing homework, library anxiety could negatively affect the educational performance of the students. Since the factors such as access to services, library literacy, and access to resources trace the most effects on library anxiety in students, putting emphasis on teaching library resources and services, library literacy skills, and information literacy to college and university students could likely decrease sense of library anxiety in such students. Mohondro (1999) and Battle (2004) have also emphasized the effectiveness of teaching library skills on descending library anxiety. As the students of first and second semesters at M.A. level have experienced the most range of library anxiety, providing teaching careers on necessary skills becomes to a high amount of importance to them. Although these students may have experienced use of academic library at Bachelor level, they have never perceived the necessity to use library resources and services until now. Such a conclusion has also been reported by previous research (Jiao and Onwuegbuzie, 1997; Bin Omran, 2001; Kuhreman, 2002).

Use of mechanical equipment in libraries is also another stress-generating factor considering in this study which it was reported to cause the library anxiety extended to the more than average level in 13% of students. Lately increase in use of computer, printer, scanner, and other day life mechanical equipments seems contribute to getting familiarity and appropriate skills in students and decrease the anxiety generated from this perspective. Designing his scale of library anxiety, Bostic (1992) considered interaction with computer in libraries as one of the most important stress-generating factors.

Anxiety about the library building has the lowest mean among the eight investigated factors, but providing facilities such as transfer services, places to relax and eat, and considering environmental factors such as color, light, temperature, appropriate use of pictures, maps, signs, and instructions suggested in previous research, could help handle the matter (Bin Omran, 2001; Van Kampen, 2003).

Interaction with library staff was not a significant source of anxiety. Such a result differs from the findings of most previous studies representing interaction between user and librarians as one of the most remarkable stress-generating factors (Jiao and Onwuegbuzie, 1997; Cliveland, 2004).

In general, being familiar with the concept of library anxiety and the attributes of users, academic librarians need to employ an appropriate procedure to play a positive role in reducing such anxieties by going to the user's assistance. Mellon (1986) argues that being friendly and treating all users as equals, regardless of gender, religion, abilities, and other attributes, could help decrease anxiety in users. Also, trying not to use the specific library terms when helping users may be useful in increasing self-confidence and decreasing anxieties.

Investigating the extent of library anxiety in the students of different majors showed that the students of library and information sciences suffer from the lowest extent of anxiety; such a result could be foreseen due to the nature of this major, familiarity of its students with library, library skills, and high use of library resources and services. Bin Omran (2001) and Kuhraman (2002) came also to this conclusion. On the other hand, the students of Special Education and Physical Education have encountered highest levels of library anxiety which requires more attention from professors and administrators of the college and library to provide facilities for descending anxieties of these students of these two majors.
Comparing library anxiety in male and female students shows a significant
difference in the five aspects of the eight factors in library anxiety. Male students
generally in encountered higher rates of library anxiety. Previous studies report
either equivalent levels of library anxiety at both groups (Match and Bruex, 1995;
Kuhreman, 2002) or a bit more anxiety in males (Jiao and Onwuegbuzie, 1997 &
1998; Bin Omran, 2001). The reason for the significant difference revealed in this
study needs more research to understand

Since most of the students under this study were not familiar with the concept of
library anxiety, making users aware of the concept of this common phenomenon
and its different aspects will end in that users do not find themselves left behind
and alone through such a feeling. Regarding this point, Kuhran (2002) states that
providing students with pamphlets and broachers on library anxiety could be
effective to handle such scientific anxieties.

Along with the efforts made from librarians in acquisition, organization, and
dissemination of information and resources, investigating emotional and
psychological barriers in use of library, access to information resources, and
carrying out library researches could also be useful in better provision of services
and making more effective use of libraries by users. Since little research on library
anxiety in Iran has been conducted, planning for more studies to assess the level
and extent of library anxiety in users in view of their personality attributes, and
environmental properties of libraries, identifying the main causes of such a feeling
and making efforts to overcome it could be a useful pace taken for making
effective use of library resources and services by users in Iran.

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