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Relationship between Library Anxiety and Attitudes toward Computer based on an Integrated Model of ATC and BELCAT of Public Libraries' Users

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Abstract

Purpose: the present study evaluated the relationship between library anxiety and attitude toward computer based on as integrated model of ATC and BELCAT of public libraries' user.

Methodology: the study was conducted using the analytic survey. A sample of 370 participants was randomly selected out of 10757 users of public libraries in Dezful city, Khouzestan, Iran. To collect data for library anxiety, Bostick questionnaire and for computer attitude a questionnaire based on ATC and BELCAT models were used.

Findings: the results showed that the most important factor of distress based on the scale of Bostick was"the comfort with library (mean = 4.41) regarding the attitudes towards computer components of "computer appreciation" (mean ranks = 6.95) was reported as the most important factor. In addition, users' library anxiety and attitudes toward computer in terms of age and educational level were examined using one-way ANOVA; and Gender was also tested using the independent t-test, but no significant statistical difference was observed among these factors. The results indicated a significant relationship between library anxiety and user's attitude toward computer ($r=0.157$) ($p< 0.01$). Also, it was found that attitudes toward computer can serve as an indicator of library anxiety.

Keywords: Library Anxiety; Attitudes toward Computer; Computer Attitude model of ATC; Computer attitude model of BELCAT; Public libraries users.

Introduction and the statement of problem

Members' inability to use library is considered as one of the principal challenges of library managers. Since libraries as institutions that use public or parent organization funds are judged by their chief managers, non-use or less use of library resources and services can be considered as a waste of funds. Library anxiety is one of the main reasons of the inability of users in the optimum use of library resources and services. Derven (2004, p. 25) believes that the use of library is possible if the user is located in a position that can easily focus his/her mind on the research. If libraries did not create this situation for the users, there would be no more result than confusion and waste of time and it would finally lead to the context of providing the situation for library anxiety among users. In other words, member's use of libraries is efficient in case those libraries provide the appropriate condition in addition to peace and psychological and mental securities for the members at the maximum level. Library anxiety is the feeling of being uncomfortable and in a breathtaking or exciting mood that is experienced in library and has behavioral, psychological, emotional and cognitive effects (Khadivi, 2003; p. 113). It also consists of space and time limitations and is a type of anxiety based on mood and position (Speilberger and Anton, 1976). Members who are experiencing high levels of library anxiety consider library a negative experience. Thus, they may not seek help from librarians, or simply

ignore signs and guides (Keefer, 1993).They may experience more interactive reactions during different stages of search (Mellon, 2004; p. 164).

In addition to library anxiety dimensions originated from interactions with librarians, emotional factors, uncomfortable feeling in library, lack of library skills and mechanical factors, the entry of computer technology into the field of social activities caused different attitudes and behaviors from members toward this technology. This technology creates new challenges to the field of library. Sophisticated information storage and retrieval tools and transformations resulting from information and communication technologies create difficulties and new complexities in the use of library systems while facilitating process to access the information resources. These difficulties accompanied by various other factors can affect the quantity and quality of the library services (Hariri and Lafmajani, 2009; p. 39). Yushau (2006, p.2) with reference to other research findings (Gressard & Loyd, 1986; Smith & Kotrlik, 1990; Woodrow, 1991; Fletcher & Deeds, 1994) suggests that computer anxiety, mistrust and discontent can affect computer acceptance and appliance as a teaching or learning tool. Because of the interconnecting of information and communication technology and library activities, this study aimed to determine the level of library anxiety of the members, explaining the attitude of the members toward computer with respect to the components of ATC and BELCAT models, examining library anxiety by considering such elements as age, gender and educational level of members, and, evaluating computer attitude of members regarding the features of age, gender and educational level of members. Then, the main problem of this study was defined as: is there a relationship between library anxiety and computer technology attitude based on as integrated model of ATC and BELCAT of public libraries' user?

Computer Attitude Models

Attitudes toward computers reflect the affective or evaluative reactions of individuals toward the use of computers on a favorable - unfavorable continuum (Parasuraman and Igbaria, 1990). The significance of attitudes derives from the proposition of attitude theorists (e.g. Fishbein and Ajzen, 1975, 1980) that an individual's attitude toward an object plays an important role in influencing their subsequent actual behavior. In particular, Fishbein and Ajzen (1975) describe attitudes as a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to an object. Since computer usage has become a way of life, researchers have been concerned about the factors that influenced individual attitudes toward computers and the relationships between these factors (Siann et al., 1990). Gardner et al. (1993) indicated that an individual's attitude toward computers has not only been an important topic in schools but also in the workplace. According to Gressard and Loyd (1987) "the success of computer instruction and/or computer based projects can be largely dependent upon the attitudes toward computers of its participants-both teachers and students". Woodrow (1991) also cited research indicating that "attitudes toward computers are thought to influence not only the acceptance of computers, but also future behaviors, such as using a computer as a professional tool or introducing computer applications into the classroom".

A review of relevant studies can reveal a wide range of scales and computer attitude dimensions and assessments concerned with computer. The attitude toward computers scale (ATC) developed by Raub (1981) as a model to measure attitudes towards computers. It consists of 25 semantic differentials-type items ranging from strongly agree to strongly disagree; and it measures computer usage, computer appreciation, and societal impact.) After numerous studies, Raub defined the computer usage anxiety, lack of appreciation for computers, and anxiety concerning the negative impact of computers as constructs of the computer anxiety. The Blomberg-Erikson-Lowery Computer Attitude Task (BELCAT, Erickson, 1987) also is the composite of the Computer Anxiety Index (CAIN), Computer Attitude Scale (CAS) and ATC scales. The BELCAT is a Likert- type-self –report measure of attitudes toward learning about computers and toward computers themselves based on Fennema and Sherman's Mathematics Attitude Scales (Fennema and Sherman, 1977). BELCAT is the 36-item instrument that consists of a five-point Semantic differential-type scale with five subscales: Computer Liking, Comfort with Computer, Usefulness of Computers, Attitude towards Success with Computers, and Computers as a Male Domain (Richardson, Nash and Flora, 2014); and assesses attitudes toward learning about computers and towards computers themselves (Pass, 2005). Erickson (1987) used the subscales of the BELCAT in a theoretical scheme that was based on a model of achievement developed by Eccles (1982). The model predicted an index of choice to study and use computers by students. Findings of Erickson's study (1987) showed that an index of value of computers was the best predictor of the index of choice to study and use computers.

Literature review

A vast majority of studies were conducted separately in the field of library anxiety and computer attitude previously and their findings are worthy of attention. To illustrate the effects of library anxiety and attitudes towards computer reviewing previous research findings can provide better insights into this significant issue. A review of literature in the field of library anxiety in different contexts shows that there is no significant difference between male and female students and also the individuals who didn't use library before entering university (Jokar & Taherian, 2008). The mean of library anxiety in all subscales of the employees' barriers, emotional obstacles, library knowledge, library convenience and mechanical obstacles were in high ranges of moderate level regarding the level of anxiety and no significant difference in library anxiety in terms of education level and stage was observed. Moreover, in subscales of mechanical obstacles, males revealed significantly higher library anxiety compared to females (Hariri & Lafmajani, 2009). Factors of library and information skill, familiarity with the concept of library anxiety, positive interactions with librarians, teachers and instructors' collaboration with students and librarians, providing positive experience for library members to control and reduce library anxiety are proposed. And as the nature of libraries and interaction with librarians can cause distress for the students, lack of familiarity with researching skills and information-seeking processes can also increase students' anxiety when doing library researches. Moreover, members with idealistic attitude while confronting the feeling of anxiety are very sensitive and

fragile and will experience higher levels of anxiety if they are faced with a problem in the process of searching for information and doing library researchers (Erfanmanesh & Basirian, 2011). Writing research proposal for students with higher levels of anxiety is difficult (Onwuegbuzie, 1997). There was a significant relationship between idealistic attitude and library anxiety among students (Jiao &Onwuegbuzie, 1998). Student with lower study skills level showed greater library anxiety (Jiao &Onwuegbuzie, 2001). A strong and multivariable relationship between library anxiety and computer attitude (Jiao & Onwuegbuzie, 2004a) was reported. Regarding the students' age, the highest level of library anxiety belonged to the age ranges from20 to 22 years (Khadivi et al. , 2007) and the fact that gender can influence library anxiety suggests that gender can be considered as a n important factor for library anxiety (Jiao & Onwuegbuzie, 2004b). Student with lower critical thinking level have higher library anxiety. In addition, teaching ways and strategies for critical thinking can play a significant role in reduction of library anxiety among students (Kwon et al., 2007). The results of Gross and Latham (2007) study on the examination of the relationship between information skill level and library anxiety indicated a weak negative correlation between library anxiety scores and information literacy test scores and the reduction of library anxiety. In another study, Jiao and Onwuegbuzie (2008) investigated the relationship between library anxiety of PhD students in Educational Science and their error rate compared with citations. Findings showed a significant relationship between these two variables. In other words, students with higher anxiety levels had more errors in citations of their thesis. The findings of another study aimed to investigate students attitudes towards the use of computer in Slovakia showed that attitudes towards computer is positive and their internet usage at home and school are different. Individuals with internet access use their computers to check emails and individuals with no internet access use their computers to play games (Fančovičová & Prokop, 2008). Findings of Korobili et al. (2010) research also revealed that students with more English and computer knowledge have less computer anxiety and as a result, they showed positive attitude towards computers. The results of Abusin and Zainab (2010) study on the examination of library anxiety among Sudanese students showed that 88.2% of the students had anxiety and stress resulting from doing research as their first experience in library of their university. On the other hand, research findings related to attitudes toward computer are worthy of note. Khadivi et al. (2005) found that there is no significant difference between male/female and single/married students' attitudes towards computer. However, a significant relationship between age, home computer use and the experience of using computer and attitudes towards computer was declared. Moreover, no relationship between occupation and education, and attitudes towards computers was revealed. Additionally, in another study, they found that there is a significant difference between familiarity with electronic resources and familiarity with computer regarding gender. Familiarity with computers indicated a significant relationship with electronic resources anxiety and individuals who are not familiar with computers exhibited greater electronic resources anxiety (Khadivi et al., 2007).

Methodology

This study was an analytical survey and the population consisted of public libraries' members in Dezful including 4644 male and 6113 females (total=10757). 370 subjects were randomly selected as the of the study sample using Krejcie and Morgan Table (1970). The data collection instrument included two questionnaires of Bostick library anxiety (1992) and computer attitude of ATC and BELCAT models accompanied by demographic information questions. Content validity of the questionnaires was assessed by sending the questionnaires to a number of scholars in the field of information and knowledge science and their corrections and ideas were performed in two stages. In addition, in order to check the questionnaires reliability 30 questionnaires were randomly distributed among the members of public libraries in Ahwaz and after collecting the data using Cronbach alpha coefficient the reliability for library anxiety was 86.0 and the reliability attitudes toward computer was 88.0 coefficient. 300 questionnaires out of the total of distributed questionnaires were collected (return coefficient of 81.08%) and the data were analyzed using SPSS software (version 19).

Research Findings

Question 1: What is the degree the library members' library anxiety regarding the factors originated from interaction with librarians, emotional factors, the feeling of inconvenience in library, lack of library skills and mechanical factors?

Using Bostick scale to determine the extent of library anxiety among members of public libraries in Dezful, the above-mentioned question was proposed and Friedman test was used to test the question. The results are presented in Table 1.

Table 1, Descriptive statistics of Friedman test and variance analysis to examine the library members' anxiety

Library anxiety	Number	Mean	Standard deviation	Mean of ranks	priorities
Comfort with library	300	3.6050	0.70393	4.41	1
Knowledge of the library	300	2.8356	0.61030	3.45	2
Mechanical barriers	300	2.5139	0.68664	2.63	3
Affective barriers	300	2.3878	0.64254	2.41	4
Barriers with staff	300	2.2777	0.60206	2.10	5
Library Anxiety	300	2.5139	0.47853		

The overall mean score of library anxiety among members is 2.5139, as shown in Table 1. According to the proposed levels of library anxiety by Anwar et al. (2004) Table 2 the mean score of 2.5139 drops on the low level of anxiety ranging from 2.22 to 2.65. When looking at the mean score of each dimension of library anxiety, the item affecting library members most is the "comfort with library" (3.6050) that drops on the moderate level of anxiety ranging from 3.55 to 3.98, and the second one is the "knowledge of library" (2.8356). The three other dimensions are "the mechanical barriers" (2.5139), "the affective barriers" (2.3878), and "the barriers with staff" (2.2777) drop on the Mild level of anxiety ranging from 2.22 to 2.65.

Means of ranks for library anxiety of public libraries members in Dezful based on Bostick scale dimension (factors resulting from barriers with staff, affective barriers,comfort with library, knowledge of the library, and mechanical barriers) suggest a significant difference between the means.

Table 2 Library anxiety level of Anwar et al. (2004)

Library Anxiety Level	Anwar et al. (2004)
Mean Score	3.1
No anxiety	0.00-2.21
Low anxiety	2.22-2.65
Mild anxiety	2.66-3.54
Moderate anxiety	3.55-3.98
Severe anxiety	3.99-5

Table 3 Results of Chi-squared test

Number	300
Chi- square	426.864
Degree of freedom	4
Sig.	0.000

In Table 3, the value of the test statistics (Chi- square), the degrees of freedom (df) of the test statistic and the significant level (Sig.) are presented. The results of Friedman test analysis indicates that the Chi-squared test (df =5, X^2=77.214) is significant and the analysis is accepted and verified. As the results of Table3 reveals the highest rank belongs to the comfort with library with a mean rank of 4.41 and the mean rank of knowledge of the library as the second rank (3.45) and after that mechanical barriers (2.63), affective barriers (2.41) and the barriers with staff (2.10) in third to fifth ranks, respectively. Finally, the highest level of anxiety related to the comfort with library and then the dimensions of the knowledge of the library, mechanical barriers and the lowest degree of anxiety related to the barriers with staff.

Question 2: How is the attitude toward computer of the members regarding the components of the integrated models of ATC and BELCAT (computer liking, comfort with computer, computer usage, Attitude toward success with computer, computer as male domain, and societal impact of computer)?

To determine the extent of attitudes toward computer of the members regarding the desired components in the two models (BELCAT and ATC) among public libraries members in Dezful, the above-mentioned question was suggested and Friedman test was performed to answer the question. The obtained results can be viewed in Table 4**.**

Table 4 Descriptive statistics of Friedman test and the results of variance analysis to examine the extent of attitudes towards computer of the members

Computer technology behavior	**Numbers**	**Mean**	**Standard**	**Mean of ranks**	**priorities**

			deviation		
Computer Liking	300	3.1647	0.48555	4.29	5
Comfort with computer	300	2.8660	0.45128	2.80	6
Computer usage and usefulness	300	3.2367	0.45003	4.70	4
Attitude towards success with computer	300	3.4600	0.56018	5.71	2
Computer as a male domain	300	2.7752	0.64438	2.67	7
Computer appreciation	300	3.8429	0.71189	6.95	1
Societal impact of computer	300	3.3800	0.51933	5.33	3

Considering the results of Table 4, it is obvious that there is a significant difference between means regarding the members' attitude towards computer in public libraries in Dezful.

Table 5 Results of Chi-squared test

Number	300
Chi-squared	795.925
Degree of freedom	6
Sig.	0.000

The value of Chi-square test statistics, degree of freedom and the significance level of the test (table 5) are exhibited. The obtained results of Friedman variance analysis indicates that Chi-square test is significant (df=5 and X^2=77.214) and the analysis is accepted and confirmed.

As the results of Table 4 indicates the highest rank is obtained to be the computer appreciation with the mean of 6.95 while the second rank belonged to the attitude toward success with computer with a mean of 5.71. Next factors are the societal impact of computer (mean = 5.33), the computer usage and usefulness (mean = 4.70), computer liking (mean = 4.29), comfort with computer (mean = 2080), and computer as a male domain (mean = 2.67) from third to seventh priorities, respectively. Ultimately, regarding the issue of attitudes towards computer the highest mean related to the computer appreciation and the lowest rank related to computer as a male domain.

Question 3: To what extent is the degree of library anxiety of members regarding the features of age, gender and educational level?

The above-mentioned question was proposed to determine library anxiety regarding the features of age, gender and educational level of the members of public libraries in Dezful. Independent one-way ANOVA was performed to test the data (age and educational level) and independent group's t-test was run on gender factor and the results are shown in Table 6.

Table 6 One-way ANOVA and independent group's t-test for library anxiety examination of members regarding the features of age, gender and educational level

Independent one-way ANOVA						
Feature	**Resources**	**Sum of squares**	**Degree of freedom**	**Mean square**	**F**	**Sig.**

Age	**Between groups**	0.722	4	0.181	1.308	0.267
	Within groups	40.721	295	0.138		
	Total	41.443	299			
Independent groups t-test						
Gender	**Groups**	**Frequency**	**Mean**	**Degree of freedom**	**t**	**Sig.**
	Female	165	2.7103	298	0.483	0.483
	Male	135	2.7407			
Independent one-way ANOVA						
Educational level	**Resources**	**Sum of squares**	**Degree of freedom**	**Mean square**	**F**	**Sig.**
	Between groups	0.285	4	0.071	0.511	0.728
	Within groups	158.41	295	0.140		
	Total	41.443	299			

Regarding the significance level of 0.267 in Table 6, it is concluded that there is no significant relationship between library anxieties in different range of ages of the members. As the significance level of 0.483 in Table 6 reveales no significant relationship is found between library anxieties of the members based on the similarity of genders. Regarding the significant level of 0.728 in Table 6, it is concluded that is no significant relationship between library anxieties among different members with various educational levels.

Question4: How is the attitude toward computer of the members regarding the features of age, gender and educational level?

The above-mentioned question was formulated to determine the features of age, gender and educational level of members in public libraries in Dezful. Independent One-way ANOVA test and independent group's t-test were performed to test the data (age and educational level). The results can be seen in Table 7.

Table7 One-way ANOVA and Independent groups t-test for the members' attitude toward computer in terms of age, gender and educational level.

Independent one-way ANOVA						
Feature	**Resources**	**Sum of squares**	**Degree of freedom**	**Mean square**	**F**	**Sig.**
Age	**Between groups**	0.482	4	0.120	1.167	0.326
	Within groups	30.457	295	0.103		
	Total	30.939	299			
Independent groups t-test						
Gender	**Groups**	**Frequency**	**Mean**	**Degree of**	**t**	**Sig.**

				freedom		
	Female	165	3.2430	298	1.343	0.180
	Male	135	3.1929			
Independent one-way ANOVA						
Educational level	**Resources**	**Sum of squares**	**Degree of freedom**	**Mean square**	**F**	**Sig.**
	Between groups	0.932	4	0.233	2.291	0.060
	Within groups	30.007	295	0.102		
	Total	30.939	299			

Considering the significant level of 0.326 in Table 7, it can be concluded that there is no significant difference between attitudes towards computer among different age ranges of members. As the significant level in Table 7 indicated (0.180), there is no significant difference between attitudes towards computer according to their gender. But regarding the significant level of 0.060 in Table 7, it can be concluded that there is no statistically significant difference between the members' attitudes toward computer among members regarding their educational level.

Research Hypothesis: There is a significant relationship between library anxiety and the members' attitudes toward computer in public libraries in Dezful.

This hypothesis was suggested to examine the relationship between library anxiety and attitudes toward computer and was estimated using Pearson Correlation Coefficient (Table 8).

Table 8 Pearson Correlation Coefficient to examine the relationship between library anxiety and the members' attitudes toward computer

Variables	Library anxiety
Attitudes towards computer	0.157**
	0.000
	300

As the significant level of 0.000 in Table 8indicates, it can be concluded that there is a statistically significant relationship (P< 0.001) between library anxiety and attitudes towards computer of the members. In other words, the researcher claimed that the relationship between library anxiety and attitudes toward computer with confidence level of 0.99 was confirmed. Finally, attitudes towards computer play a predictive role in library anxiety.

On the other hands, the relationship between library anxiety and attitudes toward computer was calculated based on subscales of these two variables (Table 9) and the results showed that the relationship is significant regarding the subscales. The relationship for the obstacle of barriers with staff and computer usage and usefulness (-0.190) in P<0.01. Since the correlation coefficient is a negative value, it is obvious that the relationship is an inverse. Affective barriers as subscales of library anxiety are inversely correlated to subscales of attitudes towards computer

including the societal impact of computer (-0.153), the computer appreciation (-0.172), attitude toward success with computer (-0.135) and computer usage and usefulness (-0.176) with P<0.01. The subscale of comfort with library is positively correlated with the societal impact of computer (0.332), computer appreciation (0.362), attitude toward success with computer (0.311), computer usage and usefulness(0.290), comfort with computers (0.261) and computer liking (0.273) as six components of subscales P<0.01. There was a significant and positive relationship between Knowledge of the Library with the societal impact (0.195) in P<0.01 and mechanical barriers are positively correlated with the computer as a male domain (0.195) in P<0.01. In other words, the existence of relationship between these subscales indicated the predictive role of these subscales of attitudes towards computer for library anxiety.

Table 9the relationship between library anxiety and attitudes towards computer based on subscales using Pearson Correlation Coefficient

Attitude / Anxiety	Societal Impact	Computer Appreciation	Computer as a male domain	Attitude toward success with computer	Computer Usage and Usefulness	Comfort with Computers	Computer Liking
Barriers with staff	-0.026	-0.084	.0210	-0.007	-0.190	0.025	-0.012
	0.649	0.149	0.720	0.898	0.001**	0.666	0.834
Affective barriers	-0.153	-0.172	0.027	-0.135	-0.176	0.090	-0.070
	.008**	0.003**	0.644	0.010**	0.002**	0.120	0.226
Comfort with library	0.332	0.362	0.068	0.311	0.290	0.261	0.273
	0.000**	0.000**	0.243	0.000**	0.000**	0.000**	0.000**
Knowledge of the Library	0.195	0.065	0.083	0.086	0.099	0.039	0.091
	0.001**	0.258	0.152	0.136	0.086	0.501	0.114
Mechanical barriers	0.021	-0.107	0.151	0.082	0.038	0.005	-0.003
	0.722	0.064	0.009**	0.154	0.514	0.927	0.957

Conclusion and Recommendation

Due to the impact of library anxiety on the efficiency of individuals while using library, this issue has long been considered by different researchers and the significance of addressing the issue is to help the library administers' concern regarding library usage difficulties. The rapid development of information and communication technology has changed various fields of information science. For example, strengthening tools for retrieving information has been provided or the concern of accessing the information beyond the limits of time and space is largely absent. But this way, new challenges are created. One of these challenges is the

emergence of new competitors for the libraries by taking greater advantage of technological possibilities. Nowadays, one of the most important concerns of public libraries administers in Iran is the reducing number of library members. On one hand, this may be rooted in members' use of other information search tools, and on the other hand, the internal functions of libraries can be concentrated that a part of it is defined in library anxiety. Many areas of library are influenced by computer technology and perhaps accepting the changes in the scope of library, the members, their abilities and attitudes toward computer have been neglected. Thus, the members' attitudes toward computer need to be taken into consideration. Hence, in this study the relationship between library anxiety and attitudes toward computer among public libraries' members in Dezful (Iran) was investigated. Nevertheless, the findings can be utilized by administers in improving the relationship between libraries and their members and the endeavors can be conducted to resolve the obstacles. Considering the individuals and members attitudes toward computer the necessary background for the development of ICT infrastructure in the library and moving from a traditional library to the modern library can be provided. As the results of the present study indicates, the comfort with library (feeling of inconvenience in library) and knowledge of the library (library skills) are the most important factors for members compared with other dimensions and factors. The findings of this research for the comfort with library are compatible with research findings of Erfanmanesh (2011). Moreover, interaction with librarians despite of being considered as an important factor causing anxiety in Erfanmanesh (2011) and Jiao and Onuwegbuzie (2004) studies, it is considered as the ultimate factor and is inconsistent with previous findings. On the other hand, in Tajeddini and Mousavi (2010) research, mechanical barriers were determined as the most important factors in causing anxiety. Consequently, it can be concluded that factors causing anxiety are not in the same order regarding their importance in different libraries and can have different degrees of significance for different members and different libraries. Insecure environment of libraries, having troublesome rules and lack of relaxation in library for useful study and resources usage can be regarded as the root of the feeling of inconvenience for library members. On the other hand, members' inability to use searching and researching tools in library effectively, low information literacy, inability to explain the need for information in addition to finding and utilizing information resources in library can be considered as basic factors causing anxiety. Therefore, as the findings of the study show it is necessary for public libraries to use the required mechanisms to provide the sense of security for the members and troublesome procedures such as membership, borrowing, reservation, late penalties, missing resources, etc. to be facilitated so that library will be presented as a safe and attractive context that members feel satisfied and convinced. Today, due to the widespread use of information and communication technology in libraries following the development and impact of it on all aspects of life, having information literacy provides new opportunities for efficient use of time and resources available to individuals. On the one hand, teaching information literacy for members facilitates the development of information systems in libraries that individuals as user are the important components and how they interact with

information systems is constant concern. Finally, efficient uses of resources can guarantee the continued participation of users.

Other findings show that library anxiety and attitudes toward computer is not influenced by demographic features such as age, gender and educational level. Moreover, no statistically significant difference was found -inother words, the feeling of library anxiety among library members and attitudes toward computer was identical in demographic components level. This can facilitate planning for public libraries administers regarding these features. With respect to this subject, the findings of the study were inconsistent with previous findings. Khadivi et al. (2007) argue that age ranges from 20 to 22 years had the highest level of library anxiety and the studies of Jiao and Onuwegbuzie (2004b) and Hariri and Lafmajani (2009) indicated that gender influence on library anxiety and was considered as a anxiety factor. Analyzing the results pertaining to attitudes toward computer among members revealed that members' attitude among the seventh component (computer liking, comfort with computer, computer usage, Attitude towards success with computer, computer as male domain, and societal impact of computer) was mostly concerned with the computer appreciation. This approach may be influenced by the expansion in the use of this technology in various dimensions including social, educational, economic and cultural interactions as well as home, workplace and other social contexts. The research findings of Ben-Jacob and Liebman (2010) demonstrated that fear of technology (technophobia) is still one of the most prominent factors in non-usage or low-usage of library resources. The low ranks of comfort with computer and computer as a male domain. These two subscales of ATC and BELCAT model are promising for administers and managers in public libraries and indicate that fear of computer and the limitations influencing this factor are not a concern or a challenge anymore. Additionally, the general misconception about computers as a male task has faded away. The results of Pearson Correlation Coefficient shows that there is a statistically significant relationship between library anxiety and attitudes toward computer among library members in public libraries of Dezful with lower means and attitudes toward computer play a predictive role in library anxiety. In this regard, the findings are consistent with the research findings of Jiao and Onwuegbuzie (2004b) and Xie and Bugg (2009) in which the study relationship between library anxiety and attitudes towards computer was validated. However, Jiao and Onwuegbuzie emphasized that their findings based on African American students should not be generalized to other ethnic groups such as the Indo Europeans (which experienced greater library anxiety than African American students regarding the subscales of factors related to the employees and the factors of convenience in library usage). However, the intensity of the relationship in two studies are not identical. Nevertheless, the sample/context of the study cases can be regarded as a research content, the environment individuals experience in two different studies, and even their approach to library use and the obligations arising from the application of computer technology in two various contexts can justify and explain the present correlation. On the other hand, the findings of Xie and Bugg (2009) conducted with an experimental approach indicates that the experimental group experience lower library anxiety after receiving adequate trainings during learning sessions (computer, internet and National

Institute of Health Toolkit (NIHS) and Medline) compared to the pre-test results and it was followed by improvements in their attitudes towards computer. Finally, since public libraries are social widespread institutions that provide access to information for the public and aid to reduce the information gap in the community and the development of democracy, awareness of the effects of library anxiety which can be determined as a deterrent component in library use and attitudes towards computer certainly can help to the influence of information services of libraries. Recognition of distressing factors can lead not only to developing new policies and programs but also to finding of the necessary solutions so that the psychological barriers of members in using libraries are removed. Regarding the members' attitudes toward computer, it play a crucial role in development of modern services such as creation unified information management systems in library, development of web OPEC, portals and services based on social networks, electronic information resources, e-books and e-journals. Therefore, it seems that familiarity with library, virtually or in person, training courses on how to communicate with members and users to enable the employees in public libraries, beauty of library environment, creation of a trustworthy atmosphere between users and library employees, information literacy training courses, computer training courses at different levels may be very influential to get to the desired condition. The findings of this study may not be generalized for university or other particular libraries. It is highly recommended that similar studies in different contexts should be carried out.

References

Abusin, K. A., Zainab, A. N. (2010). Exploring library anxiety among Sudanese university students. *Malaysian Journal of Library & Information Science, 15*(1), 55-81.

Anwar, M. A., Al-Kandari, N. M., & Al-Qallaf, C. L. (2004). Use of Bostick's library anxiety scale on undergraduate biological sciences students of Kuwait University. *Library & Information Science Research, 26*(2), 266-283. doi:10.1016/j.lisr.2004.01.007

Ben-Jacob, M. G., Liebman, J. T. (2010). Technophobia and effective use of library resources at the college/university level. *Journal of Educational Technology Systems, 38*(1), 35-38. doi:10.2190/ET.38.1.d

Bostick, S. L. (1992). *The development and validation of the Library Anxiety Scale.* (PhD dissertation), Wayne State University, Michigan. Retrieved from https://www.researchgate.net/publication/241840650_The_Development_and_Validation_of_a_Library_Anxiety_Scale

Derven, B. (2004). Useful theory for librarianship: Communication, not information. *Drexel Library Quarterly, 13*(3), 16-32.

Eccles, J. (1982). *Sex differences in achievement patterns*. Retrieved from Washington D. C.: http://www.rcgd.isr.umich.edu/garp/articles/ecclesparsons82h.pdf

Erfanmanesh, M. A., & Didgah, F. (2011). Library anxiety challenges of effective use of library services. *Monthly Book of Generalities, 14*(6), 43-54.

Erfanmanesh, M. A., & Basirian Jahromi, R. (2011). Studying the influence of training library skills and providing tours of familiarity with library on library anxiety of the students. *Knowledge Science, 4*(15), 43-52.

Erickson, T. E. (1987). *Sex differences in student attitudes towards computers*. University of California, Berkeley.

Fančovičová, J., Prokop, P. (2008). Students' attitudes toward computer use in Slovakia." *Eurasia Journal of Mathematics, Science & Technology Education, 4*(3), 255–262.

Fennema, E., Sherman, J. (1977). Sex –related differences in mathematics achievement, spatial visualization and affective factors. *American Educational Research Journal, 14*(1), 51-71. doi:10.3102/00028312014001051

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intentions, and behavior. An introduction to theory and research*. Boston: Addison - Wesley.

Fishbein, M., & Ajzen, I. (1980). *Understanding attitudes and predicting social behaviour*. New Jersey: Prentice-Hall. .

Gardner, D. G., Discenza, R., & Dukes, R. L. (1993). The measurement of computer attitudes: An empirical comparison of available scales. *Journal of Educational Computing Research, 9*(4), 487-507. doi:10.2190/DXLM-5J80-FNKH-PP2L

Gressard, C. P., Loyd, & H., B. (1987). An investigation of the effects of math anxiety and sex on computer attitudes. *School Science and Mathematics, 87*(2), 125-135. doi:10.1111/j.1949-8594.1987.tb11684.x

Gross, M., & D., L. (2007). Attaining information literacy: An investigation of the relationship between skill levels, self-estimates of skill, and library anxiety. *Library & Information Science Research, 29*(3), 332-353. doi:10.1016/j.lisr.2007.04.012

Hariri, N., Nemati Lafmajani, S. (2009). Estimating library anxiety the students of Rehabilitation Department of Medical Sciences College of Shiraz University. *Knowledge Science Quarterly 2*(7), 39-52.

Jiao, Q. C., Onwuegbuzie, A. J., & Waytowich, V. L. (2008). The relationship between citation errors and library anxiety: An empirical study of doctoral students in education. *Information Processing and Management, 44*(2), 948-956. doi:10.1016/j.ipm.2007.05.007

Jiao, Q. G., & J., O. A. (2004). The impact of information technology on library anxiety: The role of computer attitudes. *Information Technology and Libraries, 23*(4), 138-142.

Jiao, Q. G., & Onwuegbuzie, A. J. (1998). Understanding library anxious graduate student. *Library Review, 47*(4), 217-224. doi:http://dx.doi.org/10.1108/00242539810212812

Jiao, Q. G., & Onwuegbuzie, A. J. (2001). Library anxiety and characteristics strengths and weakness of graduate student's study habits. *Library Review, 50 (2):73-78*. doi: http://dx.doi.org/10.1108/00242530110381118

Jiao, Q. G., & Onwuegbuzie, A. J. (2002). Dimensions of library anxiety and social interdependence: implications of library services. *Library Review, 51*(2), 71-78. doi:http://dx.doi.org/10.1108/00242530210418837

Jiao, Q. G., Onwuegbuzie, A. J., & Bostick, S. L. (2004). Racial differences in library anxiety among graduate students. *Library Review, 53*(4), 228-235. doi:10.1108/00242530410531857

Jokar, A. R., Taherian, A. S. (2008). Investigation and comparison of the amount of library anxiety Shiraz university educational department students based on the Bostick scale of library anxiety. *Educational and Psychological Researches, 4*(10), 135-159.

Keefer, J. A. (1993). The hungry rates syndrome: library anxiety, information literacy, and the academic reference process. *Reference Quarterly, 32*, 333-339.

Khadivi, S. (2003). Reviewing library anxiety in libraries of universities. *Book Quarterly, 15*(1), 109-114.

Khadivi, S., Abedi, M., & Shabani, A. (2007). Studying library anxiety and electronic resources anxiety among the students in Isfahan University. *Educational and Psychological Studies Quarterly, 8*(3), 115-126.

Korobili, S., Togia, A., & Malliari, A. (2010). Computer anxiety and attitudes among undergraduate students in Greece. *Computers in Human Behavior, 26*(3), 399-405. doi:10.1016/j.chb.2009.11.011

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*, 607-610. doi:10.1177/001316447003000308

Kwon, N., Onwuegbuzie, A. J., Alexander, L. (2007). Critical thinking disposition and library anxiety: Affective domains on the space of information seeking and use in academic libraries. *College and Research Libraries, 68*(3), 268-278. doi:10.5860/crl.68.3.268

Mellon, C. A. (2004). Library Anxiety: a grounded theory and its development. *College and Research, Libraries 47*(2), 160-165. doi:10.5860/crl_47_02_160

Onwuegbuzie, A. J. (1997). Writing a research proposal: The role of anxiety, statistics anxiety, and composition anxiety. *Library & Information Science Research, 19*(1), 5-33. doi:10.1016/S0740-8188(97)90003-7

Parasuraman, S., & Igbaria, M. (1990). An examination of gender differences in the determinants of computer anxiety and attitudes toward microcomputers among managers. . *International Journal of Man-Machine Studies 32*(3), 327-340. doi:10.1016/S0020-7373(08)80006-5

Pass, D. R. (2005). *Effects of professional development initiative on technology innovation in the elementary school.* (Doctoral Dissertation), University of North Florida, Florida State. Retrieved from: http://digitalcommons.unf.edu/cgi/viewcontent.cgi?article=1282&context=etd

Raub, A. C. (1981). *Correlates of computer anxiety in college students.* (PhD. Dissertation), University of Pennsylvania, Pennsylvania. Retrieved from: http://repository.upenn.edu/dissertations/AAI8208027

Richardson, J. W., Nash, J. B., & Flora, K. L. (2014). Unsystematic technology adoption in Cambodia: Students' perceptions of computer and internet use. *International Journal of Education and Development using Information and Communication Technology (IJEDICT), 10*(2), 63-76.

Siann, G. M., H. Glissov, P. Durndell, A. (1990). The effect of computer use on gender differences in attitudes to computers. *Computers in Education, 14*, 183-191. doi:10.1016/0360-1315(90)90058-F

Spielberger, C. D., Anton, W. D., & Bedell, J. (1976). The nature and treatment of test anxiety. In C. D. S. a. M. Zuckerman (Ed.), *Emotions and anxiety: New concept, method and applications, 317-346. Oxford, England: Lawrence Erlbaum.* (pp. 357). New York: Psychology Press.

Tajeddini, O., & Mousavi, A. (2010). Library anxiety: explaining the relationship between library environment and the stress of library users. *Monthly Book of Generalities, 151*, 94-99.

Woodrow, J. E. J. (1991). A comparison of four computer attitude scales. Journal of Educational Computing Research. *Journal of Educational Computing Research, 7*(2), 165-187.

Xie, B., & Bugg, J. M. (2009). Public library computer training for older adults to access high-quality Internet health information. *Library & Information Science Research, 31*(3), 155. doi:http://doi.org/10.1016/j.lisr.2009.03.004

Yushau, B. (2006). Computer attitude, use, experience, software familiarity and perceived pedagogical usefulness: The case of mathematics professors. *Eurasia Journal of Mathematics, Science and Technology Education, 2*(3), 1-17.