The Relationship Between Perceived Size of Library Collection and Library Anxiety Among Undergraduate Students at International Islamic University Malaysia

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Abstract
The purpose of this study was to explore the relationship between library anxiety in a Malaysian academic library setting and the perceived size of library collection of books that may contribute towards increasing or decreasing level of library anxiety. The results of the study established that the phenomenon of library anxiety or the uncomfortable feeling or emotional disposition, experienced in a library setting, with cognitive, affective, and behavioral ramifications exists among undergraduate students. Students who perceived library collection as big experienced more anxiety and less comfort in the library.

Keywords: Library Anxiety, Academic Library, Undergraduate Students, Malaysia.

Introduction
Library anxiety, a psychological barrier to academic success among students hinders the optimal use of library systems, services, and resources by its patrons (Anwar, Kandari & Al-Qalllaf, 2004). It is a form of academic anxiety that is considered one of the most widespread anxiety types as it is experienced by majority of students who are compelled to use the library at some point or other in their program of study (Jiao & Onwuegubzie, 2002). It results in tension, fear, feeling of uncertainty, helplessness, negative self-defeating thoughts and mental disorganisation that hinder effective usage of the library services by students (Shoham & Mizrachi, 2001; Jiao & Onwuegubzie, 1997). In academic libraries, the constant flow of information technology is reported as overwhelming for undergraduate students where many undergraduate students are struggling to cope with the changes brought on by the rapid advances of information technologies (Jiao & Onwuegubzie, 2004). These changes have lead undergraduate students to experience library anxiety or a feeling of discomfort in the library environment that prevents them from making effective use of library resources.

The prevalence of library anxiety among students has been acknowledged and studied for over a decade. In the United States an estimated ninety five percent (95%) of college students engage in frequent academic procrastination because of library anxiety (Onwuegubzie & Jiao, 2000). This anxiety gives rise to insecurity and overwhelms users to the point where they are not able to function effectively in the library. For the vast majority of students, the ability to utilise the library and its resources is crucial to attain and maintain the high level of academic performance (Jiao & Onwuegubzie, 2002). Students need to be able to use the library, to access and to retrieve information. The inability to do so creates the negative attitude towards the academic libraries.

One important variable that may give rise to this anxiety level is the perceived size of library collection of books. According to Majid et al. (2001), the adequacy of collection is one of the important factors that determine the effectiveness of any library in meeting the information needs of its patrons. Satisfying the information needs of students would assume to reduce the level of library anxiety.

The size of library in term of building has been demonstrated in the empirical literature as well as in the cognitive affective stage model of library anxiety to be a factor influencing library anxiety. The size of library collection is assumed to have direct relationship with the size of library building, i.e. the larger the building, the bigger the collection size. Thus, it is justified to research library collection size as unique antecedent in the library context that influences students’ level of library anxiety.

Research Objectives
To analyze if a statistically significant relationship exists between undergraduate student’s scores on various dimensions of library anxiety scale and the...
perceived size of the library collection of books.

**Literature Review**

The concept of library anxiety was first formally recognised and studied in 1986 by Constance A. Mellon who conducted a 2-year qualitative investigation on college students enrolled in beginning composition courses. She found that there were four primary reasons to explain this phenomenon of library anxiety: the students were intimidated by the size of the library, lacked knowledge about where everything was located, lacked knowledge about what to do, and lacked knowledge about how to initiate the research process.

While some appreciated Mellon’s application of qualitative research to the study of a library environment (Miller, 1986) others did not find her findings as important or scientifically acceptable because she did not begin with a hypothesis. Consequently, those researchers who supported her methodology and her findings, worked to scientifically prove that library anxiety was a valid theory. Bostick (1992), in her dissertation (1992) entitled ‘The Development and Validation of the Library Anxiety Scale’ created a Library Anxiety Scale to quantitatively measure library anxiety. The five components of Bostick’s Library Anxiety Scale are: Barriers with the service; Affective barriers; Comfort with the library; Knowledge of the library and Mechanical barriers.

Bostick (1992) operationalised these five dimensions in the form of the library anxiety scale (LAS) to assist in quantitative data collection for studies related to library anxiety. According to Kuhthau (1991), anxiety is initiated during any one of the six stages of the information-search process. Jiao et al (1996) showed that gender of the students was a contributing factor to predict library anxiety. They found that the highest levels of library anxiety that exist among university students tended to be males, those who did not speak English language as their native language, who had high levels of academic achievement, who were engaged in either part-time or full-time employment, and who infrequently visited the library.

According to Jacobson and Mark (1995), the size of academic library building contributes in increasing the level of anxiety among students. They reported library anxiety as a learning block for students caused by large size of academic library buildings. The library anxiety condition was labeled as information apprehension, a condition characterized by an aversion to enter library, ask for assistance, use access or information sources or evaluate information.

**Definition of Terms**

- **Library anxiety:** Library anxiety is defined as a negative experience characterised by excessive worry, self-defeating thoughts, fear, tension, and physiological arousal that arises during the typical library-task cycle. (Jiao & Onwuegbuzie, 2003).
- **Faculty:** This refers to all undergraduate departments/kulliyah in the International Islamic University Malaysia. It includes the following: Law; Islamic Revealed Knowledge & Human Science; Science; Engineering; Information and communication Technology; Economics and Management Sciences; Education; Architecture and Environmental Design and Centre for Language and Pre University Academic Development.
- **Year of study:** It refers to student’s level of study. For the purpose of this study, undergraduate students from year 2003 (first year) to year 2006 (fourth year) are considered.
- **Perceived size of the library collection:** It refers to undergraduate students’ perception about the size of IIUM library collection of books.
- **Barriers with Service Providers:** It refers to the barriers students face when dealing with library staff.
- **Comfort with Library Services:** It refers to how welcoming student does perceive the library to be.
- **Affective Barriers:** It refers to student’s feelings of dissatisfaction or inadequacy about using the library. This includes searching for a book or other materials or use of computers in the library.
- **Cognitive Barriers:** It refers to student’s thinking of lack of familiarity and awareness of library resources. This includes searching for a book or other materials or use of computers in the library.
- **Comfort with Library Technology:** It refers to student’s level of ease in using library technology. This includes use of online library catalogue, online databases and other digital services provided in the library.

**Limitations**

The study is limited to only undergraduate students from one institution in a specific academic library setting.

**Background of University and Library**

International Islamic University Malaysia (IIUM), located in Gombak, Malaysia was established in 1983. It operates under the direction of a Board of Governors with representatives from the eight sponsoring governments and the Organization of Islamic Conference (OIC). It maintains links with governments and institutions all over the world, such as the League of Islamic Universities, the International Association of Universities and the Association of Commonwealth Universities. It has students originate from more than 90 countries representing nearly all regions of the world. At the time of the study the university had 14014
undergraduate students registered. For the purpose of this study, only student from 2003-2006 were considered. The population size was reduced to 8,432 undergraduate students and a sample size of 367 was obtained at degree of accuracy of 0.05.

The University library has total collection of approximately 557,076 volumes of monographs, 1,674 serial titles on subscription, 24,066 volumes of bound serials, 60,091 units of audio-visuals and 29,148 microforms. In addition to providing access to the internet, the library also subscribes to a number of online databases and electronic journals and e-books. The main library building in Gombak provides a spacious and conducive study environment with 40 carrel rooms, 15 research rooms, eight discussion rooms, four audio-visual viewing rooms, an auditorium, and a multi-purpose room. It has a seating capacity for 2,077 users. In addition, the Library also has three computer lab as well as computer facilities for the Library users. It has 41 librarians and 152 staff including among others, technical staff, library assistants and administrative assistants.

Research Methodology
For the purpose of this research, a questionnaire was designed to incorporate all the independent and dependent variables that would furnish the answers to the research questions (Appendix 1).

The population of the study was undergraduate students of the International Islamic University Malaysia (IIUM), from level one (first year) to level four (senior years) of students’ undergraduate studies. Applying a stratified random sampling technique, a sample was drawn from the targeted population.

Response rate for questionnaire
The questionnaires were distributed to the randomly selected undergraduate students from each year during class hours or after they finish the class during the months of August- November 2006. The response rate for the questionnaire was 84 per cent (out of 367, 308 questionnaire were received). The reasons given for blank return ranged from “not wishing to participate”, “don’t have time”, and “do not feel qualified to respond to the questionnaire”.

Results
Pearson’s correlations were performed to test the relationships between perceived size of library collection of books with each subscale of library anxiety. Correlation analysis between antecedents and library anxiety subscale ‘Barriers with service providers’ show a positive significant linear relationship exist between antecedent perceived size of library collection of books and “Barriers with service providers” ($r= 0.176, p=0.002$).

Correlation analysis between perceived size of library collection of books and library anxiety subscale “Comfort with library services” showed a negative significant linear relationship between antecedents perceived size of library collection of books and comfort with library services ($r= -0.131, p=0.022$).

Correlation analysis between perceived size of library collection of books and library anxiety subscale “Affective barriers” showed a negative significant linear relationship exist between perceived size of library collection of books and affective barriers ($r= -0.187, p=0.001$).

Correlation analysis between perceived size of library collection of books and library anxiety subscale “Cognitive barriers” showed no significant linear relationship. Lastly, the correlation analysis between perceived size of library collection of books and library anxiety subscale “Comfort with library technology” show no significant relationship existed.

Multiple Regression Analysis
Multiple regression analysis was carried out for each sub scale of the library anxiety with perceived size of library collection of books to determine the best predictor for each sub scale and the significant amount of variance that could be explained by perceived size of library collection of books.

Multiple regression analysis predicting Barriers with Service Providers
Regressing with the dependent subscale “barriers with service providers” showed a significant predictive relationship between antecedent perceived size of library collection of books and the dependent subscale “Barriers with Service Providers”. Independent variable with the largest beta weight shows the largest

<table>
<thead>
<tr>
<th>Correlates</th>
<th>Perceived size of library collection of books</th>
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<tbody>
<tr>
<td>Barriers with Service Providers</td>
<td>$r= .176 , p= .002$</td>
</tr>
<tr>
<td>Comfort with library services</td>
<td>$r= -.131 p= .022$</td>
</tr>
<tr>
<td>Affective Barriers</td>
<td>$r= -.187 p= .001$</td>
</tr>
<tr>
<td>Cognitive Barriers</td>
<td>$r= -.077 p= .181$</td>
</tr>
<tr>
<td>Comfort with library technology</td>
<td>$r= .110 p= .056$</td>
</tr>
</tbody>
</table>

Table 1: Correlation Analysis between Perceived Size of Library Collection of Books and Library Anxiety Subscales
correlation with the dependent variable. A visual examination of table below shows that the most important contribution is from the correlate size of library collection of books (Beta = -0.136, p < .05) for the dependent library anxiety subscale “Barriers with Service Providers”. Collectively the predictors explain three per cent (3%) of the variance in the barriers with service providers (R square = 0.03).

**Table 2: Multiple Regressions of Antecedents with the subscale Barriers with Library Services Provider**

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Beta</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of library collection</td>
<td>-.136</td>
<td>.003</td>
</tr>
<tr>
<td>R square: .031</td>
<td></td>
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</tr>
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**Multiple regression Analysis for Antecedents Predicting Comfort with Library Service**

Regressing selected antecedents with the subscale “comfort with library services” showed that a predictive relationship existed between antecedent perceived size of library collection of books with the dependent subscale “comfort with library services”. Independent variable with the largest beta weight shows the largest correlation with the dependent variable. A visual examination of table shows that the most important contribution is from the correlates of perceived size of library collection of books (Beta = -0.136, p < .05) for the dependent library anxiety subscale ‘comfort with library services’. Collectively the predictors explain five percent of the variance in the comfort with library services (R square = 0.052).

**Table 3: Multiple Regressions of Antecedents with the subscale Comfort with Library Services**

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Beta</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived size of library</td>
<td>-.112</td>
<td>.049</td>
</tr>
<tr>
<td>R square: .052</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Multiple Regression Analysis for Antecedents Predicting Affective Barriers**

Regressing selected antecedents with the subscale “affective barriers” showed a significant predictive relationship existed between the perceived size of library collection of books with the dependent subscale “affective barriers”. Independent variable with the largest beta weight shows the largest correlation with the dependent variable. A visual examination of table below shows that the most important contribution is from the correlates of perceived size of library collection of books (Beta = -.0.182, p < .05) for the dependent library anxiety subscale ‘affective barriers’. Collectively the predictors explain four percent of the variance in the affective barriers (R square = 0.042).

**Table 4: Multiple regressions of antecedents with the subscale Affective Barriers**

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Beta</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived size of library</td>
<td>-.182</td>
<td>.003</td>
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<tr>
<td>R square = .046</td>
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<td></td>
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**Multiple Regression Analysis for Antecedents Predicting Cognitive Barriers**

Regressing selected antecedents with the dependent subscale “cognitive barriers” showed no significant correlation between perceived size of library collection of books and the dependent subscale “cognitive barriers”.

**Conclusion and Recommendation**

Undergraduate students from International Islamic University Malaysia library showed significant level of anxiety on one dimension or another. Perceived size of library collection is a unique antecedent established in this research that showed relationship with three subscales of library anxiety, i.e., barriers with staff, affective barriers, and comfort with library services'. The collection size is assumed to be directly related to size of academic library building, i.e. the bigger the building, bigger will be the collection and higher library anxiety will be expected from its patrons. Students form negative perceptions by looking at the size of the library collection before they explore the library resources since it will affect their library search. Students who perceived library collection as big experienced more anxiety and less comfort in the library and face more barriers with service providers. This is consistent with the literature which shows that the size of academic library building contributes in increasing the level of anxiety among students and act as a learning block for students caused by large size of academic library buildings (Jacobson and Mark 1995).

The multiple regression results showed that the perceived size of library collection was an important
predictor for four dimensions of the library anxiety. It creates obvious problems because searching requires more time and greater expertise, it can make a student feel confused, and uncomfortable.

The perception of library size increases or decreases the anxiety level among students. It is assumed that seeing library with a large collection of books may overwhelm students and make them feel uncomfortable before they begin the search task.

Thus, with knowledge that the phenomenon of library anxiety exists in Malaysian academic library environment; academic libraries in Malaysia can take appropriate measures to produce self reliant or information literate users who will have capability of acquiring information in any format. Since this variable has not been explored in previous researches, its existence in other places needs to be established.

References