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ABSTRACT

This study of 125 non-native English-speaking students at a Northeastern university investigated the prevalence of the dimensions of library anxiety among this population. Participants were administered the Library Anxiety Scale (LAS). This instrument has five subscales: barriers with staff; affective barriers; comfort with the library; knowledge of the library; and mechanical barriers. Of the five dimensions studied, mechanical barriers, which refers to feelings that emerge as a result of students' reliance on mechanical library equipment (e.g., computer printers, copy machines, and change machines) was the greatest source of library anxiety. Affective barriers, which refers to students' feeling of inadequacy about using the library, was the second most prevalent dimension, having statistically significantly higher mean ratings than the three remaining dimensions. This dimension was followed by barriers with staff and comfort with the library, respectively. Knowledge of the library was the source of least anxiety. Based on these findings, librarians and library educators should be cognizant of the role that technology plays in inducing library anxiety among international students. (Contains 21 references.) (MES)

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Library Anxiety Among International Students

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Abstract

The United States currently has the largest number of international students, comprising approximately one-third of the world's total. Unfortunately, many foreign students, particularly those from countries whose native language is not English, face an array of difficulties when utilizing academic libraries. As a result, levels of library anxiety typically is higher among international college students than among their counterparts. This study of 125 non-native English-speaking university students investigated the prevalence of the dimensions of library anxiety among this population. Of the five dimensions studied, mechanical barriers, which refers to feelings that emerge as a result of students' reliance on mechanical library equipment (e.g., computer printers, copy machines, and change machines), was the greatest source of library anxiety. Indeed, mechanical barriers had statistically significantly higher mean ratings than did the four other dimensions. Affective barriers, which refers to students' feelings of inadequacy about using the library, was the second most prevalent dimension, having statistically significantly higher mean ratings than did the three remaining dimensions. This dimension was followed by barriers with staff and comfort with the library, respectively. Knowledge of the library was the source of least anxiety. Based on these findings, librarians and library educators should be cognizant of the role that technology plays in inducing library anxiety among international students.

Library Anxiety Among International Students

The United States currently has the largest number of international students, comprising approximately one-third of the world's total (Liu, 1993). Most of these students originate from countries where English is neither an official language nor a medium of instruction (MacDonald & Sarkodie-Mensah, 1988). These students typically have to make a difficult transition to universities in the United States. Not only do these students have to become language barriers, but they have to adapt to a different educational system. Central to this educational system are academic libraries.

Unfortunately, the academic libraries in the mother countries of many international students are very different than those in the United States. Specifically, college libraries in developing countries tend to be smaller and contain much fewer current books and references (Onwuegbuzie & Jiao, 1997). Additionally, in many of these libraries, little or no bibliographic instruction takes place (Koehler & Swanson, 1988), since libraries are more often deemed by librarians and students alike to be places to study, as opposed to venues to conduct library searches (Koehler & Swanson, 1988; Pearce, 1981). In fact, it is not unusual for the main role of reference librarians in these countries to be to retrieve books--a role which is very different than for their counterparts in the United States.

Consequently, many international students arrive in the United States with insufficient library skills (Allen, 1993), as well as with erroneous beliefs about the function of U.S. libraries (Onwuegbuzie & Jiao, 1997). These factors, alongside language and cultural difficulties (Bilal, 1989), language barriers (Wayman, 1984), technological difficulties (Koehler & Swanson, 1988; Liu, 1993), and unfamiliarity with the United States classification schemes, such as Dewey Decimal and Library of Congress (Ormondroyd, 1989), can make using these libraries an overwhelming experience for many international students.

Moreover, Onwuegbuzie and Jiao (1997) reported that, although non-native English-speaking international students visit the library more frequently than do native English speakers, they have higher levels of overall library anxiety. According to Mellon (1986), library anxiety is an uncomfortable feeling or emotional disposition, experienced in a library setting, which has cognitive, affective, physiological,

and behavioral ramifications. Jiao, Onwuegbuzie, and Lichtenstein (1996) note that library anxiety is characterized by ruminations, tension, fear, feelings of uncertainty and helplessness, negative self-defeating thoughts, and mental disorganization, which debilitate information literacy. Moreover, library anxiety is situation-specific, inasmuch as the symptoms only appear when students are in or are contemplating a visit to the library (Jiao et al., 1996).

Based on Mellons' (1986) theory, Bostick (1992) has identified five dimensions of library anxiety, namely, "barriers with staff," "affective barriers," "comfort with the library," "knowledge of the library," and "mechanical barriers." *Barriers with staff* refers to the perception of students that librarians and other library staff are intimidating and unapproachable. In addition, the librarian is perceived as being too busy to provide assistance in using the library. Students with this perception tend to report high levels of library anxiety (Mellon, 1986). *Affective barriers* stems from students' feelings of inadequacy about using the library. These feelings of ineptness are heightened by the assumption that they alone possess incompetent library skills (Mellon, 1986). *Comfort with the library* deals with how safe, welcoming, and non-threatening students perceive the library to be. Students who are not comfortable in the library tend to have higher levels of library anxiety (Onwuegbuzie, 1997a). *Knowledge of the library* refers to how familiar with the library students feel they are. A lack of familiarity leads to frustration and anxiety, and subsequently, further avoidance behaviors (Mellon, 1986). Finally, *mechanical barriers* refers to feelings which emerge as a result of students' reliance on mechanical library equipment, including computer indexes, online facilities, computer printers, copy machines, and change machines. Students who have difficulty using library technology tend to experience high anxiety levels (Onwuegbuzie, 1997a).

Surprisingly, with the exception of Onwuegbuzie and Jiao (1997), no other recent empirical research appears to exist which has investigated patterns of behavior or experience of international students while using U.S. libraries. Thus, the present study was an attempt to add to the scant body of literature in this area. Specifically, the purpose of this study was to determine which of the five dimensions is the greatest source of library anxiety for international students.

Method

Subjects and Instruments

One hundred and twenty-five students from a variety of disciplines at a northeastern university were administered the Library Anxiety Scale (LAS). The LAS, developed by Bostick (1992), is a 43-item, 5-point Likert-format instrument which assesses levels of library anxiety. The instrument has five subscales, namely, barriers with staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers. High scores on each scale represent high levels of library anxiety. Jiao and Onwuegbuzie (1997a) found that the LAS subscales generated scores which yielded coefficient alpha reliabilities ranging from .60 (*mechanical barriers*) to .90 (*barriers with staff*). The ages of the respondents ranged from 18 to 45 (mean = 21.2, *SD* = 3.7). Two-thirds of the sample (67.0%) were female.

Results

Analysis of the LAS revealed that mechanical barriers was the greatest source of anxiety, followed by affective barriers, comfort with the library, barriers with staff, and knowledge of the library, respectively. Indeed, a series of dependent *t*-tests, using the Bonferroni adjustment, revealed that mechanical barriers induced significantly higher levels of library anxiety than did affective barriers ($t = 6.0, p < .0001; Effect\ size = 0.70$), barriers with staff ($t = 8.9, p < .0001; Effect\ size = 0.98$), comfort with the library ($t = 10.6, p < .0001; Effect\ size = 1.29$), and knowledge of the library ($t = 14.4, p < .0001; Effect\ size = 1.84$). Additionally, affective barriers generated significantly higher levels of library anxiety than did barriers with staff ($t = 4.2, p < .0001; Effect\ size = 0.35$), comfort with the library ($t = 7.5, p < .0001; Effect\ size = 0.65$), and knowledge of the library ($t = 12.2, p < .0001; Effect\ size = 1.38$). Barriers with staff induced significantly higher levels of library anxiety than did comfort with the library ($t = 3.3, p < .0001; Effect\ size = 0.26$), and knowledge of the library ($t = 9.5, p < .0001; Effect\ size = 0.99$). Finally, comfort with the library secured significantly higher levels of library anxiety than did knowledge of the library ($t = 8.1, p < .0001; Effect\ size = 0.83$). The effect sizes, which were calculated by dividing the mean differences by the pooled

standard deviations (Cohen, 1988), ranged from .26 to 1.84. Using Cohen's (1988) criteria, the effect sizes (ES) pertaining to the barriers with staff/comfort with the library comparison (ES = 0.26) and to the affective barriers/barriers with staff comparison (ES = 0.35) can be considered as representing small effects. All other differences presented above represent large effect sizes.

Discussion

Interestingly, library technology (i.e., mechanical barriers) appears to be the greatest source of library anxiety among international students. This finding is consistent with Onwuegbuzie (1997b), who reported that mechanical barriers induced the highest levels of anxiety among US-born students enrolled in a university in Arkansas. It is likely that mechanical barriers is the most problematic antecedent of library anxiety for international students because many of these students come from countries in which the level of technology is much lower than that in the U.S. (Koehler & Swanson, 1988; Liu, 1993). Thus, library instructors should familiarize international students with the array of library equipment and resources available as early as possible. As recommended by Jiao and Onwuegbuzie (1997b), librarians and library staff should monitor library equipment used by students, checking periodically that all machinery are functioning properly and that appropriate stock levels are maintained (e.g., paper, toner cartridges). In addition, library personnel should be proactive in providing assistance to international students, since many students perceive asking for help as a failure (Kuhlthau, 1991). In particular, reference librarians should look for verbal cues (e.g., vocal tone, verbal responsiveness, and quantity and types of words used) and nonverbal cues (e.g., eyes, gestures, body stance, and facial expressions) which may indicate that an international student is experiencing difficulties with some aspect of the technology.

Since affective barriers emerged as the second most anxiety-inducing antecedent, library instructors should consider incorporating information about library anxiety into their presentations (Mellon, 1988). In particular, affective skills development, which has not been the focus of library instruction, should be incorporated, since improvement in attitudes towards libraries following instruction based on affective skills development has been found (Ramey, 1985).

Since barriers with staff also induced relatively high levels of anxiety, library administrators should consider hiring qualified librarians who speak more than one language fluently in order to assist students whose native language is not English, as well as hiring student assistants from different cultures to work as peer tutors (Swope & Katzer, 1972; Westbrook & DeDecker, 1993).

It is hoped that the present study will help to promote more research in this area. As the number of international students enrolled in U.S. educational institutions continues to grow at a fast rate, failure to recognize, to understand, to appreciate, and, consequently, to address the negative experiences of these students will have dire consequences.

References

- Allen, Mary Beth (1993). International students in academic libraries: A user survey. *College & Research Libraries*, 54 (July 1993): 323-33.
- Bilal, Dania M. (1989). International students' acquisition of library research skills: Relationship with their English language proficiency, *Reference Librarian*, 24 (1989): 129-145.
- Bostick, S.L. (1992). The development and validation of the Library Anxiety Scale (Doctoral dissertation, Wayne State University, 1992). *Dissertation Abstracts International*, 53-12, Section A, 4116.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York: John Wiley.
- Jiao, Q., & Onwuegbuzie, A.J. (1997a). *I'll Go to the library tomorrow: The role of procrastination in library anxiety*. Manuscript submitted for publication.
- Jiao, Q., & Onwuegbuzie, A.J. (1997b). Antecedents of library anxiety. *The Library Quarterly*, 67, 372-389.
- Jiao, Q.G., Onwuegbuzie, A.J., & Lichtenstein, A. (1996). *Library anxiety: Characteristics of at-risk college students*. *LISR*, 18, 151-163.
- Koehler, B., & Swanson, K. (1988). ESL students and bibliographic instruction: Learning yet another language. *Research Strategies*, 6(4) (Autumn, 1988), p. 149.
- Kuhlthau, C.C. (1991). Inside the search process: Information seeking from the user's perspective. *Journal of the American Society for Information Science*, 42(5), 361-371.
- Liu, Z. (1993). Difficulties and characteristics of students from developing countries in using American libraries. *College & Research Libraries*, 54, 27.
- MacDonald, Gina, & Sarkodie-Mensah, Elizabeth (1988). ELS students and American libraries, *College & Research Libraries* 49 (Sept. 1988): 425-431.
- Mellon, C.A. (1986). Library anxiety: A grounded theory and its development. *College and Research Libraries*, 47, 160-165.

- Mellon, C.A. (1988). Attitudes: the forgotten dimension in library instruction. *Library Journal*, 113, 137-139.
- Onwuegbuzie, A.J. (1997a). Writing a research proposal: The role of library anxiety, statistics anxiety, and composition anxiety. *Library & Information Science Research*, 19, 5-33.
- Onwuegbuzie, A.J. (1997b). The role of technology in the library anxiety of Arkansas college students. *Instructional Media Quarterly*, 30, 6-8.
- Onwuegbuzie, A.J., & Jiao, Q.G. (1997). Academic library usage: A comparison of native and non-native English-speaking students. *The Australian Library Journal*, 46, 258-269.
- Ormondroyd, Joan, (1989). The international student and course-integrated instruction: The librarian's perspective, *Research Strategies* 7 (Fall 1989): 148-158.
- Pearce, R. (1981). *The overseas student and library use--A special case for treatment*. In Proceedings of the Second International Conference on Library User Education, Oxford University, July 7-10, 1981, ed. Peter Fox (Loughborough, England, 1981).
- Ramey, M.A. (1985). Learning to think about libraries: Focusing on attitudinal change for remedial studies students. *Research Strategies*, 4, 125-130.
- Swope, Maru J., & Katzer, Jeffrey. (1972). Why don't they ask questions? The silent majority. *RQ*, 12(2), 161-166.
- Wayman, Sally, G. (1984). The international student in the academic library. *Journal of Academic Librarianship*. 9 (January 1984): 336-341.
- Westbrook, Lynn, & DeDecker, Sharon. (1993). Supporting user needs and skills to minimize library anxiety: Considerations for academic libraries. *The Reference Librarian*, 40, 43-51.



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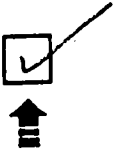
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