

Evidence Based Library and Information Practice

Classics

Library Anxiety Impedes College Students' Library Use, but May Be Alleviated Through Improved Bibliographic Instruction

A Review of:

Jiao, Q. G., Onwuegbuzie, A. J., & Lichtenstein, A. A. (1996). Library anxiety: Characteristics of 'at-risk' college students. *Library & Information Science Research*, 18(2), 151-163. https://doi.org/10.1016/S0740-8188(96)90017-1

Reviewed by:

Barbara Wildemuth
Professor Emeritus
School of Information and Library Science
University of North Carolina
Chapel Hill, North Carolina, United States of America

Email: wildemuth@unc.edu

Received: 3 Oct. 2017 Accepted: 31 Oct. 2017

© 2017 Wildemuth. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (http://creativecommons.org/licenses/by-nc-sa/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

Abstract

Objective – To identify the characteristics of college students that are related to their experiences of library anxiety.

Design – Survey, analyzed with multiple regression.

Setting – Two universities, one in the mid-south and one in the northeastern United States.

Subjects – 493 students from those two universities.

Methods – The students responded to two questionnaires: the Library Anxiety Scale developed by Bostick (1992), and a Demographic Information Form that included questions about students' gender, age, native language, academic standing and study habits, library instruction received, and library use. Spearman's rank correlation was used to identify those demographic characteristics that were correlated with library anxiety. Multiple

regression analysis was used to develop a model for predicting library anxiety.

Main Results – The study found that age, sex, native language, grade point average, employment status, frequency of library visits, and reasons for using the library contributed significantly to predicting library anxiety. Library anxiety was highest among young male students who did not speak English as their native language, had high levels of academic achievement, were employed while in school, and infrequently visited the library. While the overall regression model was statistically significant and explained 21% of the variability in library anxiety, the individual correlations with library anxiety were generally weak (the strongest was a -0.21 correlation with frequency of library visits).

Conclusion – The authors conclude that many students experience library anxiety, and recommend that libraries make every effort to be welcoming. In addition, they recommend that library instruction should be introduced at the high school level and, in college, incorporated into the classes that require library research. In this setting, library anxiety should be addressed during the instruction, and classroom teachers should plan to assist students in the early stages of their research.

Commentary

While the results from this study continue to be both interesting and useful to practitioners, its primary contribution was to further develop the concept of library anxiety. Work on defining and measuring library anxiety began with Mellon's (1986/2015) grounded theory study of it. *EBLIP* published a Classic review of this work in 2008 (Bailey, 2008). Jiao and Onwuegbuzie began publishing a number of studies on library anxiety in 1996, with this article; published their book with Sharon Bostick in 2004; and continued to publish on library anxiety through 2008 (Jiao, Onwuegbuzie, & Waytowich, 2008). Key

reviews on library anxiety include those by Cleveland (2004) and Carlile (2007).

In the article reviewed here, Jiao, Onwuegbuzie, and Lichtenstein (1996) define library anxiety as "an uncomfortable feeling or emotional disposition, experienced in a library setting, which has cognitive, affective, physiological, and behavioral ramifications. It is characterized by ruminations, tension, fear, feelings of uncertainty and helplessness, negative self-defeating thoughts, and mental disorganization" (p.152). In Onwuegbuzie and Jiao's later (2004) book, co-authored with Bostick, they clarify further, noting that library anxiety is not an enduring personal trait, but is a state experienced in particular situations.

In their work on library anxiety, Jiao and Onwuegbuzie have consistently used Bostick's (1992) Library Anxiety Scale, which consists of 43 Likert-scale items (rated on a 5-point scale from strongly agree to strongly disagree). The items are organized into five factors: Barriers with staff, Affective barriers, Comfort with the library, Knowledge of the library, and Mechanical barriers. This scale continues to be the basis for most studies of library anxiety. For example, it was used in McPherson's (2015) study of library anxiety among college students in the West Indies.

As noted above, Jiao and Onwuegbuzie conducted a number of studies after publishing this initial study; these are reviewed by Cleveland (2004). These studies considered the relationship between level of library anxiety and students' demographic characteristics, such as race (Jiao, Onwuegbuzie & Bostick, 2004); the causes or antecedents of library anxiety, including students' computer attitudes, their reading ability, and their learning environment preferences, among others (e.g., Jiao & Onwuegbuzie, 2004); the relationship between library anxiety and other psychological characteristics, such as social interdependence (Jiao & Onwuegbuzie, 2002), academic procrastination (Onwuegbuzie & Jiao, 2000), and perfectionism (Jiao & Onwuegbuzie, 1998); and the effects of library anxiety on study habits (Jiao & Onwuegbuzie, 2001) and citation errors (Jiao, Onwuegbuzie, & Waytowich, 2008). While many of the student characteristics that have been associated with library anxiety are not amenable to change (such as race or social interdependence), some of them may be targets for intervention by librarians or college instructors. For example, an instructor's structuring of a library research assignment or a librarian's discussion of a research plan, including a schedule with intermediate deadlines, may address the role of procrastination in library anxiety. Thus far, few intervention studies building directly on these findings have included an evaluation of the success of the intervention.

Studies by other researchers have paralleled the work of Jiao and Onwuegbuzie. They have studied the prevalence of library anxiety among students in particular countries including Pakistan (Naveed, 2016) or specific disciplines such as nursing (Still, 2015); possible causes or antecedents of library anxiety (Karim & Ansari, 2013); the relationship between library anxiety and other psychological characteristics, such as foreign language anxiety (Sinnasamy & Karim, 2014); and the effects of library anxiety, such as the adoption of online library resources (Booker, Detlor, & Serenko, 2012). These studies augment the research program of Jiao and Onwuegbuzie, in terms of adding more depth to our understanding of these aspects of library anxiety.

In addition, several researchers have taken the next step, to develop approaches to alleviating library anxiety and evaluating the effectiveness of those approaches. Several of these focused on new approaches to bibliographic instruction. For example, Fleming-May, Mays, and Radom (2015) developed a three-workshop model specifically targeting at-risk students; Bell (2011) developed a one-credit information literacy course; and Van Scoyoc (2003) compared a computer-assisted instruction approach with

face-to-face instruction led by a librarian. These and other studies have taken to heart some of the recommendations made by Jiao and Onwuegbuzie, to develop bibliographic instruction programs that are intended to alleviate library anxiety, then went on to evaluate the effectiveness of those programs. In addition, a few studies have taken a broader look at improvement of library services. For example, Ott and Chhiu (2007) evaluated the effectiveness of providing "deskless" services, and Dugdale (2000) evaluated the impact of electronic reserves. These studies serve as models for the ways in which findings about library anxiety can be used to improve the practice of reference services generally, and bibliographic instruction specifically. Even now, over twenty years after Jiao and Onwuegbuzie published their first study of library anxiety, their results can be mined for additional ways in which library services might be improved.

In addition, more research in this area should be conducted, particularly because the technological infrastructure of academic libraries has evolved since 1996. College students now routinely use hybrid collections: a physical collection in the library itself, as well as the online resources provided through the library. Two examples will illustrate some of the possibilities for future research. First, the role of technology might be considered in relation to library use. As Kohrman (2003) points out, "the library's old wooden card catalog is now a computerized online catalog greeting students" (p.1), so computer anxiety must be considered in combination with library anxiety. While still widely used, Bostick's Library Anxiety Scale would be more valuable for current research if it were updated to take this change into account. Second, the situation in which students experience anxiety might be broadened slightly, to consider information seeking more broadly, rather than focusing on library use. As our field has made the turn to user-centered studies of information behaviors and practices, we might also make this turn in the measures we use. For example, Naveed (2016) has recently taken the

first steps toward developing a measure of information seeking anxiety. Such a measurement instrument may also lead to studies of the anxiety of information seekers outside the academic library setting.

It is true that the number of studies on library anxiety, particularly those conducted in North America and Europe, has decreased quite a bit since the publication of the Onwuegbuzie, Jiao, and Bostick (2004) book. It's not as clear that there is less library anxiety being experienced by college students or other library users. Thus, this continues to be an area in which important research – both applied and basic – can be fruitfully conducted.

References

- Bailey, E. (2008). Constance Mellon demonstrated that college freshmen are afraid of academic libraries. *Evidence Based Library and Information Practice*, 3(3), 94-97. http://dx.doi.org/10.18438/B8FS60
- Bell, J. C. (2011). Student affect regarding library-based and web-based research before and after an information literacy course. *Journal of Librarianship and Information Science*, 43(2), 120-130. https://doi.org/10.1177/0961000610383634
- Booker, L. D., Detlor, B., & Serenko, A. (2012).
 Factors affecting the adoption of online library resources by business students.

 Journal of the American Society for Information Science and Technology, 63(12), 2503-2520.

 https://doi.org/10.1002/asi.22723
- Bostick, S. L. (1992). *The development and validation of the Library Anxiety Scale* (Doctoral dissertation). Wayne State University, Michigan.

- Carlile, H. (2007). The implications of library anxiety for academic reference services:

 A review of the literature. *Australian Academic & Research Libraries*, 38(2), 129-147.

 https://doi.org/10.1080/00048623.2007.10
 721282
- Cleveland, A. (2004). Library anxiety: A decade of empirical research. *Library Review*, 53(3), 177-185. https://doi.org/10.1108/00242530410526583
- Dugdale, C. (2000). A new UK university library service to meet the needs of today's students and tomorrow's lifelong learners. *Information Services and Use*, 20(1), 1-8.
- Fleming-May, R. A., Mays, R., & Radom, R. (2015). "I never had to use the library in high school": A library instruction program for at-risk students.

 Portal:Libraries and the Academy, 15(3), 433-456.

 https://doi.org/10.1353/pla.2015.0038
- Jiao, Q. G., & Onwuegbuzie, A. J. (1998).

 Perfectionism and library anxiety
 among graduate students. *Journal of Academic Librarianship*, 24(5), 365-371.

 https://doi.org/10.1016/S0099-1333(98)90073-8
- Jiao, Q. G., & Onwuegbuzie, A. J. (2001). Library anxiety and characteristic strengths and weaknesses of graduate students' study habits. *Library Review*, 50(2), 73-80. https://doi.org/10.1108/002425301103811

- Jiao, Q. G., & Onwuegbuzie, A. J. (2002).

 Dimensions of library anxiety and social interdependence: Implications for library services. *Library Review*, *51*(2), 71-78.

 https://doi.org/10.1108/002425302104188
- Jiao, Q. G., & Onwuegbuzie, A. J. (2004). The impact of information technology on library anxiety: The role of computer attitudes. *Information Technology and Libraries*, 23(4), 138-144. https://doi.org/10.6017/ital.v23i4.9655
- Jiao, Q. G., Onwuegbuzie, A. J., & Bostick, S. L. (2004). Racial differences in library anxiety among graduate students.

 Library Review, 53(4), 228-235.

 https://doi.org/10.1108/002425304105318
 57
- Jiao, Q. G., Onwuebguzie, A. J., & Waytowich, V. L. (2008). The relationship between citation errors and library anxiety: An empirical study of doctoral students in education. *Information Processing & Management*, 44(2), 948-956. https://doi.org/10.1016/j.ipm.2007.05.007
- Karim, N. H. A., & Ansari, N. A. (2013).

 Investigating the effects of students' major and bibliographic instruction programme on library anxiety sub-scale, 'barriers with staff'. *Malaysian Journal of Library & Information Science*, 18(3), 39-47.
- Kohrman, R. (2003). Computer anxiety in the 21st century: When you are not in Kansas any more. Paper presented at the Association of College and Research Libraries 11th National Conference, Charlotte, NC. Retrieved from https://pdfs.semanticscholar.org/d7cc/ac7c1ab4af5918e0e01829582714e7e893d3.pdf

- McPherson, M. A. (2015). Library anxiety among university students: A survey. *IFLA Journal*, 41(4), 317-325.

 https://doi.org/10.1177/034003521560399
 3
- Mellon, C. A. (2015). Library anxiety: A grounded theory and its development. *College & Research Libraries*, 76(3), 276-282. (Original work published 1986). https://doi.org/10.5860/crl.76.3.268
- Naveed, M. A. (2016). Exploring information seeking anxiety among research students in Pakistan. *Libri*, 66(1), 73-82. https://doi.org/10.1515/libri-2015-0047
- Onwuegbuzie, A. J., & Jiao, Q. G. (2000). I'll go to the library later: The relationship between academic procrastination and library anxiety. *College & Research Libraries*, 61(1), 45-54. https://doi.org/10.5860/crl.61.1.45
- Onwuegbuzie, A. J., Jiao, Q. G., & Bostick, S. L. (2004). *Library anxiety: Theory, research, and applications*.. Lanham, MD: Scarecrow Press.
- Ott, K., & Chhiu, S. (2007). The first wave:
 Floating in the Florida State University
 Strozier Library, Florida State
 University, Tallahassee, Florida. *New Library World*, 108(3-4), 165-176.
 https://doi.org/10.1108/030748007107353
 66
- Sinnasamy, J., Karim, N. H. A. (2014). A correlational study of foreign language anxiety and library anxiety among nonnative speakers of English: A case study in a Malaysian public university. *Journal of Academic Librarianship*, 40(5), 431-435. https://doi.org/10.1016/j.acalib.2014.07.0

Still, M. (2015). Addressing library anxiety (LA) in student nurses: A study in an NHS Foundation Trust Hospital library and information service. *Health Information and Libraries Journal*, 32(4), 322-325. https://doi.org/10.1111/hir.12124

Van Scoyoc, A. M. (2003). Reducing library anxiety in first-year students: The impact of computer-assisted instruction and bibliographic instruction. *Reference & User Services Quarterly*, 42(4), 329-341.