



Library Anxiety and Intervention Strategies: Review of Conceptualized Antecedents in Public Service Librarianship

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Authors' contributions

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ABSTRACT

This paper investigates the origin of information behavioural studies as it relates to library anxiety. It is a retrospective review of Library Anxiety Scale (LAS). Research design employed in the study is Ex post facto design, as existing theories related to the theme were examined, such as Mellon's grounded theory of Library Anxiety (LA); Carol Kuhlthau's Information Search Process (ISP) and its respective cognitive and emotional aspects. The paper reviews history and theoretical basis of library anxiety; The paper also presents Onwuegbuzie, Jiao, and Bostick's Model of conceptualization of antecedents of library anxiety. Intervention strategies that address the various dimensions of library anxiety are briefly discussed. Psychological and educational implications are equally considered. Authors conclude with recommendations, which include that librarians should organize constant user education and encourage frequent visit by users.

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1. INTRODUCTION

Library anxiety was first identified by Mellon [1] as the negative and overwhelming feelings many students experience when needing to use the library for an information need. Earlier research had begun investigations of library interactions from the users' viewpoint, and the widespread recognition of Mellon's findings stimulated further exploration of this phenomenon. The development of the Library Anxiety Scale (LAS) by Bostick [2] enabled quantitative measurements among large groups of students in the United States and abroad. Researchers using the LAS found five factors of library anxiety and identified the characteristics and antecedents most closely associated with this occurrence. Knowing which groups of users are most at risk, and developing the most appropriate approaches for intervention and alleviation are important steps to efficient library service to all.

Library anxiety is the feeling of being overwhelmed, intimidated, nervous, uncertain, or confused when using or contemplating use of the library and its resources to satisfy an information need. It is a state-based anxiety that can result in misconceptions or misapplication of library resources, procrastination, and avoidance of library tasks [3]. Public service librarians have long noticed this type of behavior, and pioneering studies of the reference interview process, and user's perceptions of libraries and librarians provided impetus for theoretical development.

It was discovered that library anxiety and its debilitating effects are found among all levels of undergraduates, graduates, and doctoral students, as well as among students in different countries. Some researchers have looked at library anxiety within the context of the Information Search Process (ISP) and its respective cognitive and emotional aspects as defined by Kuhlthau [4] in her ISP model. Since the publication of Mellon's grounded theory, a knowledge base for understanding the characteristics of those affected by library anxiety, and its factors, antecedents, and outcomes has been developed, but there still remain many questions and areas for further research and exploration.

2. CONCEPT AND STUDY OF LIBRARY ANXIETY

Library anxiety is defined by Reitz [5] as "confusion, fear, and frustration felt by a library user, especially one lacking experience, when faced with the need to find information in a library". According to her, among college and university students, library anxiety may be a cause of academic procrastination. The first formal study of this phenomenon was conducted by Constance Mellon in the mid-1980s using qualitative methods [6]. In 1992, Sharon Bostick developed the Library Anxiety Scale (LAS) to quantitatively measure: (1) barriers with library staff, (2) affective barriers, (3) comfort with the library, (4) knowledge of the library, and (5) mechanical barriers. In 2001, Doris Van Kampen developed the Multidimensional Library Anxiety Scale (MLAS) to reflect changes in information theory and search methods. In 2002 research on the topic began to increase with better designed research questionnaire for more inclusiveness.

2.1 Objectives of the Study

- To investigate into the concepts and history of library anxiety (LA).
- To examine theoretical bases of library anxiety
- To conceptualize library anxiety antecedents
- To pinpoint intervention strategies which address the various dimensions of library anxiety
- To consider the psychological and educational implications of library anxiety

2.2 Statement of the Problem

Issues which have been raised for consideration by previous studies on unwelcomed behaviours of library users in relation to inability to get the needed information included: patrons' cognitive state when thinking about an information need; the question-negotiation process of the reference interview; causes of user frustration when seeking information; and patrons' decisions not to seek assistance at all. There need for greater emphasis on communication and interpersonal skills training for librarians, and attention to the social dynamics of the user community were suggested in order to increase understanding and lessen both librarian and user frustration.

There is evidence from previous studies that up to half of all patrons leave the library without obtaining the book they are seeking. Yet, as Mirachi [3] noted “researchers continue to decry the significant lack of user studies among the literature, particularly behavioural research into how people interact with information and libraries”. This informed authors’ motivation for the review study on the library anxiety in order to examine its educational implications and recommend for its reduction in any library setting.

3. LITERATURE REVIEW

3.1 History and Theoretical Basis

Historically, the research of public service librarianship has focused on measurements of system interactions, circulation statistics, patron demographics, and policy developments without much investigation into library user experiences. By the late 1960s, theoreticians began calling for librarians to think about services from their users’ perspective. Many conditions later recognized as components of library anxiety surfaced in pioneering studies of the 1970s. These included the perception of librarians as being preoccupied or rude, and patron reluctance to ask for help for fear of ridicule by librarians. One study found that 65% of the students would not ask a librarian for assistance with their specific need because they: did not want to disturb the librarian; felt their questions were too basic; or had experienced dissatisfaction with a previous librarian interaction [7]. Such findings help to explain the conclusion of another study by Saracevic and Shaw [8] that up to half of all patrons leave the library without obtaining the book they are seeking.

By the early 1980s information had increased in complexity and availability, and became more crucial in people’s everyday lives. Libraries were employing new automated and computerized systems and patrons were faced with the challenges of learning to cope in this rapidly changing environment. New theories and methodologies were needed to research how people interacted with information, which was obviously more complicated than just “getting it” or “having it” [9]. Dervin and Nilan [10] perceived a gradual shift to the inclusion of more varieties of measurements and methods; from the strictly traditional scientific approach which measures user interaction with information through quantitative means, to more alternative approaches that recognize information as

constructed by humans whose behavior can and should be measured through qualitative as well as quantitative methods. They called this shift a “quantum and conceptual leap” in the field, they encouraged more researchers to take up their challenge to invent “new ways of looking at users and linking systems to them.”

3.1.1 Mellon’s ground theory of library anxiety

Like many public service librarians, Constance Mellon had long noticed the anxieties and hesitations many students displayed when using the library. She felt a more efficient library instruction program would help alleviate the problem, but had to convince skeptic faculty and administration of the need. Mellon found that 75-85% of her student participants described their initial library encounters in terms of anxiety and fear. Terms like “scary,” “overpowering,” “lost”, “helpless”, “overwhelming,” “confused,” and “fear of the unknown” were used repeatedly by the students [1]. She noticed a striking similarity to research in math and test anxieties, and felt that this new phenomena should also be considered within the anxiety framework. Mellon called her grounded theory “*library anxiety*”. She identified four sources for the students’ anxieties in her study:

1. The relative size of the library
2. Not knowing where resources were located
3. Not knowing how to begin library research
4. Not knowing how to proceed with library research

Embarrassment over their lack of competence drove their anxieties deeper; it seemed to them that all the other students knew what to do in the library, and only they did not. They felt their lack of library skills was shameful and were afraid to reveal their inadequacies, or “look dumb,” by asking a librarian for assistance. Mellon found that students became so overwhelmed and “anxious about having to gather information in a library for their research paper that they are unable to approach the problem logically or effectively.” [6].

3.1.2 Carol kuhlthau’s ISP

Kuhlthau [4] based her epistemology primarily upon ideas of personal construct theory. She developed a model of six stages of the Information Search Process (ISP), and describes the emotions, thoughts, tasks, and actions typical of each. Kuhlthau identifies stages three and four

of the ISP – exploration and formulation – as critical from the seeker’s emotional perspective. The exploration stage, when seekers are looking for general information about their topic in order to broaden their own understandings and construct new knowledge into their already existing knowledge, is fraught with increasing feelings of doubt, uncertainty, and confusion. Users often become discouraged, and especially at this stage, their sense of inadequacy may be so heightened that they abandon their task altogether. By the next stage, formulation, the users have succeeded in breaking through the threatening doubts of their earlier explorations and managed to focus their topic and the information they retrieve. The anxious feelings found in the ISP, especially at the information exploration stage, strengthen Mellon’s findings of the highly emotional experiences of many students when conducting library research.

Librarians had long observed behaviours of library anxiety and knew anecdotally that it existed, but no one before Mellon had so precisely studied and labeled it. Recognition of Mellon’s theory generated numerous discussions and studies on the influence of library user behavior, library graphics, bibliographic instruction, and the ISP on library anxiety. By 1992 a reliable instrument was developed to measure library anxiety quantitatively.

3.1.3 Bostick’s library anxiety scale

Influenced by Mellon’s research identifying library anxiety, Bostick [2] developed the LAS in order to discover whether the phenomenon could be measured quantitatively. The LAS is a questionnaire consisting of 43 Likert-type statements relying on self-reporting by the participants, with an internal consistency of 0.80 using Cronbach’s alpha coefficient. Through her study, Bostick identified five dimensions of library anxiety:

- Barriers with the staff – feelings by students that the librarians and library staff are preoccupied or unapproachable for assistance.
- Affective barriers – the “not knowing what to do in the library” situation first identified by Mellon.
- Comfort with the library – the physical comfort level students feel in the library building.
- Knowledge of the library – knowing where things are located and how to find one’s way in the building.

- Mechanical barriers – the perceived reliability and ease of using the library’s printers, photocopiers, computers, and other equipment.

3.1.4 Jiao and onwuegbuzie study on library anxiety

Through their profile studies using the library anxiety scale (LAS), Onwuegbuzie and Jiao [11] have identified many of the characteristics and situations of students most at risk for library anxiety. Demographic patterns, learning preferences, personality traits, study habits, and behavioural characteristics most closely associated with library anxiety have been explored. Participants in their studies include undergraduates, graduate, and doctoral students, and show that library anxiety is found among all segments of these pollutions; it is not a phenomenon limited to first-year students and novice researchers. Jiao and Onwuegbuzie [12] conducted much of their research by surveying large groups of students using the LAS and one or more other instruments that measure behavioural or demographic characteristics. They were thus able to identify major factors associated with each of Bostick’s five dimensions of library anxiety as well as factors relating to library anxiety in general [13].

Major factors associated with high levels of library anxiety include:

- A non-English native language.
- Working full- or part-time while studying.
- Not being a frequent visitor to the library.
- Being a high achiever.
- Displaying high levels of perfectionism.
- Not receiving library instruction.
- Negative self-perception in scholastic competence, intellectual ability, creativity, and social acceptance.
- Low cooperative attitudes in group tasks.
- Poor study habits

3.2 Conceptualization of Antecedents

Another important finding is that library anxiety is a state-based anxiety, an independent phenomenon from trait anxiety, meaning that being affected by library anxiety does not necessarily indicate having a high anxiety personality. Onwuegbuzie, Jiao, and Bostick [14] gathered findings from several studies into three categories of antecedents that interact to determine the overall level of library anxiety:

- Dispositional – particular personality traits.
- Situational – the environment of the particular stimulus
- Environmental – the demographic factors

This is illustrated in their model of conceptualization of antecedents of library anxiety in Fig. 1.

The below diagram illustrates the fact that there are three antecedents that interplay library anxiety. Each of them has issues that affect behavior in their use of library. The diagram is thus summarized:

1. Situational antecedents (18)
2. Dispositional antecedents (8) and
3. Environmental antecedents (7)

3.3 Intervention Strategies

Libraries engage in many proactive strategies to help educate their users and bring in new ones. They may not consciously be seeking specific mechanisms for reducing library anxiety, but with enough careful thought and planning, each individual effort can make a difference. Onwuegbuzie, Jiao, and Bostick [14] categorized

procedures into three types of approaches: library facilities and resources management, library instruction, and mediated informational services. Within each category are numerous intervention strategies that address the various dimensions of library anxiety.

3.3.1 Library facilities and resources

This category includes all the strategies that librarians and library managers employ to make their facility and resources as users friendly and welcoming as possible, ensuring a pleasant atmosphere within the physical compound that will encourage the patron to return often and without hesitation. It directly addresses the third factor of library anxiety identified by Bostick, “comfort with the library”, and can help alleviate Bostick’s fourth factor, “knowledge of the library,” and the fifth, “mechanical barriers”. Strategies in this category include effective library signage and graphics, logical space and furniture arrangements, library tours, in-library computing labs. Laptop stations and wireless availability, laptop lending, small group workrooms, coffee bars and areas, efficient document delivery systems, and fully functioning library consortia.

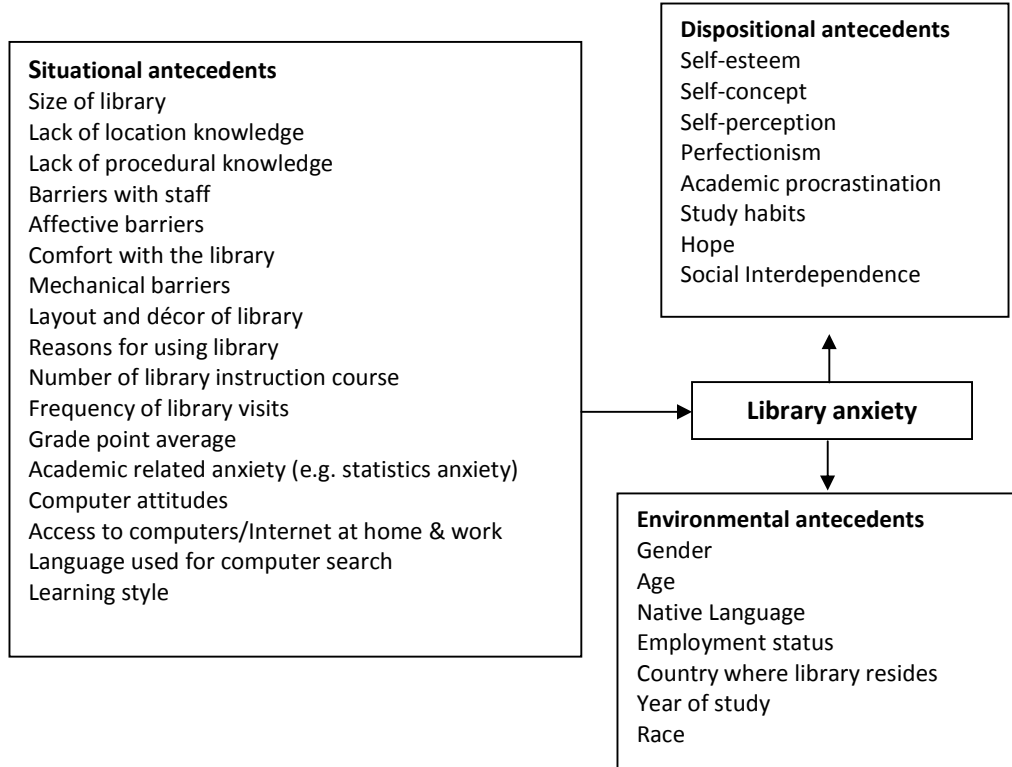


Fig. 1. Onwuegbuzie, Jiao, and Bostick’s model of conceptualization of antecedents of library anxiety

3.3.2 Library instruction /user education

This category includes all types of information literacy instruction, teaching users how to identify an information need, locate, evaluate, and use information effectively and ethically. It directly addresses the cognitive obstructions which Bostick termed “affective barriers.” Most instructional strategies involve professional library staff, and this librarian/patron interaction can also help alleviate Bostick’s first factor, “barriers with staff”. Academic libraries today see instruction as one of their primary tasks, and they perform this through numerous ways such as: classroom instruction; online tutorials; drop-in workshops; print and online help guides; and through multimedia technologies such as television broadcasts, Web-casts, streaming video, and podcasts. Targeted outreach and marketing campaigns to raise student awareness of library resources and services, “putting a familiar face with the place,” are also being used. In-person library instruction is an effective approach for significantly reducing library anxiety among college students [15].

Library user education can occur through any service but it primarily refers to formal instruction by librarians to help the user to use resources effectively. In most academic and public libraries user education is offered to students and other category of users in the following areas:

- Library orientation and users’ education
- Information search skills
- Literature search
- Citation Styles for term paper and projects
- Online Search strategies
- Internet resources and search skills

3.3.3 Mediated Informational Services

This category includes not only the traditional reference services such as: mediated reference assistance at the reference or information desk, active reference roving, and individualized information consultation, but also chat reference services, reference through instant message, e-mail, and online social network service. Successful interactions with staff will help alleviate the “barriers with staff” factor, but depending on the content of the query, the interaction may help dissipate any of Bostick’s five factors. The best strategies and procedures are secondary to a friendly, patient, welcoming, and effective library staff. The most efficient services and instruction devoid of any warmth solidifies preconceived perceptions of the rude

and uncaring librarian and an intimidating institution [16].

3.4 Review of Recent Empirical Studies

Absin, Zainab & Karim [17] carried out a study which explored library anxiety amongst Sudanese university students and identified factors that contribute to this phenomenon. The factors were identified using the diary approach collected from 51 third year undergraduate students who were taking the research method course at the Sudan University of Science and Technology for the first time. The analysis of diary entries revealed eight library constructs named Sudanese Library Anxiety Construct (SULAC). The constructs comprises:

1. Negative perceptions towards academic library environment,
2. Negative perceptions towards library staff,
3. Affective barriers,
4. Negative perceptions towards peers,
5. Negative perceptions towards library services,
6. Negative perceptions towards library collections,
7. Negative perceptions towards library regulations, and
8. Cognitive barriers.

Washington State University Libraries Guides [18] viewed library anxiety is a real and prevalent problem for many college students which includes is a fear of both the library space, which can be seen as overwhelming and confusing, and of the process of using the library to find materials. The state university library identified common signs and symptoms of library anxiety to include the following:

- Fear and uneasiness with the physical space of the library, often related to how big the library is.
- Fear of approaching a librarian or library worker to ask for help.
- Fear that you are alone in not knowing how to use the library.
- Feeling paralyzed when trying to start library research.

It is noteworthy that library users who find themselves encountering any of these fears, it is important to understand that they are not alone and that they can overcome library anxiety, though it may take a little time, and obtain some help from their librarians, instructors, and friends.

In their pilot study, conducted at a major public university in Ohio, Shelley and Frank [19] explore elements of information anxiety (which they defined as a combination of library anxiety and information technology anxiety) among second-semester freshmen enrolled in all iterations of both a traditional and a remedial first-year English course. The Information Anxiety Scale (an adaptation of Sharon Bostick's 1992 'Library Anxiety Scale') was the pilot study's primary measure. Study researchers wanted to examine which information anxiety elements registered the most statistical significance for respondents. Analysis of results revealed statistically significant findings between elements in the scale and previous research and library experience, sex, and race/ethnicity.

3.5 Psychological and Educational Implications

As Onwuegbuzie, and Jiao [11] noted, "Of all forms of academic-related anxiety, library anxiety appears to be the most common." The library environment has changed rapidly since the publication of Mellon's breakthrough study in which she systematically identified library anxiety over two decades ago, but the hesitations, inhibitions, confusion and lack of self-confidence students often display when using or contemplating use of the library for an academic need are still in evidence. Various epistemological approaches and theories are used to explore and explain this area of library and information user behavior.

As educational institutions cannot function effectively without libraries on the general note; students, in particular cannot excel if there is no constant orientation and training programmes organized for them on the use of libraries. This is the only way library anxiety will be minimized or completely removed from the students or newly employed faculty members who are yet to acquaint themselves with the library resources and operations. Library anxiety therefore, is a psychological challenge that has negative effect on teaching and learning process in educational institutions at all levels as well as individuals who wish to search and update themselves with information in the public library setting. The seeming 'library-phobia' of some people hampers their educational development, especially as it is arguably presumed that greater percentage of learning takes place outside the classroom. Libraries must be visited and library materials consulted on a personal or group basis.

4. CONCLUSION AND RECOMMENDATIONS

It has been observed that library anxiety is manifested in the form of negative feelings, fear, stress, distress, confusion and has debilitating effects on students' academic performance, which makes it a serious phenomenon for investigation by librarians, library setting notwithstanding. Through the use of Bostick's library anxiety scale (LAS) and other research methods, library anxiety has been quantitatively studied among large heterogeneous groups of students, and prominent characteristics and antecedents of students most at risk for library anxiety have been identified. Professionals in the library and academic fields have successfully used libraries for many years and may not remember or realize how intimidating the institution can be for many people. Mellon stresses that librarians and educators must acknowledge library anxiety as a common, legitimate phenomenon, and creates encouraging and successful experiences for the students in order to alleviate the anxiety. She notes that students' anxieties lessen after encounters with professional librarians and encourages more personal contact between librarians and students to help them see the library as truly relevant to their academic needs with friendly and helpful professionals to assist them. In order to reduce library anxiety among students and faculty library users, the followings are recommended:

- Library orientation and users' education should be a constant practice by libraries in order to have their users familiarize with library resources (in both manual and automated or digitized libraries) where electronic information resources are available.
- In the academic institutions, teachers should always give assignments which must be done in the libraries in order to inculcate constant library visit by students and teachers.
- In order to knock off every fear and anxiety in the use of the library, students, faculty and all categories of library users should instill the culture of constant library visit.
- Frequent library visit also builds confidence in library users' ability to discover and use needed resources with little or no assistance by librarians or library officers.
- Teachers and students should plan and implement their teaching and learning

schedules before deadlines. This will definitely curtail the extent of library anxiety, especially, students who formed the habit of visiting libraries only when examination approaches.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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