UNIVERSITY OF CALIFORNIA

Los Angeles

An Exploratory Case Study of Library Anxiety

and Basic Skills English Students

in a California Community College District

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Education

by

Scott William Lee

2011

DEDICATION

I want to dedicate this to my mother Amy C. Lee, a scientist and educator who always taught me the value of knowledge and a love of discovery. My mother was a brave woman who did amazing things such as traveling alone to Europe along as a young, Black woman in the 1950's and integrating personal computers into science education in the 1980's. Unfortunately, many of her dreams were limited by an unsupportive family, which curtailed her medical career, and her health, which prevented her from earning a doctorate. Before her death in 2005, we discussed my plans for earning this degree and she had hoped to be alive to see it. I know I could not have done this, or much else in my life, without her powerful influence.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGMENTS

ix

VITA

January 18, 1969	Born, Washington, DC

1991   A. A. in Visual Communications Technologies
Montgomery College
Rockville, Maryland

1993   B. A. in Media & Theatre Arts
Montana State University
Bozeman, Montana

1997   M. S. in Library Science
The Catholic University of America
Washington, DC

1994 - 1998   Reference Librarian
District of Columbia Public Library
Washington, DC

1998 - 2000   Reference Librarian
Sacramento Public Library
Sacramento, California

2000 - 2001   Library Technology Trainer
Sacramento Public Library
Sacramento, California

2001 - 2011   Information Competency Librarian
Antelope Valley College
Lancaster, California

PUBLICATIONS AND PRESENTATIONS

Counseling and Library Faculty Issues Committee (2010). Standards of practice for California community college library faculty and programs. Sacramento, CA: Academic Senate for California Community Colleges.

Bontenbal, K., and Lee, S. (February, 2009). SLO's for library science faculty. Presentation at the Counseling/Library Science Development Institute of the Academic Senate for California Community Colleges, San Jose, California

Lee, S. (Facilitator), Anderson, B., Schneider, T, and Williams, G. (January, 2008). Beginning easy assessment techniques for classrooms and programs. Presentation at the Accreditation Institute of the Academic Senate for California Community Colleges, Pasadena, California.

Burrell, C., and Lee, S. (2005). Online library tutorials at Antelope Valley College: Origin and development. Community & Junior College Libraries. 13(3).

Lee, S., and Burrell, C. (2004). Introduction to streaming video for novices. Library Hi Tech News. 21(2).

Lee, S. and Burrell, C. (November, 2003). Introduction to streaming video for novices. Presentation at the 105th Annual Conference and Exhibition of the California Library Association, Ontario, California.

ABSTRACT OF THE DISSERTATION

An Exploratory Case Study of Library Anxiety

and Basic Skills English Students

in a California Community College District

by

Scott William Lee

Doctor of Education

University of California, Los Angeles, 2011

Professor Richard L. Wagoner, Co-Chair

Professor Beverly P. Lynch, Co-Chair

This sequential, mixed-methods case study examined Library Anxiety in a

group of developmental English students attending eight of the nine colleges of

the Los Angeles Community College District. A sample of 191 students was

administered Bostick's Library Anxiety Scale (LAS) during the spring 2010

semester. Overall, levels for the LAS and it subscales were not high, but were

comparable to other higher education populations studied. No college showed

dramatically higher or lower levels than the others and most of the subscales

were equal to each other with the exception of the Knowledge subscale which was about seven to twelve percent lower.

Thirteen of the students who participated in the quantitative phase of the study agreed to be interviewed about their awareness of, use of and valuation of their college libraries. This data was examined to identify if high-anxiety participants differed in their responses from low-anxiety participants. Both groups demonstrated little awareness of their library or its services. The behavior and attitudes classroom instructors had the greatest effect on awareness and participants indicated they were seldom given assignments that required extensive knowledge or use of library resources. Levels of anxiety did have an effect on library use as high-anxious participants reported less use than low-anxious participants. Participants also reported extensive use of public libraries in addition to, or even instead of, their college library. Both groups placed great value on the library as a necessary resource for a successful college student. However, while most participants held the library, and librarians, in high esteem, they primarily used it for limited purposes such as finding a quiet place to study or to access personal computers.

CHAPTER ONE: INTRODUCTION

Approximately 40% of students entering community colleges in the United States are not prepared for college-level study and must enroll in courses in college that are at a pre-collegiate level (Parsad & Lewis, 2003). These students' academic abilities in math, reading and/or writing are below college level, perhaps significantly below. As a result, such students will need to take courses that are sometimes called *developmental* or *remedial* or are classified as designed for *at-risk* or *high-risk* students. In California community colleges (CCC's) such courses are called basic skills, which 70% - 80% of entering students need (Academic Senate for California Community Colleges, 2007, p. 1). This is not unique to community colleges. In 2001, the California State University system eliminated almost 7% of its freshman class (over 2,200 students) because those students failed to master basic math or English skills (Trounson, 2002 as cited in Bettinger & Long, 2005). However, California, like other states, has placed the primary responsibility for basic skills education into its community colleges making it part of the CCC mission and providing over 33 million dollars for the 2007-2008 academic year to support it (Academic Affairs Division System Office, 2008). Some states including Virginia, Montana, and Florida actually prohibit their public four-year universities from teaching such courses (Bettinger & Long, 2005). In the 2006 - 2007 academic year, over 700,000 California

1

Community Colleges students were taking at least one credit or noncredit basic

skills course (Academic Affairs Division System Office, 2008) out of a total

unduplicated student headcount of 2.6 million (Academic Affairs Division System

Office, 2008; California Community Colleges Chancellor's Office, 2009). That is

around 27% of students in CCC's receiving some basic skills training. As to why

so many community college students need these courses, the primary reasons

cited are poor high school preparation and returning adult students who have

forgotten these skills since learning them in primary or secondary education

(Boyer, Butner, & Smith, 2007). Common characteristics of CCC basic skills

students include being a first generation college student, being a new high-school

graduate, being an adult who has been in the workforce for several years before

returning to school, being from a cultural or ethnic minority, being an immigrant,

or not speaking English as a native language (Fulks & Alancraig, 2008, p. 2).

Students enrolled in remedial classes are less likely to persist than

students not enrolled in such classes (U.S. Department of Education National

Center for Education Statistics, 1996). However, students who complete their

developmental coursework graduate or transfer at equal levels to students who

arrive at college better prepared (Bettinger & Long, 2005). It is, therefore,

important to encourage the use of any and all resources of the campus that can

positively support the persistence of students. Alexander Astin's research (1975,

1985, 1996) has long shown the positive effects of students making connections

to their campus resources and other research shows that use of college facilities can increase the persistence of low-performing students (Churchill & Iwai, 1981). Specific to the positive effects of libraries, Kuh & Gonyea (2003) show that as students persist they make more frequent use of the library. This led the authors to the opinion that library faculty have a beneficial effect on student engagement and success. Additionally, numbers of hours spent in the library is a predictor of student retention (Mallinckrodt & Sedlacek, 1987) and use of the library has been shown to have positive effects on the retention of minority students (Kraemer, 1997; Mallinckrodt & Sedlacek, 1987). Considering the importance of retention to basic skills students, they should be encouraged to make use of all educational resources available – such as the college library – and educators need to understand any issues that could prevent students from using these resources.

A problem for some students is a psychological phenomenon called library anxiety (LA). There are a number of academic anxieties that can affect college students including math anxiety, test anxiety, information anxiety and library anxiety (Battle, 2004). Anxiety can be categorized into either trait anxieties or state anxieties (Battle, 2004). A trait anxiety is a person's inherent tendency to feel that the world is threatening or dangerous (Battle, 2004) while a state anxiety can vary over time and be specific to situations such as taking an exam or being in a library (Mech & Brooks, 1995). Therefore, library anxiety is a state-based anxiety (Onwuegbuzie, Jiao, & Bostick, 2004) in which students experience

uncomfortable feelings or emotions while in a library setting (Jiao, Onwuegbuzie, & Lichtenstein, 1996). Library anxiety is not uncommon for college students (Battle, 2004), who, when caught in a library-anxious moment, can feel tension, fear and a sense of helplessness (Jiao, et al., 1996; Onwuegbuzie, et al., 2004). It can occur at any point within the library use or search process (Kuhlthau, 1988, 1991) and can have a debilitating effect on a student's ability to complete assignments or develop proper information literacy skills (Onwuegbuzie, et al., 2004). Students who suffer from library anxiety will go to great lengths to avoid using an academic library and are more likely to avoid or delay starting or completing assignments that involve the library (Onwuegbuzie, 1997). Research into the characteristics of library-anxious students show that new students are more likely to suffer from LA than experienced college students with freshmen and sophomores showing higher rates than upperclassmen (Mech & Brooks, 1995). Other characteristics likely to identify a library-anxious student include being young, not being a native English speaker, being employed while going to school and infrequent visits to the library (Jiao, et al., 1996).

The purpose of basic skills education in community colleges is to prepare students to take college-level courses so they can successfully matriculate to a degree or to transfer. If and when basic skills students complete their developmental coursework and begin taking college-level courses, particularly English courses, they will begin to see significant demands on their information

literacy skills that will require the use of an academic library and its resources and services. The American Library Association defines an information literate person as someone who can "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (American Library Association, 2006b). There is wide recognition of the importance of information literacy as many regional and discipline accrediting agencies consider it a necessary outcome of a college education (American Library Association, 2006a). The escalating complexity and abundance of information and information sources increases the need for information literate people in all phases of society and it is of vital importance to college students who hope to succeed and graduate. Students who have an inherent fear of libraries face a significant psychological barrier to achieving these skills.

Significance

If basic skills students were to suffer from library anxiety, it could have a negative effect on their ability to become full and successful matriculating college students. The purpose of this study was to identify if LA was an existing and significant problem among basic skills English students in a California community college district and to explore if and how LA affected those student's interactions with college libraries on a cognitive, behavioral and affective level. The increased use of libraries and library services is the likely outcome for basic skills students when they begin taking college-level courses, especially transfer-level

English courses. Understanding if these students are being affected by negative emotions in regard to libraries and how those emotions may be affecting their awareness, actions, or value judgments with regard to academic libraries can be important to designing better and more effective basic skills and library/information literacy programs within community colleges.

The Study

This research was a descriptive case study investigation to explore the prevalence of library anxiety among basic skills English students in a large, multi-campus California community college District. Additionally, it sought to understand how LA affects the relationship between those students and their college libraries. Levels of library anxiety were measured by administering Bostick's Library Anxiety Scale (LAS) to basic skills English students in a CCC district. The LAS is a 43-question survey developed by Sharon L. Bostick in 1992 to measure levels of LA in those taking the survey. More information of the Library Anxiety Scale will be provided in chapter three. Students identified by their LAS scores as high library anxious or low library anxious were interviewed to discover how these two groups differed in their awareness of and use of the library on their campus and their value judgments of the library as a resource for higher-education study. The ultimate purpose of this research was to learn more about the relationship between basic skills students and community college libraries using the theory of library anxiety as a framework in which to explore.

Research Questions

1. What is the prevalence of library anxiety among basic skills English

    students in a large, multi-campus California community college district?

    a. What components of library anxiety have the most and least

        prevalence?

    b. What variations, if any, exist across colleges within the district?

2. How do low library-anxious and high library-anxious basic skills English

    students in a large, multi-campus California community college district

    differ in the use of their college libraries?

    a. How aware is each group of the array of services and resources

        available to them through their college library?

    b. How frequently does each group use their college library to

        complete educational and non-educational tasks?

    c. How does each group value their college library as a resource to

        achieve educational goals?

Client and Research Sites

My client was Deborah L. Harrington, the Project Director of the 2009

California Community Colleges Basic Skills Initiative (CCCBSI). Ms. Harrington

was also the Dean of Institutional Effectiveness and Student Success for the Los

Angeles Community College District (LACCD). The CCCBSI was funded by a

grant from the California Community Colleges Chancellor's Office. It was

initiated in 2006 and was created to improve student access and success in higher education through the use of credit and noncredit basic skills courses, English as Second Language courses and adult education programs. It is part of Goal Area 2 of the Strategic Plan for CCC's, which covers Student Success and Readiness (CCCBSI, 2009).

My research sites were eight of the nine colleges of the LACCD, which is the largest community college district in California and the United States. It had over 240,000 enrolled students (unduplicated headcount) for the 2007–2008 academic year which represented just over 9% of the total students enrolled in the entire California Community College System (California Community Colleges Chancellor's Office, 2009). In the 2007–2008 academic year, over 30,000 LACCD students were placed into basic skills English (LACCD Office of Institutional Research and Information, 2008).

Definition of Terms

For the purpose of this study, the following terms are defined below:

Library Anxiety is a term first coined by Constance Mellon (1986), but she did

not provide a concise definition of it in her originating article. However, Jiao

(1996) gives a straightforward definition:

Library anxiety is an uncomfortable feeling or emotional disposition,

experienced in a library setting, which has cognitive, affective,

physiological, and behavioral ramifications. It is characterized by

rumination, tension, fear, feelings of uncertainty and helplessness,

negative self-defeating thoughts, and mental disorganization, which

debilitate information literacy (p. 152).

Library anxiety: theory, research, and application (2004) by Onwuegbuzie

is the most thorough text available on the subject and, while it also does not give

a simple definition, it provides a collection of components that define and identify

library anxiety:

Library anxiety is time- and situation-specific inasmuch as the symptoms

only appear when students are in or are contemplating a visit to the library

(p. 30).

A student who experiences library anxiety usually undergoes either

emotional or physical discomfort when faced with any library or library-

related task, whether it is a routine responsibility such as returning a library book or a more complex task such as conducting an extensive library search. Library anxiety may arise from a lack of self-confidence in conducting research, lack of prior exposure to academic libraries, and the inability to see the relevance of libraries in one's field of interest or career path (p. 32).

Developmental Education (DE) is a term broadly defined by The National Association of Developmental Education (NADE) as:

A field of practice and research within higher education with a theoretical foundation in developmental psychology and learning theory. It promotes the cognitive and affective growth of all postsecondary learning, at all levels of the learning continuum (National Association for Developmental Education, 2009).

Boylan (1999), one of the leading researchers in developmental education, defines it as:

A continuum of services ranging from remedial courses at the low end to tutoring or learning assistance centers at the high end. Developmental education is something of an umbrella under which a variety of interventions designed to develop the diverse talents of students may fit. Developmental education is the whole of which remediation on the one end and learning assistance on the other end are both a part (p. 88).

10

Basic Skills is the term for DE used within California Community Colleges. The guiding definition of basic skills used by the Academic Senate for California Community Colleges (2007), which directed the 2008 CCCBSI, is:

> Those foundation skills in reading, writing, mathematics, and English as a second language, as well as learning skills and study skills, which are necessary for students to succeed in college-level work (p. 4).

Boylan's (1999) definition addresses the conceptual split between DE and remediation, but the ASCCC's (2007) does not. However, the ASCCC does discuss it at another point within the same document when it states:

> We believe the distinction between the terms 'remedial' and 'developmental' is significant. Remedial is defined as 'intended to correct, to supply a remedy.' This presumes that something is 'wrong,' and that the student must be responsible for correcting it. Developmental education does not judge the student or even the educational experience of the student prior to entering the new educational environment (p. 4).

Within U.S. community colleges, the most common form of DE intervention is the use of remedial courses (Boylan, et al., 1999, p. 88). For this study, remedial course enrollment is the primary form of participant selection.

Data Collection Methods

I negotiated access to one section of the highest level of basic skills, non-transferrable English courses at eight of the colleges of the LACCD and

administered the LAS to students in those classes. After that data was analyzed,

some students identified as high library-anxious and low library-anxious were

invited to participate in face-to-face, semistructured interviews about their

awareness of and use of the library on their colleges campus and what values

they place on the library as a higher education resource.

Delimitation

A delimitation of this study is that only students in the highest level of basic

skills English courses in the LACCD were invited to participate. Students

enrolled in lower levels of basic skills English or who are not taking basic skills

English courses were not invited to participate. Also, students were not invited

based on their enrollment in basic skills mathematics or reading courses.

Although, students who met the selection criteria may have also been enrolled in

those courses, the findings of this study are not necessarily generalizable to all

basic skills students in the LACCD.

Limitations

The limitation of this study is that it did not seek to identify causal

relationships between the management and organization of libraries or the

provision of library services and the behavior and attitudes of basic skills English

students. This makes the findings of this study not applicable as a best practices

collection for community college librarians developing services to basic skills

students. However, the recommendations that come form this study are useful for librarians to begin discussion and development of their own methods of service with an understanding of how those methods can affect and be affected by library anxiety within this population. Additionally, this study did not seek remedies to the problem of library anxiety among basic skills English students. Its goal was to explore, clarify, and elucidate the extent and nature of the issue and the relationship between these students and their libraries. It is hoped that the findings of this study will lead to the development of such remedies in later research.

Dissemination

I plan to disseminate the results of this research through both library science and developmental education journals and conferences. Examples of library journals include: *Library Journal*, *College & Research Libraries*, and *Community & Junior College Libraries*. The first is a widely read trade journal and the others are peer-reviewed and published by professional library organizations. I have previously been published in *Community & Junior College Libraries*. Professional library conferences are held by such organizations as the American Library Association (ALA), the California Library Association (CLA) – at whose conference I have previously presented – and the Association of College & Research Libraries (ACRL). Developmental education journals include *The Journal of Developmental Education*, a peer-reviewed journal published by the

National Center for Developmental Education, *NADE Digest*, and *Research and Teaching in Developmental Education*. I will also work with the Academic Senate for California Community Colleges (ASCCC) to participate in conferences and training sessions around the state to share the findings of this study. I have served two terms on the ASCCC Counseling and Library Faculty Issues Committee and have previously served on another Senate committee as well as presented and facilitated at some ASCCC conferences and teaching institutes.

Conclusion

Through this study, I wish to bring about two significant changes: (a) To encourage community college library faculty to reflect on their service to DE student populations with consideration of any anxiety-related barriers that may inhibit those students, (b) to significantly increase the communication between DE practitioners and researchers and academic library practitioners and researchers. Given the increased difficulty developmental education students face in completing a college degree and the value of providing support to these students, it is important to identify, understand, and ameliorate any barriers that can keep them from accessing and using support. Understanding if library anxiety is affecting DE students and exploring how those students interact and value their college library is significant to increasing the efficacy of developmental education programs and library/information literacy programs.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

As discussed in chapter one, the purpose of this study is to identify the

prevalence of library anxiety (LA) among basic skills students in a California

community colleges (CCC) and to explore how that population of students

interacts with and values the libraries on their college campuses. For this

chapter, the term developmental education (DE) will be used instead of basic

skills as it is the primary term used in the literature related to it. Basic skills is the

term used by the California Community Colleges Chancellor's Office for its

system-wide DE program. To collect materials for this review, databases for both

library literature and education literature within ERIC, ProQuest, Wilson Web and

EBSCOhost were searched. The Digital Dissertations database in ProQuest was

also used to locate information relevant to both fields as well as the Melvyl

Catalog, a union catalog of the University of California libraries, and WorldCat. In

addition, searches of the World Wide Web were conducted and the literature

reviews and bibliographies of articles, books, reports, and web-published

materials were examined.

There are four topic areas covered within this review. The first is library

anxiety whose research history goes back about twenty-five years; however,

there have been a significant number of studies conducted on it during that

period. The next topic examines the role of instructional support services (ISS) in

DE programs. This research shows that there are many parts to ISS in developmental education, however, libraries are generally not counted among them. Thirdly, it will look at the research related to academic library services to development students. This topic was examined partly as a response to the previous topic. The significant conclusion of this area of the research is that there are not enough connections between developmental education research, which virtually ignores libraries, and library research, which occasionally, but not consistently, discusses developmental education. The final section of the review is on the value of libraries to the persistence and success of college students. I will lay out research that shows positive connections between the use of libraries and good student outcomes.

Library Anxiety

There are two categories of anxiety, trait anxiety (an individual's inherent tendency to view the world as threatening or dangerous) and state anxiety (specific to a particular situation or stimulus that can vary in intensity depending on the situation) (Battle, 2004; Mech & Brooks, 1995). Academic anxieties are state anxieties as they appear in relation to specific stimuli. Common academic anxieties include math anxiety, test anxiety, computer anxiety, information anxiety, and library anxiety (Battle, 2004; Mohundro, 1999).

One of the earliest published studies on LA was conducted by Swope and Katzer (1972) at Syracuse University. The term "library anxiety" had not yet been

created and a specific focus on how libraries can cause anxiety in students was not the goal. The authors were investigating if students they saw in their library were reticent to seek help from a librarian (Battle, 2004), and discovered that many suffered from high levels of frustration when using the library (Swope & Katzer, 1972). Students were selected at random and given a structured interview to determine how many had questions and, of those who did, how many would seek help from a librarian. Of those who had questions, 65% said they would not seek help from a librarian (p. 163), even preferring to ask a fellow student instead. In their analysis, the authors theorized that a fear of appearing stupid may have played a part in this behavior (p. 164). Kosa (1982) surveyed 993 students at Burwood State College, a teacher's college in Australia, to examine what psychological barriers may prevent students from interacting with librarians. He found that an almost equal number of students (31% to 32%) preferred to ask a friend for help in using the library compared to going to the information desk (p. 109). When asked to indicate why they would be hesitant to seek assistance from a librarian, some said they were afraid of "appearing ignorant" or that they were "intimidated" by the reference librarian (p. 110). He also found that about 5% of students "simply give up if they don't find needed library material by their own effort: they do not ask anyone, not even their friends, for help" (p. 110).

Constance Mellon first coined the term "library anxiety" in the article

Library Anxiety: A Grounded Theory and its Development (Mellon, 1986). She

used grounded-theory qualitative research methods primarily involving analysis

of two years of student and instructor journals. From this, she determined that 75

to 85 percent of the students studied used terms of fear or anxiety in describing

the library (p. 162). Students in her study described themselves as library phobic

and indicated that using the library was something they dreaded all semester.

Students also described feelings of being lost or scared in the library, which they

likened to a maze. Mellon identified four causes for students feelings. Two were

related to the physical space of the library – the size of the building and its layout

– which they could not navigate (p. 162). The other two causes were conceptual

and related to the research process – or information literacy – itself (p. 163). In

addition to these students' anxious feelings about being in and using a library,

Mellon also discovered that most believed that other students were more

knowledgeable and competent in these skills which caused library-anxious

students to feel shame and be unwilling to ask questions for fear of revealing

their inadequacy and appearing stupid (p. 163). Mellon decided to use the term

"library anxiety" because of the phenomenon's close relationship to both math

and test anxiety in process and affect. She believed that "it seemed logical to

describe students' fear of the library as *library anxiety* [emphasis by the author]

and to consider treating it within the anxiety framework" (p. 163).

The next major leap in the study of library anxiety occurred when Sharon L. Bostick developed the Library Anxiety Scale (LAS) in an attempt to quantitatively test Mellon's qualitative theory (Bostick, 1992, p. 5). For her PhD dissertation, she developed a single research question of "Can a valid and reliable instrument be developed to measure Mellon's theory of library anxiety?" (p. 5), along with three sub-questions. Her study culminated in the creation of a reliable and validated 43-item survey to measure library anxiety in five areas: Barriers with staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers (Onwuegbuzie, et al., 2004, p. 15).

The creation and development of a quantitative method to measure library anxiety led to an increase in its study. Based on a search of the Wilson Library Literature & Information Database, between 1986 and 1993 there were six published pieces on the topic of library anxiety. After 1993, there were equal that number of articles by 1996. The ability to quantitatively measure LA made it easier to conduct research studies on the topic and compare data across studies. In addition, the rarity of qualitative research methods being used in library research (Mellon, 1986) made a quantitative tool more attractive; although part of the original purpose of Mellon's study was to stimulate interest in qualitative research methods among librarians. The first large study of LA using the LAS was conducted by Mech and Brooks (1995). They compared library anxiety to general trait anxiety among 153 students and found no connections (p. 173)

indicating that LA is separate from trait anxiety. They also created the first

portrait of what students who suffer from LA look like. They found, among other

things, that it has an inverse relationship to a student's academic experience

existing more in freshmen and sophomores than upperclassmen (p. 175).

Research Questions Asked and Student Populations Studied -- Findings

Most LA research has focused on the search for it in different groups of

students and identifying if specific psychological, demographic, or behavioral

aspects of students can be correlated to or predictive of LA. Most of this

research observed and measured LA through the use of surveys, primarily the

LAS which was used in a least 32 studies between 1986 and 2006 (Carlile,

2007). The research identified that students find the library a physically

intimidating place (Carlile, 2007; Mech & Brooks, 1995) and that an assortment of

fears and problems with self-perception seem to be the most important

contributors to LA (Carlile, 2007). Mellon's original study identified the propensity

for library-anxious students to feel that other students had a better understanding

of the library and that asking questions would create embarrassment (Mellon,

1986). Later research has since supported that conclusion (Jiao &

Onwuegbuzie, 1999b; Mellon, 1988). Mech and Brooks (1995) specifically found

negative correlations between students' levels of library anxiety and their self-

reported competence at using the library.

Anthony J. Onwuegbuzie and Qun G. Jiao are the most prolific authors on the topic of library anxiety having published over 20 articles together and/or with others and one of only two books on the topic, *Library Anxiety: Theory, Research, and Applications* (2004), which they wrote with Sharon L. Bostick. This book was created to be used as a general reference source and textbook on library anxiety for librarians, library researchers and library science graduate students. The other published book, *Library Rx: Measuring and Treating Library Anxiety, a Research Study* (Malvasi, Rudowsky, & Valencia, 2009), is a monograph detailing efforts to study and treat LA at Slippery Rock University. Onwuegbuzie and Jiao's research discovered a link between LA and academic procrastination (Onwuegbuzie & Jiao, 2000) and created a predictive profile of the library-anxious student by identifying students that were most at risk for developing LA (Jiao, et al., 1996). This study identified a number of predictive factors, which include limited college experience, being employed, low frequency of visits to the library, and not speaking English as a native language. The last factor is supportive of previous research by Goudy & Moushey (1984) who found that non-U.S. students can have greater difficulty using libraries. Jiao and Onwuegbuzie have also twice examined connections between race and LA. In their first study (Jiao, Onwuegbuzie, & Bostick, 2004) they noted that African-American graduate students displayed statistically significant lower levels of LA than Caucasian students. However, the students studied were attending different

types of universities with the African-American students attending Historically

Black Universities and the Caucasian students not. This prevented them from

ruling out factors related to school setting as having an effect. A replication study

(Jiao, Onwuegbuzie, & Bostick, 2006) with all graduate students attending the

same university did not find a statistically significant difference in levels of LA

between the two groups, though African-American students still showed lower

levels. These authors have also found connections between library anxiety and

student perfectionism (Jiao & Onwuegbuzie, 1998), correlations between learning

styles and different dimensions of LA (Jiao & Onwuegbuzie, 1999a;

Onwuegbuzie & Jiao, 1998), and that LA can effect student study habits (Jiao &

Onwuegbuzie, 2001). Onwuegbuzie (1997) also found that the quality of

research proposals submitted by graduate students were negatively effected by

high levels of library anxiety.

Research in ameliorating library anxiety has focused on intervention

models using a pre and post-test often around information literacy instruction

(ILI), which has been shown to reduce LA (Carlile, 2007; Veal, 2002). Mohundro

(1999) and Battle (2004) both used a quasi-experimental design to examine the

use of ILI and its effects on levels of LA in GED and international students,

respectively. Both found positive effects from such instruction. Van Scoyoc

(2003) compared traditional bibliographic instruction (BI) to computer-assisted

instruction and their effects on LA and found that traditional BI with a librarian as

instructor had a better effect than computer-assisted instruction. There is

research, however, that contradicts this. Dolman (1996) found no improvement

in the alleviation of LA through the use of ILI and other research has stressed

that one-shot information sessions may have no positive effect on LA and can

even exacerbate it by dumping too much information on students who are not

prepared to understand or process it (Carlile, 2007). In addition, research has

shown that cognitive-based classes with a heavy focus on information transfer

can increase students' anxieties and negative self-perceptions of themselves as

a library user (Kracker & Wang, 2002; Mohundro, 1999). Some researchers

stress that, to be truly beneficial, ILI should take into consideration both affective

and cognitive concerns in teaching research (Collins & Veal, 2004; Kuhlthau,

1988) with a focus on the research process (Zahner, 1992).

Undergraduate and graduate university students represent the largest

populations of students studied. Mellon (1986) looked at 6000 undergraduates in

her original two-year study and Mech and Brooks (1995) created their profile of

the LA student through the study of 500 undergraduates. Bostick (1992) used

community college and university undergraduate and graduate students in the

development of the Library Anxiety Scale while Jiao and Onwuegbuzie have

conducting the majority of their research on graduate students. Most students

studied have also been American, however, Shoham (2001) used the LAS to look

for LA in Israeli business students and Anwar (2004) used it to examine Kuwaiti

biology students. Neither of the last two studies found significant evidence of LA and Anwar (2004) suggested that the LAS may not suitable for non-American students.

Mech and Brooks (1995) found that LA decreased as students advanced in their years of study and Jiao (1996) confirmed this, seeing lower levels in graduate students compared to undergraduates. However, Onwuegbuzie and Jiao have found significant amounts of LA among graduate students. These researchers study LA in this population more than they study it in any other and have conducted more investigations on LA among graduate students more than any other researchers (Jiao & Onwuegbuzie, 1998, 2001; Jiao, Onwuegbuzie, & Waytowich, 2008; Onwuegbuzie, 1997). Ben Omran (2001) and Van Kampen (2003) have also researched library anxiety in graduate students confirming Onwuegbuzie's and Jiao's findings that doctoral students exhibited LA during their dissertation research.

Developmental Education (DE) and Instructional Support Services (ISS)

Developmental education has become integral to the mission of community colleges. Ninety-eight percent of U.S. community colleges offer at least one developmental course (Kozeracki, 2004) and it is estimated that over two million students each year would not persist in college without participating in DE (McCabe & Day, 1998). Also known as preparatory, compensatory, or remedial education (Clowes, 1980; Higbee, Arendale, & Lundell, 2005),

24

developmental education is a collection of courses and/or services for college

students who are not prepared to successfully matriculate at the collegiate level

in reading, English or mathematics. Some, however, define a distinct difference

between remedial education, which is associated with a curative or medical

approach to solve academic deficiencies (Kozeracki, 2004), and developmental

education, which includes non-cognitive developmental aspects of learning such

as locus of control, attitudes toward learning, self-concept, autonomy, ability to

seek help, and other factors not related to intellect or academic skill (Boylan &

Saxon, 1998, p. 7). Developmental education theory can be traced back to the

publishing of *The Student Personnel Point of View* in 1937 (National Association

of Student Personnel Administrators, 1989). Its stated goal was to encourage

colleges and universities to ". . . assist the student in developing to the limits of

his potentialities and in making his contribution to the betterment of society"

(American Council on Education, 1937, as reprinted by National Association of

Student Personnel Administrators, 1989, p. 39). The document was revised in

1949 to include academic assistance programs such as counseling (Higbee, et

al., 2005), and by the 1950's developmental education began to encompass an

holistic view of student learning (Kozeracki, 2002).

There is significant research on developmental education that covers

decades of time. This literature is heavily comprised of best practice reviews and

case studies and generally has a positive opinion of the value of DE. This does

not mean, however, that there are not critics of DE research or practices.

Calcagno and Long (2008) see a lack of rigor in the research on the

effectiveness of DE on student outcomes (p. iii), and Bailey (2009) questions the

effects of remediation and the lack of consensus on what college-readiness

actually is (p. 2). However, these voices represent a minority opinion. Most

authors support and uphold the value and effectiveness of DE and research into

best practices has identified a number of common characteristics of successful

DE programs. One characteristic consistently mentioned in the literature is the

provision of instructional support services.

Green and Milbourne (1998) call instructional or learning support "any

activity beyond a college program's prescribed content that contributes to

individual students' attendance, retention, learning, and achievement" (p. 1).

There are a number of services that can make up ISS for a campus or program.

McCabe and Day (1998) conducted case studies of ten successful DE programs

and created a list of instructional support services which includes: assessment,

placement, orientation, tutoring, advising, counseling, peer support, early alert

programs, study skills training and support groups (p. 21). Boylan (1999)

identified ISS as including tutoring services, learning labs, counseling and

academic advising. Roueche and Roueche (1999) consider tutoring, study

groups, and learning assistance centers to encompass instructional support. The

Academic Senate for California Community Colleges (ASCCC) (2007), in one of

the most comprehensive reviews of DE best practices available, characterizes ISS as support and assistance services in a lab or center that help DE students successfully move through courses (p. 62). They also note that instructional support services may be provided through locations that can have such names as academic support centers, reading centers, study skills centers, success centers, educational development centers, or resources centers (Academic Senate for California Community Colleges, 2007, p. 62).

While the concept of what comprises instructional support services can vary within effective practices research, what does not is the conclusion that it has positive outcomes for students (Academic Senate for California Community Colleges, 2007; Boylan, 2002; Casazza & Silverman, 1996; Starks, 1994). Roueche and Roueche (1999) see the value of academic support as a tool to compensate for the limitations in structure and resources in community colleges. Bailey (2009) believes that the types of ISS provided to DE students should be provided to all students as part of a recommendation to break the dichotomy between DE and college-ready students. Fike and Fike (2008) analyzed data for over 9,000 students in Texas community colleges looking for aspects that can predict retention. They found strong correlations between student participation in ISS and their retention in and completion of developmental reading and mathematics courses (p. 75) and Muraskin (1997) discovered that a focus on

developmental students was a common trait among community colleges with strong ISS programs.

Three aspects of instructional support services to developmental education have received more attention than others: assessment, placement and tutoring. The first two have been discussed because of controversies surrounding their use and effects, and the last because of the consistent positive evaluation it receives in the literature. In the creation of this review, I read nothing that took a negative or skeptical view of tutoring for DE students, with the only qualifier being that tutors be properly trained.

Roueche and Roueche (1999) strongly support the view that both assessment and placement should be mandatory and that voluntary placement should be abolished. They note that while community colleges often lack confidence in their assessment instruments, universities routinely use them to manage student enrollment. Mandatory assessment and placement is also supported by Hays (1994) and also McCabe (2000) who based his judgment on a study of approximately 600 DE students from 25 community college around the country. Boylan (2002) laments that although most colleges have mandatory assessment they do not have mandatory placement which he says, "undermines the entire concept of assessment as a means of promoting student success" (p. 36) and further states that "research has consistently shown that mandatory assessment and placement contributes to student success" (p. 37). An analysis

by Boylan (1997) of correlates between DE program components and student performance used data from over 160 colleges and universities around the country with a population of just under 6,000 developmental students. His research found that mandatory assessment had little relation to retention, however, it was positively related to success in DE courses.   In addition, he found that mandatory placement was also positively related to student success, but negatively related to retention, showing that fewer students were able to stay in the program, but those who did performed better. Boylan (1997) does conclude, however, that mandatory assessment and placement catches more students with the greatest needs, thereby leading to larger populations of the weakest students in DE programs who then drive down the program's retention rates.

There are those, however, who do not support the heavy use of assessment and placement. McCusker (1999) warns against the use of standardized testing in assessment citing concerns of both validity and cultural bias and Bailey (2009) feels there is a need to rethink assessment and replace it with a focus on student needs over placement in a sequence. He also stressed a concern over the lack of evidence that test scores can adequately predict success in DE or college-level courses and that a wide array of assessments and cutoff scores indicates a lack of agreement on how to properly measure college readiness (p. 3).

Tutoring has received much attention in the literature primarily because it is almost universally viewed as positive for DE students, especially when tutors are trained. The ASCCC (2007) examined best practices literature on developmental tutoring, which they call the most common function of a learning center, and support the use of trained tutors. McCabe and Day (1998), Boylan (2002), McCusker (1999), and Casazza and Silverman (1996) all identify the use of trained tutors as integral to a good developmental education program. Boylan (1997) found that programs using un-trained tutors saw no increase in student GPA's whereas for programs that were using trained tutors there was a positive correlation between use of the tutoring program and higher cumulative GPA's as well as higher rates of success in developmental English courses. This coincides with an earlier study by Boylan, Bonham, and Bliss (1992) which showed the use of trained tutors to be the strongest correlate of student success. Research has also shown that tutoring is a common practice in DE programs. Gerlaugh (2007) found that 89% of twenty-nine college DE programs around the country offered tutoring. It was the most common support service offered in their study with the next most common service, academic advising, offered in 79% of the college programs. Regarding tutor training, Casazza and Silverman (1996) define the necessary components of successful training as including learning theory, metacognition, and student motivation. They also stress the need for both pre-service and in-service training.

The Findings of Previous Literature Reviews

Literature reviews of DE best practices in support the role of ISS in developmental programs. McCusker (1999) created a review to identify the essential components of successful DE programs. She defined successful by student success in DE courses and student placement into college-level courses. This effort led her to conclude that counseling and support services should be mandatory and that learning assistance center activities should be integrated with classroom instruction (p. 103). Boylan's (1999) review led to his conclusion that good DE programs should focus on helping students integrate into the college environment through the use of counseling, advising, and enrichment activities (p. 6). Kozeracki (2002) reviewed the literature to identify the aspects of DE programs frequently associated with student success. Her list included mandatory assessment and placement, counseling and tutoring (p. 93). The ASCCC (2007) made several observations and recommendations related to instructional support services from their review. They recommended that counseling be mandatory and fully integrated, which means having counselors involved in program planning and evaluation, and that the counselors be specifically trained to work with DE students (p. 28). They also addressed the conceptual split between remedial and developmental education and felt that remedial efforts specifically target a deficit in skills while the developmental approach focuses on building the skills and attitudes of higher-order thinking and

31

learning (p.50). From that, they commented on the fact that many instructional

support services are given names such as 'labs' or 'clinics' which they felt

reinforces the remediation concept of fixing damaged students through a medical

model (Academic Senate for California Community Colleges, 2007, p. 63).

    The Role of Libraries

    It is noteworthy that this section of my review has, so far, failed to mention

or discuss any role for libraries in instructional support services to developmental

students. That is because the literature of developmental education also fails to

discuss such a role for libraries. A search of the document *Basic Skills as a*

Foundation for Success in California Community Colleges (Academic Senate for

California Community Colleges, 2007), a comprehensive collection of best

practices, fails to find either the word 'librarian' or 'library' even once in its 152

pages. However, another document produced by the ASCCC called

Constructing a Framework for Success: A holistic approach to basic skills (Fulks

& Alancraig, 2008), which was created as a handbook of successful strategies

and assessments for basis skills instruction, does cover four strategies used by

specific community college libraries in California when working with DE students.

These strategies were contributed by librarians at the colleges using them. This

is the only document I have discovered related to DE best practices to discuss

any role for libraries or librarians.

Community College Library Services to Developmental Students

As mentioned, when examining the literature of developmental education, there is little direct discussion of roles or functions for libraries within it (Breivik, 1974; Lindauer, 2007; McDermott, 2005; Rippey & Truett, 1983; Roselle, 2008). Library literature has research related to DE including both case studies and large research studies (De Jong & Eckard, 2005; Farrell, 2004; Roselle, 2008); however there is not a significant amount of it. Shaughnessy (1975) and Breivik (1974) noted over thirty years ago a general lack of research into academic libraries' service to *disadvantaged* students, with Shaughnessy (1975) noting that public libraries had investigated services to this group more than academic libraries (p. 443). This has changed over the intervening years, but there is still room for academic libraries, especially community college libraries, to increase their services to developmental students, take a leadership role in serving these students (Thomas, 2000) and further develop the research in this area.

In the 1970's and 1980's, Breivik (1974), Shaughnessy (1975) and Truett (1980) each examined multiple colleges in an effort to measure the amount and types of library services being provided to developmental students. Breivik (1974) examined libraries within the City University of New York and Shaughnessy (1975) studied eight colleges around the country. Both found limited numbers of campuses providing library services to DE students and that those services were quite limited. Truett (1980) looked at community colleges in

33

the state of Texas and found services to developmental students to be spread widely throughout the Texas community college system. The Texas system was second in size only to California's (Rippey & Truett, 1983, p. 43). Phifer and Person (1983) and Affleck (1992) both conducted surveys of community college libraries for services to developmental students and found another increase with Affleck (1992) finding that almost two-thirds of her respondents had even adapted library instruction for DE students.

After a significant gap in the literature during the 1990's (Roselle, 2009), there began to appear case studies examining the implementation of library and information literacy instruction projects aimed at DE students (De Jong & Eckard, 2005; Farrell, 2004) as well as an impassioned essay by Thomas (2000) calling for community college librarians to become involved, persistent, and cooperative participants and leaders in the education of developmental students at their campuses. By Roselle's study (2008) she found that all of the libraries she researched taught library skills to developmental students and that most provided other services such as embedding library instruction into reading and writing courses.

Types of Library Services to Developmental Students

Truett's (1980) study provided the first large-scale collection of data about the types of services libraries offer to their college developmental students. She sent a survey to each of the head librarians or library directors of the sixty

community colleges in Texas. This survey included questions about library

organization, services, materials, and instruction offered to DE students. After

collecting her data, she grouped the libraries by their levels of service into three

categories: *Lo* for libraries providing no services up to two services, *Average* for

libraries providing three to four services, and *Hi* for libraries providing five to ten

services. Examples of services offered include: library instruction to

developmental students, library handbooks in one or more languages, tutoring by

library personnel, personalized reference counseling, and if the developmental

program was managed by the library. She found that the mean number of

services was 3.3 and that 44% of the libraries in the study were at the Lo service

level with 28% of libraries at both the Average and Hi Services levels. The most

common service offered was library instruction (83%) followed by audio-visual

orientations (53%) and providing a library handbook to developmental students

(44%). The service least offered was providing a special edition of the library

handbook written specifically for DE students (2%). However, almost 90% of

libraries did report developing a relationship between the library staff and DE

faculty and, when examining the quality of that relationship, there was a close

split between libraries reporting a Lo, Average, or Hi relationship (40%, 30%, and

30% respectively). The categories were based on the number of types of

relationships that existed between the library and DE faculty.

Roselle (2008) conducted structured telephone interviews with 27 librarians from 25 community colleges around the United States. In selecting the librarians to interview, she specifically sought out those with knowledge and experience of library services for developmental students (Roselle, 2008, p. 24). The types of services she found included library skills instruction – which was offered by all of the colleges studied – outreach instruction to developmental reading and writing courses, and outreach instruction to academic success courses which are courses in how to be a successful college student and often required by DE programs. She also found that 59% of those interviewed said they had a focus on library anxiety in their instruction courses. She also presented one piece of anecdotal evidence that it did have a positive effect on students' levels of LA. Both of these studies show a significant increase in the numbers of services found from studies conducted in the 1970's. Shaughnessy (1975) found only three out of the eight libraries he studied had any services to developmental students and Breivik (1977) found a general lack of interest to meet the needs of educationally disadvantaged students by academic libraries.

Value of Libraries to the Persistence and Success of College Students

Research has shown that there exists a positive relationship between library use and experience and student persistence and achievement (Kuh & Gonyea, 2003). One of the early studies to look for such a connection was by Kramer and Kramer (1968).   At California State Polytechnic College, they looked

for and found a correlation between student persistence and the number of books checked out of the library by those students. The authors found that 73.7 percent of students who checked out books returned the following Fall, while only 57 percent of the students who did not check out books returned (Mezick, 2007, p. 562). They also identified that library use had different levels of correlation based on the major of the student. Humanities and language majors had the highest correlation while science and engineering majors had the lowest. The general trend of humanities and language students borrowing more books than science and engineering majors has also been shown in other research (De Jager, 2002; Wells, 1995). Barkey (1965) conducted a similar study focusing on freshmen and found like results to Kramer and Kramer (1968). Looking beyond checking out books, Knapp (1966) identified a positive correlation between student participation in a library skills program and their persistence, grades, and GRE scores. Breivik (1977), using an experimental design, also found that library instruction led to higher persistence. Russell (1982) found that students with high grade point averages were more likely to use the library but Hiscock's (1986) research failed to find such a connection. However, Hiscock (1986) did see a positive connection between use of the library catalog and academic performance. Self (1987) looked at student use of the reserve collection and found that it did correlate to academic success, though the differences were small. Kuh and Gonyea (2003) examined the value of undergraduate students'

experiences with the academic library and found that students who use the library more frequently are more likely to work harder, but they could not show a direct connection between library use and persistence or graduation rates.

There is also research examining the relationship between library expenditures and student success. Both Mezick (2007) and Hamrick (2004) identified positive connections between spending on the campus library and graduation rates. However, earlier research attempting to connect spending on library resources and student academic gains, specifically GRE scores, found no correlations or weak ones (Astin, 1968; Nichols, 1964; Rock, Centra, & Linn, 1970). All three studies were looking at the library in a broader examination of academic support services.

Most of the research in this area has focused on general populations of undergraduates. There is research that examines the effects on specific racial and cultural groups. Kraemer (1997) examined how Hispanic students academically and socially integrate into college, with a focus on two-year schools. She found three factors that contribute to integration, one of which was frequency of use of libraries. The other factors were formal and informal relationships between students and faculty. Mallinckrodt and Sedlacek (1987) looked at the use of campus facilities by race and its effects on student retention at the University of Maryland. They found use of the campus library and hours spent in the library to be significant predictors of persistence for all students with

library-related activities accounting for four out of seven significant predictors. They also discovered that the use of the library was the only academic activity to be a predictor of retention for African-American students, who were, outside of the library, more affected by recreational activities and access to a gym. This led the authors to state, "students who use the library are more likely to stay in school" (p. 31) and to recommend that use of the library be promoted by the academic and student affairs departments – including counseling centers – and that it be a part of freshman orientation.

Summary

Decades of research into library anxiety clearly demonstrates that it can be found in a broad array of higher-education student populations. From G.E.D. students to doctoral candidates, the research has found the presence of LA in all of the student categories studied. However, as this review shows, developmental students have not been a part of this research. Given the frequency with which it is found in other groups of college-going students, and that there is a tendency for it to decline as students progress, it is reasonable to conclude that it can be found in developmental student populations. This review also demonstrates that the Library Anxiety Scale is the primary tool used to identify levels of LA in students and has been used in the study of LA in all previous higher-education student categories. Therefore, its use for research in a previously untested group

39

of college students is warranted by that history and would be consistent with the preponderance of past research.

Additionally, this review shows that the efficacy of instructional support services for developmental students is supported by the opinion of experts in developmental education, by research in the field and by successful practices in colleges. However, this review also shows that libraries are generally absent from this research and discussion. Virtually none of the research I found mentioned any support for or encouragement of having libraries or librarians involved in the provision of support services to DE students. However, the beneficial effects of libraries on general student populations has been shown, as demonstrated by the citations in this review. This research generally concludes that libraries are a positive influence on the success and persistence of college students. Therefore, it can be argued that libraries should have a positive effect on DE students as well.

CHAPTER THREE: METHODS

Introduction

Previous research on library anxiety (LA) has discovered that different populations of college students—from freshman to doctoral candidates—suffer from LA. However, there has been no research to examine this phenomenon in developmental education (DE) students. The goal of this study was to examine how prevalent library anxiety is in a population of DE students in a California community college (CCC) district, or basic skills students as they are called in CCC's. Additionally, it examined how these students interacted with and valued their college libraries and if those interactions and valuations were affected by levels of LA.

This study was guided by two research questions and their sub-questions:

1. What is the prevalence of library anxiety among basic skills English students in a large, multi-campus California community college District?

   a. What components of library anxiety have the most and least prevalence?

   b. What variations, if any, exist across colleges within the district?

2. How do low library-anxious and high library-anxious basic skills English students in a large, multi-campus California community college district differ in the use of their college libraries?

a. How aware is each group of the array of services and resources available to them through their college library?

b. How frequently does each group use their college library to complete educational and non-educational tasks?

c. How does each group value their college library as a resource to achieve educational goals?

Research Design

I used a descriptive case study design to answer my research questions. Case studies are best used when attempting to answer how or why questions in a contemporary context (Yin, 2009) and are useful for the study of processes (Merriam, 1998), such as the interaction between basic skills students and college libraries. The case study also allows for the use of varied methods of data collection such as surveys and interviews (Yin, 2009). Descriptive case studies enable researchers to provide detailed accounts of phenomena and to provide description of topics for which previous research is not substantial (Merriam, 1998, p. 38). Such is the case with libraries and developmental education, as was discussed in chapter two. Although descriptive case studies are often deemed atheoretical (Lijphart, 1971), this study is grounded in the theoretical framework of library anxiety and it used quantitative and qualitative research methods.

I used a sequential, mixed-methods design to answer this case study's

research questions. I started with a quantitative data collection and analysis

followed by a qualitative data collection and analysis. This design allowed the

data analysis of the first phase of the study to provide structure to the data

collection of the second phase. The data analysis of the second phase could

then provide added depth to the data analysis of the first phase (Creswell, 2003).

First, I administered the Library Anxiety Scale (LAS) to basic skills students within

a California community college district. Some participants from that phase of the

study were then interviewed about their awareness of and experience with the

library at their college as well as what judgments they made about the value of

college libraries to their lives as higher education students.

A survey was applicable to answering the first research question and its

sub-questions because it allows researchers to reach large samples in an

efficient manner (Nardi, 2006). As this is the first attempt to identify the presence

of library anxiety in a DE population, the ability to examine a large sample

increases the credibility of its findings and the capability of it being generalized to

larger populations of developmental students. In addition, surveys use

standardized questions, allow for controlled answers and allow for testing their

findings against previous studies that have used the same instrument. The

survey instrument used here, the Library Anxiety Scale, has been used in over 30

previous studies (Carlile, 2007). The controlled nature of a survey also makes it

easier to question students about phenomena that they may have little

knowledge of, which, for this study, was likely given the lack of attention paid to

library-related issues within developmental education.

To answer the second research question of this study, and it sub-

questions, I used interviews, the most common form of qualitative data collection

(Merriam, 1998). In-depth interviewing helps researchers in their attempts to

understand other people's experiences and what meanings they make of those

experiences (Seidman, 2006). My goal was to understand how basic skills

students interact with the libraries on their campus and what values they place on

those interactions. Interviews allow a researcher to learn things about people

that cannot be observed such as feelings, thoughts, or how people interpret the

world around them (Merriam, 1998; Patton, 1990).

Research Sites & Participants

The sites for this study were eight of the nine colleges of the Los Angeles

Community College District (LACCD) and participants were students from those

colleges that were enrolled in sections of basic skills English courses one level

below the transfer-level English course (BSENG-1). The primary purpose of a

CCC basic skills English program is to remediate students who come to the

institution with English skills below or far below high-school graduate level and

advance them to that level before they begin transferable freshman composition

courses. As such, students in BSENG-1 courses are close to high-school

graduate level in their reading and writing skills. There are nine colleges that make up the LACCD: East Los Angeles College (ELAC), Los Angeles City College (LACC), Los Angeles Harbor College (LAHC), Los Angeles Mission College (LAMC), Los Angeles Southwest College (LASC), Los Angels Trade-Technical College (LATT), Los Angeles Valley College (LAVC), Pierce College (LAPC), and West Los Angeles College (WLAC). The only college not included in the study was LASC as I was not able to gain access to any BSENG-1 sections at that school. The rationale for choosing BSENG-1 students is that they were on the verge of taking the transfer-level freshman composition course, which normally involves completing a research paper and, thus, using library facilities and resources. In addition, these students should have a high enough reading level to complete the LAS.

The LACCD is the largest community college district in the state of California and the United States. It is spread over 882 square miles and serves students in thirty-six cities in the Los Angeles area (Los Angeles Community College District, 2010). It had a population of over 240,000 students for the 2007–2008 academic year which represented nearly 9% of the total students enrolled in the entire California Community College System (California Community Colleges Chancellor's Office, 2009). For the 2007–2008 academic year, LACCD had approximately 10,700 students who placed into BSENG-1, which represented around 30% of their total basic skills English student

population (LACCD Office of Institutional Research and Information, 2008). For the different colleges, there are variations in the size of their BSENG-1 population with ELAC having the largest at 2,112 students and LASC having the smallest at 143, for the 2007–2008 academic year (LACCD Office of Institutional Research and Information, 2008). The BSENG-1 populations for the other colleges are, in descending order: LACC, 2,088; LAPC, 1,624; LAHC, 1,540; LAVC, 965; WLAC, 837; LATT, 830; and LAMC, 635 (LACCD Office of Institutional Research and Information, 2008).

When compared to other districts in the state, the LACCD has a significantly larger basic skills population than the average. The California Community Colleges Chancellor's Office (CCCCO) provides enrollment data on basic skills students in the form of Full Time Equivalency Students (FTES). The process of estimating the number of FTES enrolled in a district is determined by taking the total number of student hours attempted and dividing that number by 525, which is the official number of class hours over the course of an academic year for a full-time student (15 hours per week multiplied by 35 weeks) (Academic Senate for California Community Colleges, 1999). For the 2007–2008 academic year, the average for all community college districts in the state of California was 1,866.53 basic skills FTES – the CCCCO did not disaggregate basic skills data between Mathematics and English – and the total for LACCD was 10,481.30 FTES (California Community Colleges Chancellor's Office, 2009).

The average for college campuses within districts was 1,148.63 FTES, which was surpassed by both LACC and ELAC, each of whom had more than double the state average (2,753.71 and 2,457.28 FTES, respectively) (California Community Colleges Chancellor's Office, 2009). Of the other colleges in the LACCD, only one other had more than the state average (LAVC with 1,288.53 FTES) while the others all had less than the state average by at least 20% with the lowest being LAHC which had 412.97 FTES, over 60% less than the state average (California Community Colleges Chancellor's Office, 2009).

For Fall 2008, all of the colleges of the LACCD had basic skills retention rates higher than the state average of seventy-nine percent. The lowest was LATT with an 81% rate of retention and the highest was LAVC with a 91% rate of retention (California Community Colleges Chancellor's Office, 2009). The LACCD average was eighty-six percent. The LACCD basic skills rate of success for Fall 2008 was 56%, which was just under the state rate of 57% (California Community Colleges Chancellor's Office, 2009). ELAC, LAPC, and LAVC all had rates of success better than the state (69%, 67%, and 64%, respectively), while the other colleges had lower rates with LAHC having a high rate, within that group, of 55% and LATT having the lowest rate of 43% (California Community Colleges Chancellor's Office, 2009).

English Courses

At most of the campuses of the LACCD, the BSENG-1 course was called English 28. The only campus that did not use this designation is ELAC, which had separated its BSENG-1 into four separate courses that were called English 61, English 62, English 63, and English 65. Each ELAC course covered the same English skills as the other colleges but used topics to base learning these skills around. These topics were: Personal Experience (61), Contemporary Issues (62), The Arts (63), and Fiction (65). However, the chair of the ELAC English Department informed me that they were planning to reduce their BSENG-1 course offerings to just English 28, becoming in line with the other colleges in the district (Kenny, J., personal communication, June 5, 2009). For all fall 2009 college catalogs, English 28 was called Intermediate Reading and Composition. ELAC also referred to their BSENG-1 courses by that title. Each catalog, however, described their course differently. Most of the catalog descriptions mentioned work in grammar and essay writing with LASC and WLAC not discussing either and ELAC only mentioning essay writing. All course descriptions described a focus on reading skills and all, except for LACC and LATT, discussed the course as designed to prepare students for English 101 (the first transfer level English course at all colleges) with WLAC specifically calling it a prerequisite. All of the course descriptions discussed a focus on writing skills such as paragraph writing, mechanics, spelling, punctuation, and sentence

structure. Only the LAHC course description mentioned introducing students to research techniques as a part of the curriculum.

Each college called its English 101 course College Reading and Composition I, and they were all three-unit courses that transferred to the California State University and the University of California. All but two of the colleges, within their catalog course descriptions, mentioned the writing of a research paper as part of the course. LACC and ELAC both mentioned expository writing; however, within a school setting this often involves writing research papers (Ball, Cooks, & Pettigrew, 1999). Although each catalog course description was unique to that college, most shared common language and components such as essay writing. In a few cases, the language in one course description matched another college's description indicating that one likely used their sister college as a model to base their description on.

LACCD College Libraries

Each college of the LACCD had its own library, which were staffed by librarians who met the CCC minimum qualifications of a Master's Degree in Library Science. Each campus had a faculty chair for the library and, at WLAC, the Chair directed both the library and the learning resources center. According to the National Center for Education Statistics, in 2006 libraries of the LACCD had an average of 4.93 full-time librarians which was slightly below the CCC average of 5.13 (Holton, Hardesty, & O'Shea, 2008). They were open an

average of 58 hours per week which is below the state average of 64 hours and, while the state average for transactions at the reference desk was 395 for the year, LACCD averaged 352 reference transactions (Holton, et al., 2008). General circulation transactions (15,284) were also below the state average (23,707).

There was significant variation among the libraries within the LACCD. ELAC had the highest number of hours of operation at 67 hours per week while LATT had the lowest at forty-nine. LAVC, at 64 hours, was the only other library to join ELAC in having open hours at or above the state average (Holton, et al., 2008). LAVC was also joined by LACC and LAPC in being above the state average in reference transactions at 477, 1078, and 447 respectively (Holton, et al., 2008). Each campus library also taught courses in library research. Most offered two library courses, which were Library 101 (Library Research Methods) and Library 102 (Internet Research Methods). Both were one-unit courses and were transferable. LASC and LATT only offered Library 101 and LAPC only offered Library 102. WLAC offered both courses in addition to other library instruction courses such as Online Legal Research and Information Literacy.

Site Access

My primary point of access to the colleges of the LACCD was through Deborah L. Harrington, who was the Project Director of the 2009 California Community College Basic Skills Initiative (CCCBSI) as well as the Dean of

Institutional Effectiveness and Student Success of LACCD. I was also helped by

Dr. Daryl Kinney who was the Los Angeles Area Regional Network Coordinator

for the CCCBSI and an English as Second Language instructor at LACC. I was

also provided advice and assistance from Dr. Gary Columbo, the Vice Chancellor

for Institutional Effectiveness of LACCD. With their help, I was able to make

contact with BSENG-1 instructors at eight of the nine colleges of the district. A

date and time was arranged with the instructor for me to come to their class and

administer the survey to their students.

Data Collection

The first research question was answered through the use of the Library

Anxiety Scale survey instrument. The second research question was answered

through in-person student interviews. Using such a design allowed the

quantitative and qualitative data analysis to provide depth and further

understanding to each other by seeing how the results from one reflected upon

the other.

Research Question One

During the spring 2010 semester, I administered the LAS to one section of

BSENG-1 students at the eight participating colleges of the LACCD. Paper

surveys were used as none of the classrooms had computers or access to the

Internet.   As discussed earlier, the LAS was created in 1992 to assess levels of

anxiety that individuals taking it feel toward libraries. The LAS has five subscales or dimensions: (a) barriers with staff (student perceptions about librarians and other personnel who work in the library); (b) affective barriers (student perceptions of their ability to perform library tasks); (c) comfort with the library (student perceptions of the library as being a safe and non-threatening place); (d) knowledge of the library (student perceptions of their familiarity with the library); and (e) mechanical barriers (student feelings about the use of library equipment and technology) (Jiao, et al., 2008, p. 951). Total scores from the LAS range from 43 to 215 with higher numbers indicating higher levels of anxiety. The 43 questions that make up the LAS are written as short personal statements to be agreed or disagreed with using a five-point Likert scale. Example statements include: 'The reference librarians are unhelpful'; 'I am unsure how to begin my research'; 'The library's rules are too restrictive'; and 'I can't find enough space in the library to study'. The LAS has been used in over 30 different studies on undergraduate and graduate students (Carlisle, 2007) in the years since its creation and is generally regarded as a reliable instrument for this purpose. The completed paper surveys were entered into SurveyMonkey to turn them into an electronic format. From there they were moved into PASW Statistics 18 for analysis.

Background Information Form (BIF)

Students taking the LAS were also asked to complete a BIF to collect additional data about the makeup of the students participating in the study (See Appendix A). I created it based on similar forms used in previous library anxiety research. The BIF collected data on age, gender, ethnicity, college units completed, employment, parental education level, educational goals, and most recent visit to the college library, any other library and the college library's website. The BIF also asked students to participate in the interview phase and described an offer of payment for their participation. This section of the BIF also collected the participant's email address and phone number. Any survey from a student who reported their age as less than 18 years of age at the time of the administration was discarded.

Research Question Two

I developed my own protocol for student interviews (See Appendix B). As this part of the study was the most exploratory, the interviews were semistructured. The interview protocol was designed to provide direction but with open-ended questions to give me the flexibility to respond to changes in the environment, react to and fully engage the interview participants, and identify and incorporate new ideas and concepts that emerged (Merriam, 1998, p. 74). The primary resource for developing the protocol were the sub-questions of research question two. The major themes of the protocol were use of the library,

53

awareness of library services, understanding of the purpose of a library on a college campus, and the library's role in the participant's development as a higher education student. I examined past research into LA in developing this protocol including Mellon's (1986) original study and similar research conducted by Onwuegbuzie (1997). Both used student journals to collect data. I also left room to alter my protocol, if needed, in keeping with the inductive and exploratory nature of this phase of the study. After completing about a third of my interviews, I changed the interview protocol adding questions related to topics that consistently presented themselves and removing some questions that were soliciting little valuable data.

To encourage participation, all students interviewed received a ten-dollar gift card. Additionally, one iPod nano and two iPod shuffles were raffled with all interview participants getting one entry in the raffle. However, despite this offer, I had significant difficulty garnering participants. I initially planned to interview 24 participants who would be defined as high-anxious or low-anxious based on having an LAS total score within the upper 20% (high-anxious) or lower 20% (low-anxious) of the range of all phase one participants. Because of low participation, I had to open the invitation to a larger pool of quantitative phase participants and no longer filter by scale score.   Students were contacted regardless of LAS total score and all who agreed to participate before the end of the spring 2010 semester were interviewed.

Consequently, a new definition of high-anxious and low-anxious had to be developed. High-anxious participants were defined as having an LAS total score above the LACCD mean and low anxious participants had an LAS total score below the LACCD mean. I also created a third group called neutral as some participants had scores within two points of the LACCD mean. This was virtually the same method as used by Ben Omran (2001) to classify study participants by LAS total scores: he used median instead of mean – my mean and median were essentially equal (102.07 versus a median of 102) – and he did not have a neutral group. My primary concern about using this method instead of the one I originally planned, is that the differences between anxiety levels among the low and high groups is no longer as significant and this may have made variations in their data less noticeable.

Data Analysis

A significant goal of this study was to collect new evidence in the form of interviews that can be combined with a type of data that has previously existed (the LAS). All of this focused on a population that has not been previously studied for library anxiety: developmental education students in community colleges.

Quantitative

Given the exploratory nature of this study, the quantitative analysis of LAS data was descriptive. The goal of descriptive statistical studies is to describe the way things are for the purpose of understanding the status quo (Light, Singer, & Willett, 1990). In keeping with the nature of descriptive statistics, I did not attempt to understand reasons or provide explanations but describe how and what things are.

The LAS assigns values of 1 to 5 for its five Likert Scale items for each of its 43 questions. The Likert items are Strongly Disagree, Disagree, Undecided, Agree and Strongly Agree. Strongly Disagree has a value of 1 and Strongly Agree has a value of 5. Twelve of the items on the LAS had to be key reversed before totaling the LAS score. After that the value of each answer was determined and then the answer values were summed which gave the student's total Library Anxiety Scale score. LAS total scores can range from a low of 43 to a maximum of 215. In addition, each question is also part of one of the five subscales, which are totaled with their counterparts to obtain each respondent's score for that subscale. Each subscale has its own numerical range with the smallest being from 3 to 15 (Mechanical Barriers) and the largest from 15 to 75 (Barriers with Staff). PASW Statistics 18 and Microsoft Excel were the software packages used for all analysis of quantitative data.

I examined the surveys to first identify the total library anxiety score for each participant. Then the scores for each subscale were calculated for each participant. All participant data was coded by college so that aggregate scores could be identified for each college for all six scale scores (the five subscales and the LAS total score). Using univariate analysis, the means, medians, modes and standard deviations were determined for each college and for the district. Frequency distribution tables were developed for each college and for the district, along with histograms, to graphically display the data and identify any patterns among colleges.

Data also underwent bivariate analysis to identify correlational relationships between scale scores and information from the BIF. Additional frequency tables and histograms were developed for each college and the district. This analysis also allowed me to compare and contrast my results to that of previous research that used the same correlational factors.

Qualitative

The qualitative data of this study was analyzed using a social-anthropological approach. The goal was to describe the connections between the libraries and the participants within the district from the participants' point of view. I also wanted to understand the perspectives of the participants regarding the value of libraries to higher-education students. I used a three-phase analysis process for my qualitative data: (a) I reduced the data through coding to focus

and simplify the transcripts; (b) I displayed the data to organize and compress the transcripts and the results from the coding; (c) I identified regularities and explanations to draw conclusions and determine meanings (Miles & Huberman, 1994).

To begin, I created an initial set of codes based on the study's research questions and on the sub-scales of the Library Anxiety Scale. This allowed me to begin coding grounded in both the theory guiding the study and the data I already had for each participant, that being their LAS and subscale scores. The code list was refined and received more detail once analysis began and the data started to show how it fit, or did not fit, into the existing code. Since this study explored an existing theory within a new population, I felt it was important to start with a theoretical structure while maintaining the ability to be open to any inferential meaning coming out of the data. I examined the transcripts looking for blocks of text that provided categories or regularly occurring ideas or phrases. I looked for larger more conceptually inclusive codes and smaller more differentiated ones (Miles & Huberman, 1994). I then identified the frequencies with which they occurred to determine if and how they should affect the code list. The initial coding analysis ended when all important pieces of texts were classified and the coding categories felt saturated and regularly occurring (Miles & Huberman, 1994).

After the first level of coding, I used pattern coding to find repeatable regularities (Kaplan, 1964) and increase the inferential nature of the codes. This second level of coding was done to group data into larger and more general patterns and to reduce the number of themes. I looked for explanations, relationships, and theoretical constructs (Miles & Huberman, 1994) and developed codes based on the patterns that arose from that. These codes were applied to the interview transcripts for proper fit by examining if the previously derived blocks of text could be properly categorized by the new codes. If not, the pattern codes were adjusted by reexamining the first stage of coding and creating new pattern codes. I used HyperRESEARCH to manage my codes and to assist in analyzing the results of the coding. It also allowed for the creation of code maps to graphically display the relationship between different levels of coding. This was used to analyze how the initial codes fit into the pattern codes and how both of those codes fit into the themes of the three sub-questions of research question two: awareness of libraries, use of libraries, and valuation of libraries. If first level codes fit within a sub-question theme but did not match a pattern code, the pattern codes were reexamined and, if needed, new pattern codes were created.

Once coding was complete, data displays were created to derive meaning from the patterns. My data displays used matrices, which allowed me to see concepts and count frequencies. My initial displays were based on the data that

was available prior to starting data analysis, which was the quantitative analysis data of the participants that were interviewed. Types of data that went into the intersection boxes included important blocks of text such as quotes, notes, and descriptions. Patterns and repeating themes and their frequencies were also entered here as well as quantitative data that lent meaning to the qualitative data such as student and college LAS scores and LAS total score categories (high, low, neutral). As the data analysis generated new ideas, additional displays were created to better understand what I was seeing and to make sure that the analysis process was inductive.

I employed several techniques for generating meaning and drawing conclusions from my displays. I re-examined for patterns and themes looking for similarities and differences in categories of variables (Miles & Huberman, 1994). I looked for patterns that reinforced the findings of the pattern coding as well as patterns or themes that contrasted them. Because the interviews were exploratory, I employed counting to numerically analyze the patterns and themes for consistencies. Relationships between variables were examined and I also looked for logic chains. Both tactics allowed me to identify how the different themes did or did not relate to each other and how one could lead to and affect the other.

Validity

The primary tool of internal validity was the use of multiple sources of information that were collected by multiple methods and triangulated. Interview data from participants was compared with their LAS data for consistency or lack thereof.   Because qualitative participants had to also be a part of the quantitative data collection, this data was available for all those interviewed. Additionally, the libraries at four of the five colleges where participants were interviewed were questioned about what services, if any, they offer to basic skills students. This data was compared to participants' reported levels of awareness to determine if library activities had any affect.

To achieve external validity, I looked for data and themes from the study's findings that could be applied to the theory of library anxiety (Ritchie & Lewis, 2003; Yin, 2009). As this was the first attempt to study LA within developmental education students, important discoveries about this population can enhance the theory. Both quantitative and qualitative analysis findings were compared to previous research in LA theory for confirmation of past conclusions and the discovery of new ones, especially in terms of how this type of student population is similar to or different from previous groups studied.

A chain of evidence was maintained for this study. For the LAS, paper copies were developed from an electronic version sent to me by Dr. Bostick. The final version used in this study was reformatted from what was sent by Dr.

Bostick solely for issues of appearance and presentation on the page. There

was also one small change in the content of the LAS. The second question of

the original survey uses the word "university". I changed it to "college" which was

more appropriate for the population being studied. This change was approved by

Dr. Bostick before any data was collected with the LAS.   After establishing a

date and time with each BSENG-1 instructor, photocopies of the LAS and BIF

were made and stapled to each other. I traveled to the college and administered

the survey to the all students present who were willing to participate. The

completed surveys were put into an envelope that was coded with an

identification number to indicate the college, course section and instructor of the

class it was administered to. A spreadsheet of the envelope codes was kept on

my personal computer. The data from each completed LAS and BIF was entered

into SurveyMonkey. The envelope code was also entered. Once a course

section was input into SurveyMonkey, the now electronic data was copied into

PASW Statistics 18 on my personal computer where a record code was added to

each student's BIF and LAS data that was combined into one record. All analysis

data generated by PASW Statistics 18 was kept on my personal computer. All of

the paper versions of the LAS and BIF were kept in their original envelopes and

stored in a locked file cabinet in my home.

All interviews were recorded using an iPad with voice recording software.

These digital files were downloaded to my personal computer and transcribed by

me using Express Scribe and Microsoft Word. Each transcript was kept as a separate electronic file with a unique file name. These files also contained the date, time, and location of the interview and contained the record code from PASW Statistics 18 for the interview participant. The transcripts were printed for analysis and the paper versions had the file name of the specific electronic transcript file it represented. Transcripts were also loaded into HyperRESEARCH for coding. Coding products from HyperRESEARCH were printed for further analysis. Both the paper transcripts and coding products were kept in a locked file drawer in my home.

To achieve confirmability, all information from the study exists in digital form. Any paper information that did not have a digital copy or that contained information that differs from its digital copy, such as color codes or notes, were digitally scanned. In addition, a collection of data and materials from the study was developed to help future researchers in the area understand and repeat the case study process that I used. This collection contains a variety of types of information including: transcripts that have been stripped of identifying data, Library Anxiety Scale analysis data presented in spreadsheets, a chronology of the steps and procedures of all phases of the case study including data collection and analysis, case study notes from data collection and data analysis, qualitative analysis products such as code lists and data displays, and a copy of this paper. In addition, there is a catalog of the collection that organizes the materials within

it by type, chronologically and by the library anxiety subscales to which they relate.

The Library Anxiety Scale

Sharon L. Bostick (1992) tested the validity and reliability of the LAS when she created it for her Ph.D. dissertation nearly 20 years ago. This represented a significant portion of her efforts in that work. This effort is detailed in chapters three and four of her dissertation. Additionally, a significant number of studies have been done on the LAS and with the LAS that have further confirmed its validity and reliability (Collins & Veal, 2004; Jerabek, Meyer, & Kordinak, 2001; Jiao & Onwuegbuzie, 2002; Onwuegbuzie, 1997; Onwuegbuzie, et al., 2004). The Library Anxiety Scale has proven to be a reliable tool for measuring LA in a broad array of higher education student populations with sound psychometric properties (Onwuegbuzie, et al., 2004). Although developmental students have not been a part of the groups studied, undergraduate to graduate students have been studied as well as university and community college students. The level of research put into the development of the LAS followed by the amount research conducted on and with the LAS makes it a reliable instrument for use in this study. Using the LAS with basic skills students will further add value to it and its use within higher education.

Administration of the LAS

The primary concern related to the administration of the LAS is that the process will create errors. To address that concern, I conducted a pilot study at a community college not connected to the LACCD. I administered the survey to one group of students in a basic skills English course one level below transfer English. This gave me the opportunity to identify any problems that could have arisen in the administration process as well as learn of questions or confusions that may have come from students taking the survey. I also learned that it took approximately 20 minutes to complete an administration, which helped me in negotiating class access with English 28 instructors.

Protection of Participants

Steps were taken to protect the participants in this study. Study participants were made aware that participation is completely voluntary and they were informed of the purpose for collecting their data. An announcement script (See Appendix C) was read aloud at each survey administration that informed students of this and the interview invitation script also covered it (See Appendix D). Only participants over 18 years of age were included and all were asked to sign an informed consent form at both stages of data collection (See Appendix E). During the qualitative phase, participants were also recorded being asked of their willingness to participate and to be recorded. Each participant's responses were confidential and all instruments and transcripts were coded without names.

When data was collected, the original completed surveys, interview recordings and transcripts were maintained and stored by me in my home in a locked file drawer and on my personal computer. I did not turn it over to other individuals or organizations for storage or management. The information entered into SurveyMonkey requires a username and password to access and all electronic information including transcripts, information entered into PASW Statistics 18 and HyperRESEARCH stayed on my personal computer plus one off-site backup location that required a username and password to access. Upon completion of the study, all original surveys and background information forms as well as the digital recordings of the interviews were destroyed so that the data products left cannot be connected to a particular participant. All protocols for my interaction with participants were reviewed and approved by the Institutional Review Board of UCLA.

Summary

The goal of this exploratory research study was to identify how prevalent library anxiety is among basic skills community college students and how those students connect to and interact with their college libraries. This research was a descriptive case study that used quantitative and qualitative data collection and analysis procedures to examine its questions. A survey, the Library Anxiety Scale, was used to identify levels of library anxiety in basic skills students at a large, multi-campus community college district. This instrument has a significant

history of use and validation. Some of the participants who completed the survey

were interviewed about their awareness of and use of the libraries at their

colleges and how they value those libraries as a resource to achieving their

higher education goals. This study provides further exploration of the theory of

library anxiety and deepens its current body of research.

CHAPTER FOUR: FINDINGS

Introduction

The goal of this descriptive case study was to explore if and how much basic skills English students in a community college district are affected by library anxiety (LA) and to better understand how these students use and value libraries. This study was guided by two research questions and their sub questions:

1. What is the prevalence of library anxiety among basic skills English students in a large, multi-campus California community college District?

    a. What components of library anxiety have the most and least prevalence?

    b. What variations, if any, exist across colleges within the district?

2. How do low library-anxious and high library-anxious basic skills English students in a large, multi-campus California community college district differ in the use of their college libraries?

    a. How aware is each group of the array of services and resources available to them through their college library?

    b. How frequently does each group use their college library to complete educational and non-educational tasks?

    c. How does each group value their college library as a resource to achieve educational goals?

This study used a sequential, mixed-methods design. Quantitative data was collected to answer the first research question and its sub questions, so its analysis will be first. Qualitative data was collected to answer the second research question and its sub questions, and its analysis follows.

What is the prevalence of library anxiety among basic skills English students in a large, multi-campus California community college District?

Description of Sample

This section will detail the demographic characteristics of the sample to provide background of the study population. All population statistics for both the Los Angeles Community College District (LACCD) and the LACCD basic skills program are from the California Community College Chancellor's Office (CCCCO) (2010) for the Fall 2009 semester. Ethnicity categories used in this study are the same used by the CCCCO.

The participants of this study were 191 students enrolled in sections of English 28 at eight of the nine colleges of the LACCD during the spring 2010 semester (See Table 1). English 28 is the last basic skills English course before transfer-level English throughout the LACCD. The only college not sampled was the Los Angeles Southwest College as access to a class section could not be negotiated. All surveys were administered by me between March and April of 2010. Survey administrations were conducted during a class session at a date and time arranged between myself and the class instructor. The survey

69

instrument consisted of Bostick's (1992) Library Anxiety Scale (LAS) and a

Background Information Form (BIF) developed by me for this study. Taking the

LAS produces six scores for each participant, which are a total score and five

subscale scores that comprise the total. These subscales are: (a) barriers with

staff (student perceptions about librarians and other personnel who work in the

library); (b) affective barriers (student perceptions of their ability to perform library

tasks); (c) comfort with the library (student perceptions of the library as a safe

and non-threatening place); (d) knowledge of the library (student perceptions of

their familiarity with the library); and (e) mechanical barriers (student feelings

about the use of library equipment and technology) (Jiao, et al., 2008, p. 951).

The BIF asked questions related to participant's ethnicity, age, gender, college

units completed, employment, parental education level, educational goals, and

most recent visit to a library and the college library's website.

Table 1

Location and Dates of Survey Administrations

College	n	Date
Los Angeles Mission College (LAMC)	28	3/1/10
Los Angeles Trade-Technical College (LATT)	23	3/3/10
Los Angeles Valley College (LAVC)	29	3/4/10
East Los Angeles College (ELAC)	34	3/10/10
Los Angeles Harbor College (LAHC)	20	3/10/10
Pierce College (LAPC)	24	3/15/10
West Los Angeles College (WLAC)	7	3/24/10
Los Angeles City College (LACC)	26	4/13/10
Total	191	

Of the survey participants, Hispanic students comprised the largest group sampled representing half of the total sample population. White Non-Hispanic students were the second largest group followed by Asian, African-American, Multiracial, Filipino, and American Indian/Alaskan Native students. Students who did not indicate any race or ethnicity represented 8.38% of the students surveyed (See Table 2).

Table 2

Ethnicity of Sample Population

Ethnicity	n	%
Hispanic	96	50.26
White Non-Hispanic	27	14.14
Asian	23	12.04
African -American	20	10.47
Unknown	16	8.38
Multiracial	4	2.09
Filipino	3	1.57
American Indian/Alaskan Native	2	1.05
Total	191	100

The percentages and rankings of the students sampled differ from the basic skills population for the LACCD as well as the overall LACCD student population. African-Americans students represented the second largest group of LACCD basic skills students and the third largest group for total LACCD Students, but were the fourth largest for the study. Asian students ranked fifth in

both basic skills and overall LACCD student population, but were the third largest

group of the study at 12% of the sample (See Table 3).

Table 3

Ethnicity of Study Sample Compared to LACCD Basic Skills Students and LACCD Students (in Study Rank Order)

Ethnicity	% of LACCD Basic Skills	LACCD Basic Skills Rank	% of LACCD	LACCD Rank
Hispanic	45.28	1	47.32	1
White Non-Hispanic	12.07	3	16.36	2
Asian	5.94	5	8.64	5
African -American	25.03	2	13.31	3
Unknown	8.65	4	10.57	4
Filipino	1.26	7	2.98	6
Multiracial	1.48	6	0.51	7
American Indian/Alaskan Native	0.28	8	0.32	8

For gender, there were 98 males, which was 52.13% of the study

participants, and 90 females, which was 47.87%. These numbers are

incongruous with the LACCD basic skills student population and the LACCD

overall, which both have female majorities of 64.79% and 56.71% respectively.

There were three participants who did not provide gender information.

The median age of the study population was 21 with a standard deviation

of 8.1 years. The minimum age was 18, the cutoff age for participating in the

study, and the maximum was fifty-four. The mode for the group was nineteen.

The CCCCO provides age information for the LACCD and its basic skills program

in age groups. To make comparisons, study participants were put into analogous

groups (See Table 4). For the study, the largest age group studied was 20 to 24

years olds who represented 38.3% of the sample. For LACCD basic skills, 20 to

24 year olds are the second largest group but are the largest group for the district

as a whole. Participants 19 or Less are the second largest group for the study

and for the LACCD overall, but the largest group for basic skills students.

However, due to the cutoff age for the study, this group only includes 18 and 19

year olds while for the LACCD and its basic skills program, this group would

include students younger than eighteen. Three participants did not provide their

age.

Table 4

Comparison of Age Groups Between the Study Sample, LACCD Basic Skills and
the LACCD Overall (n=study participants)

Age Groups (n)	% of Study	% of Basic Skills	% of LACCD
19 or Less (55)	29.26	29.26	25.72
20 to 24 (72)	38.30	26.37	28.94
25 to 29 (22)	11.70	12.90	14.03
30 to 34 (16)	8.51	7.74	8.20
35 to 39 (8)	4.26	6.01	6.13
40 to 49 (11)	5.85	9.94	9.34
50+ (4)	2.13	7.79	7.63

There were clear differences between the study population and the larger

population of the LACCD and LACCD basic skills students. However, I do not

believe this creates a problem or limits the applicability of the results of this study

to the wider LACCD basic skills population. The only inclusion criteria for this

study was that participants be registered for and attending the last basic skills English course before transfer (English 28) and that they be 18 years old or older. All study participants met both criteria, so the value of the participant group is not affected by percentage differences in ethnicity, gender, or age.

The BIF also asked participants to provide information on college units completed, educational goals, highest level of education for any parent, number of hours of employment per week, whether the current semester is the participant's first semester, most recent visited the campus library, most recent visited any library, and most recent use of the college library's website. Table 5 presents participant responses to these areas of the BIF.

For 84% of the participants, the spring 2010 semester was not their first semester in college. However, three-quarters had completed no more than 30 units of college courses. Earning a bachelor's degree was the most selected educational goal followed by earning an associate's degree, and over half the participants came from households where their parents had no college experience. Over a third of the participants do not work at all while close to one-quarter work full time. One-third of the participants had visited the campus library within the week of taking the survey, but one-quarter had never been to the library or could not remember the last time they had visited. Over a third had visited a library within the previous week but around a fifth had never visited any library or were unable to remember the last time they had. The majority of the

participants had never visited the website for the college's library or could not

remember the last time they had.

Table 5

Counts and Percentages of Participant Responses to the BIF

BIF Categories	n	%
Completed Units of Instruction (n=186)		
<10	55	29.6
10-30	86	46.2
30-60	36	19.4
>60	9	4.8
Educational Goal (n=186)		
Take Courses	5	2.7
Job Training	22	11.8
Associate's Degree	47	25.3
Bachelor's Degree	85	45.7
Graduate Degree	27	14.5
Parental Education Level (n=182)		
Some High School	58	31.9
High School Diploma	43	23.6
Some College	43	23.6
Associate's Degree	6	3.3
Bachelor's Degree	18	9.9
Graduate Degree	14	7.7
Work Hours (n=186)		
None	68	36.6
1-20	28	15.1
21-30	49	26.3
>40	41	22
Most Recent Visit to the Campus Library (n=175)		
This Week	58	33.14
This Semester	39	22.29
Last Semester	33	18.86
Never / Can't Remember	45	25.71
Most Recent Visit to Any Library (n=174)		
This Week	59	33.91
This Month	31	17.82
Last Six Months	39	22.41
Last Twelve Months	13	7.47
Never / Can't Remember	32	18.39

Most Recent Visit to the Campus Library's Website (n=174)

This Week	34	19.54
This Semester	20	11.49
Last Semester	14	8.05
Never / Can't Remember	106	60.92

Sub Question a: What components of library anxiety have the most and least prevalence?

The mean LAS total score for the district was 102.07, which was virtually the same as the median, at 102 (See Table 6). The standard deviation was 22.99 with the minimum score being 43 (the lowest possible score for the LAS) and the maximum score being 174 – the maximum score possible for the LAS is 215 – for a range of 131. LAS total scores for the sample indicate that while LA is present, overall levels are not high. This is the first group of developmental education students to be studied using the Library Anxiety Scale and these findings suggest that levels of LA among this group are not dramatically different than other groups studied using the same instrument. When compared to past dissertation research using the LAS, the mean and standard deviation are close to that found by Mohundro (1999) (98.47, 20.14), Ben Omran (2001) (96.25, 18.30) and Battle (2004) (129.68, 14.39). Additionally, most subscales did not appear to show higher or lower levels of anxiety within the sample than the others except for the Knowledge subscale, which was comparatively lower than the others. This is illustrated by Figure 1, which examines the study means for the LAS and each subscale as a percentage of those scales' maximums. Five of

the six means are between 47% and 52% of their scale maximums but the

Knowledge scale mean is at 40% which is seven to twelve points lower than that

range.

Table 6

Descriptive Statistics for Library Anxiety Scale and Subscales

	LAS	Staff	Affective	Comfort	Knowledge	Mechanical
M	102.07	35.05	30.73	18.65	9.98	7.73
Mdn	102.00	34.00	30.00	18.00	10.00	8.00
SD	22.99	9.43	8.25	4.51	2.67	2.52
Study Min	43.00	15.00	12.00	8.00	5.00	3.00
Study Max	174.00	63.00	54.00	35.00	19.00	15.00
Scale Min	43.00	15.00	12.00	8.00	5.00	3.00
Scale Max	215.00	75.00	60.00	40.00	25.00	15.00
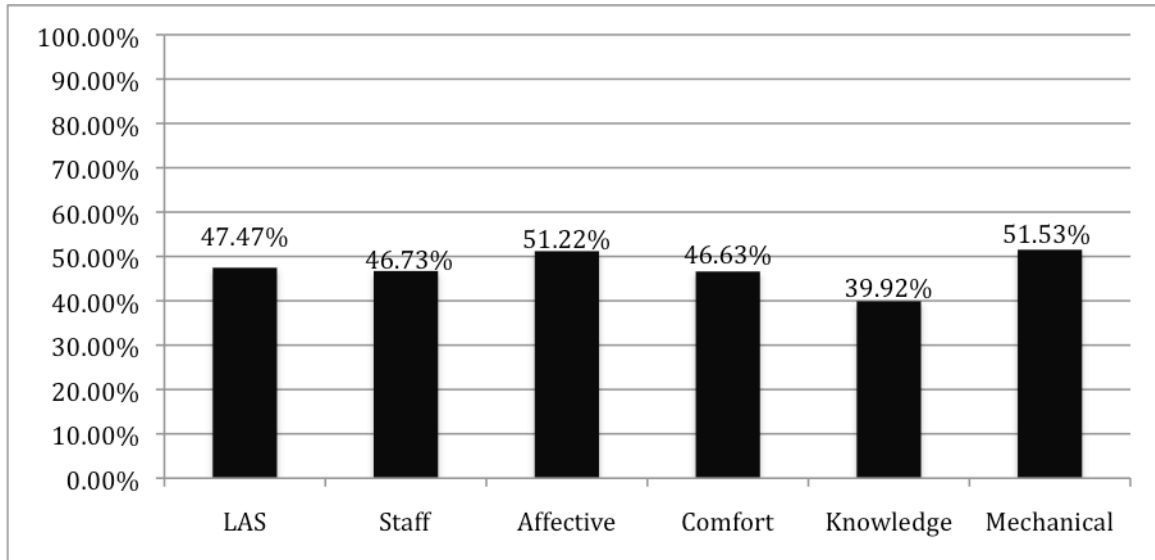
Figure 1. Comparison of study means for the LAS and subscales as a
percentage of the LAS and subscale maximums.

Sub Question b: What variations, if any, exist across colleges within the district?

District-level scales scores were broken down for the eight colleges sampled. ELAC had the largest sample at 34 and WLAC had the smallest sample at 7. Means and standard deviations were identified for each campus (See Table 7) and comparisons across the colleges and to the district were made (See Figure 2).

Table 7

LAS and Subscale Descriptive Statistics by College (M/SD)

College(n)	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
ELAC(34)	107.21/26.01	35.71/9.29	33.50/8.94	19.53/4.84	10.06/2.88	8.41/2.89
LACC(26)	99.42/25.90	34.23/1.01	29.73/8.23	17.88/5.41	10.50/3.15	7.08/2.24
LAHC(20)	87.55/29.94	30.80/11.58	24.50/8.78	16.40/6.35	8.55/2.95	7.35/3.60
LAMC(28)	108.43/12.88	38.50/8.17	32.21/6.01	19.82/2.63	10.07/2.14	7.82/1.31
LAPC(24)	100.83/23.12	34.46/8.97	30.75/8.93	18.21/4.23	10.00/2.87	7.42/2.55
LATT(23)	105.00/21.77	36.57/9.80	31.70/8.55	19.00/3.85	9.43/1.88	8.35/2.60
LAVC(29)	105.07/15.76	35.41/6.53	32.10/6.20	19.21/3.71	10.45/2.56	7.90/2.01
WLAC(7)	85.29/14.29	28.86/8.41	24.00/3.46	17.14/3.53	9.43/2.30	5.86/1.95
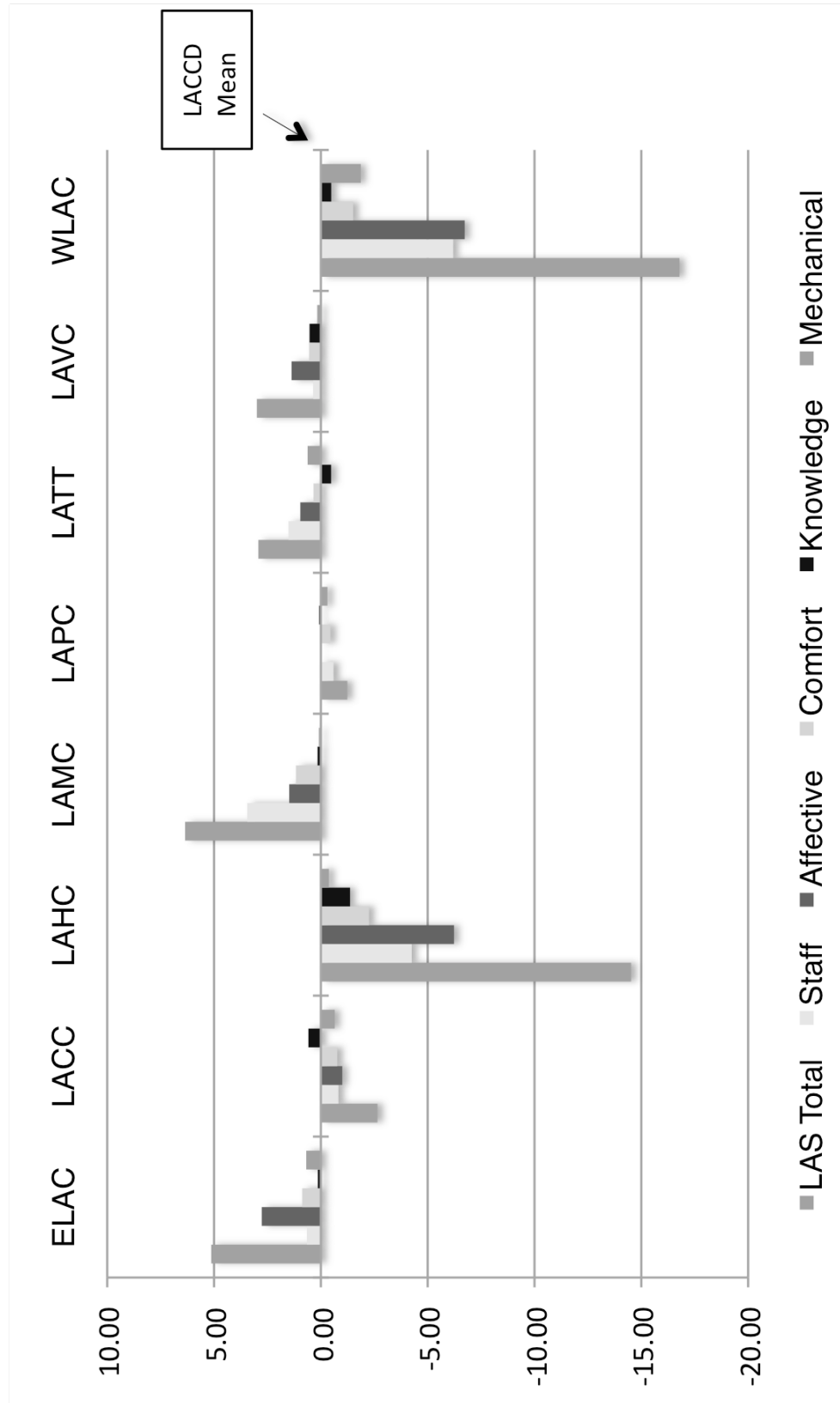
Figure 2. Comparison of LAS and subscale means for each college to the mean for the district.

LAMC had the highest overall levels of library anxiety, which was six points above the mean for the district, and WLAC had the lowest at 17 points below the district mean. When the colleges are ranked within each subscale, according to higher levels of anxiety, LAMC and ELAC participants each had the highest levels of anxiety in two of the five subscales and LACC participants had the highest in the other. WLAC participants had the lowest level of anxiety in three of the five subscales and LAHC participants had the lowest in the other two (See Table 8). Both ELAC and LAVC, which had the second and third highest levels of LA, had libraries that were being rebuilt and were in temporary structures that did not offer full space or complete services. However, LAMC had the highest overall levels of LA with a fully functioning library, so that may not be a factor in the other two colleges' scores.

Although there are variations among the colleges, no clear pattern can be seen. The only trend that can be seen is related to sample size. The three highest scoring colleges also had the largest sample sizes and WLAC, which has the lowest score on all but one scale, had the smallest sample size. Larger and more equal samples from all schools would need to be taken to see if sample size is affecting the outcomes.

Table 8

College Ranking by LAS Total Mean

College	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
LAMC	1st	1st	2nd	1st	3rd	4th
ELAC	2nd	3rd	1st	2nd	4th	1st
LAVC	3rd	4th	3rd	3rd	2nd	3rd
LATT	4th	2nd	4th	4th	6th	2nd
LAPC	5th	5th	5th	5th	5th	5th
LACC	6th	6th	6th	6th	1st	7th
LAHC	7th	7th	7th	8th	8th	6th
WLAC	8th	8th	8th	7th	7th	8th

Descriptive Frequency Tabulation of BIF Data and Scale Means

Bivariate frequency tables were developed using the data points on the BIF crossed with mean scores from the library anxiety scales. This analysis was descriptive in an attempt to see what, if any, relationships or trends can be seen using this sample.

For gender, the differences were quite small. Males had a mean LAS total score of 102.39, compared to 101.73 for females. Both were very close to the district mean of 102.07. Past research has identified males as more likely to suffer from LA (Jiao, et al., 1996) than females. Participants for whom spring 2010 was their first semester had an LAS total mean of 100.45 compared to 102.38 for the others.

When examining ethnicity and LAS scores, because the number of participants who were multiracial, Native American, or Filipino were so small (4, 2, and 3 respectively), only comparisons among African-American, Hispanic,

White Non-Hispanic, and Asian participants were performed. The range of mean

scale scores between these groups was not large, but trends could be identified

(Figure 3). Asian participants scored highest across all scales and African-

American participants scored lowest on all scales except Mechanical where

White Non-Hispanic participants scored the lowest. This finding partly supports

Jiao (2006) who found that African-American students had moderately lower

levels of LA across all subscales than White Non-Hispanic students (p. 848).

Hispanic students scored second highest on all scales.

To examine age, the same age groups that were defined earlier were used

(See Figure 4). Participants over 50 had the highest levels of anxiety on all

scales except Affective and Mechanical (the highest on those scales were 35 to

39 year olds). Bostick (1992) found that those over 50 had higher levels of LA,

but Jiao (1996) found being young a predictor of higher levels of LA. The 25 to

29 year old group had the second highest levels of anxiety on all scales except

Mechanical.
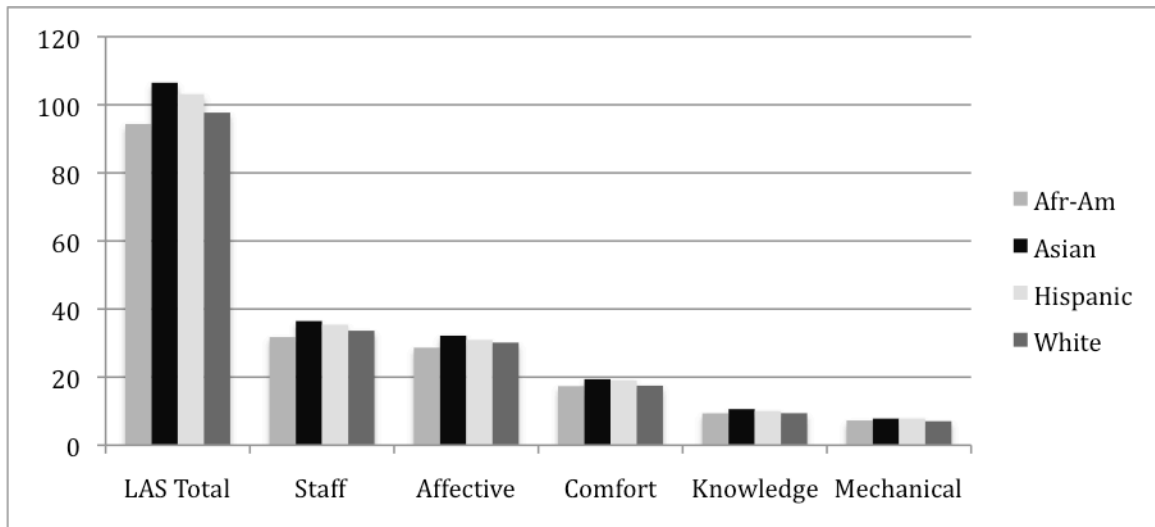
Figure 3. LAS and subscale means by ethnicity.
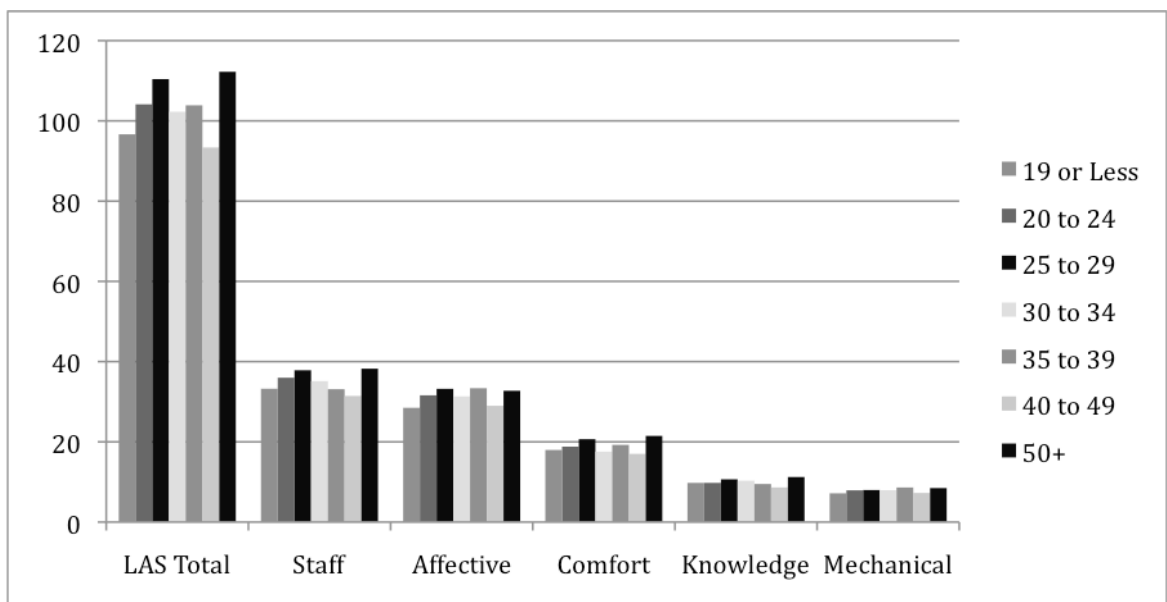
Figure 4. LAS and subscale means by age.

A trend could be seen when analyzing the relationship between work

hours and library anxiety levels. Except for the Comfort scale, which dropped

between the *21-30* and *Over 40* work hours per week categories, and the

Mechanical scale, which dropped between the no work hours and *1-20* hours per week categories, all scale means increased as the amount of work hours increased (Figure 5). Jiao (1996) also found that both part-time and full-time employment resulted in increased levels of LA.

When looking at number of units completed, the highest levels of anxiety on all scales could be seen in participants who had completed over thirty units with participants who completed over sixty units toping out on four of the six scales (Figure 6). This is counter to Mech & Brooks (1995), Jiao (1996) and Jiao & Onwuegbuzie (1997) who found that less experienced students experienced higher levels of LA, with Jiao (1996) determining that credit hours completed was not a contributor to LA.

Regarding educational goals, participants with the lowest and highest goals (taking courses with no aim towards a degree and earning a graduate degree, respectively) demonstrated the highest and/or second highest levels of anxiety on five of the six scales (Figure 7). Participants who wished to complete an Associate's Degree scored highest on the mechanical scale. Students just taking courses scored lowest on the Affective scale, which was the scale on which Graduate Degree seeking students scored the highest.
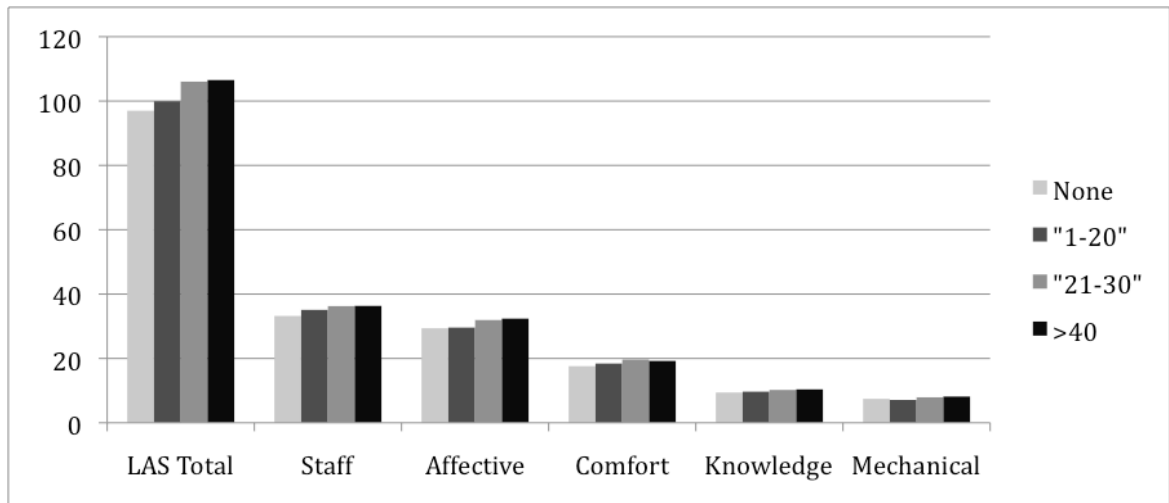
Figure 5. LAS and subscale means by work hours.
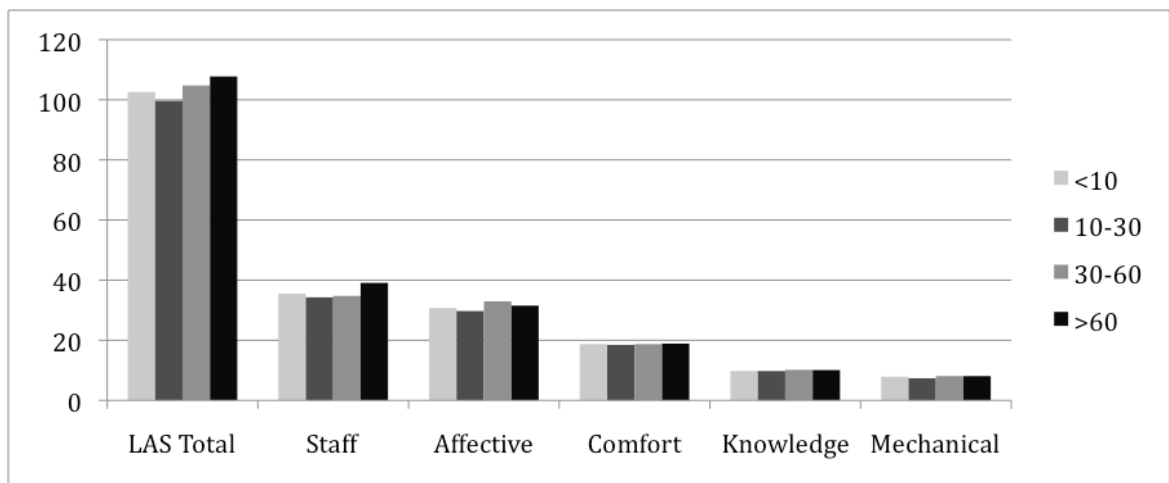
Figure 6. LAS and subscale means by units completed.
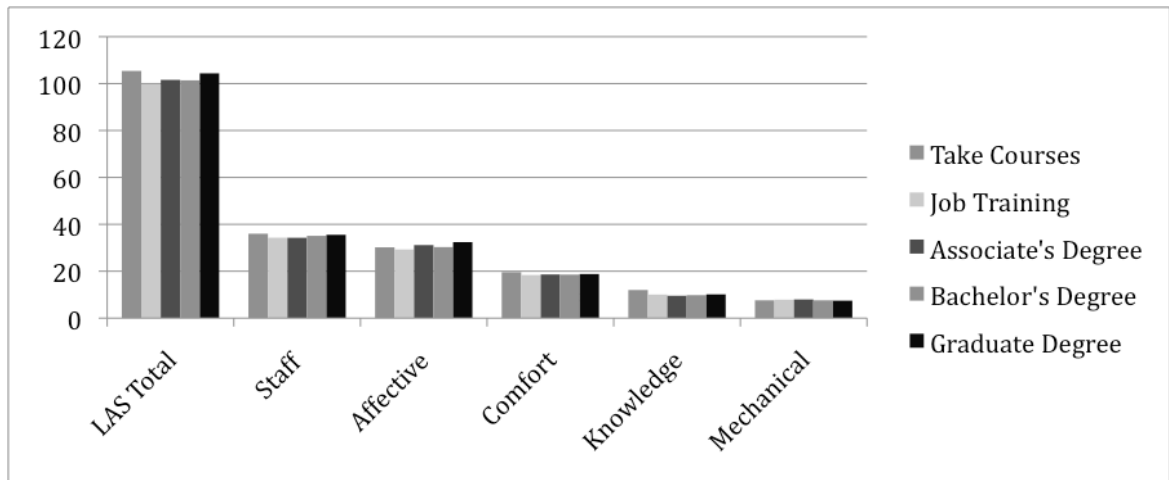
Figure 7. LAS and subscales means by educational goal.

Visits to the library had a relationship to levels of anxiety, which supports

Jiao (1996) who identified infrequent visits to the library as a contributor to LA.

For visits to the campus library, participants who selected *Never* or *Can't*

Remember displayed the highest levels of anxiety for all scales (Figure 8). For

visits to any library, participants who selected Never had the highest level of

anxiety on the total scale and four of the five subscales while participants who

selected Can't Remember had the highest level on the fifth subscale. Those who

selected *Last Year* had the second highest level on all scales except Knowledge

and Mechanical (Figure 9). However, for visits to the college library website,

there was less of a clear trend. Participants who selected Never had the highest

total levels of anxiety, but students who selected Last Semester had the highest

levels on four of the five subscales (Figure 10).

86
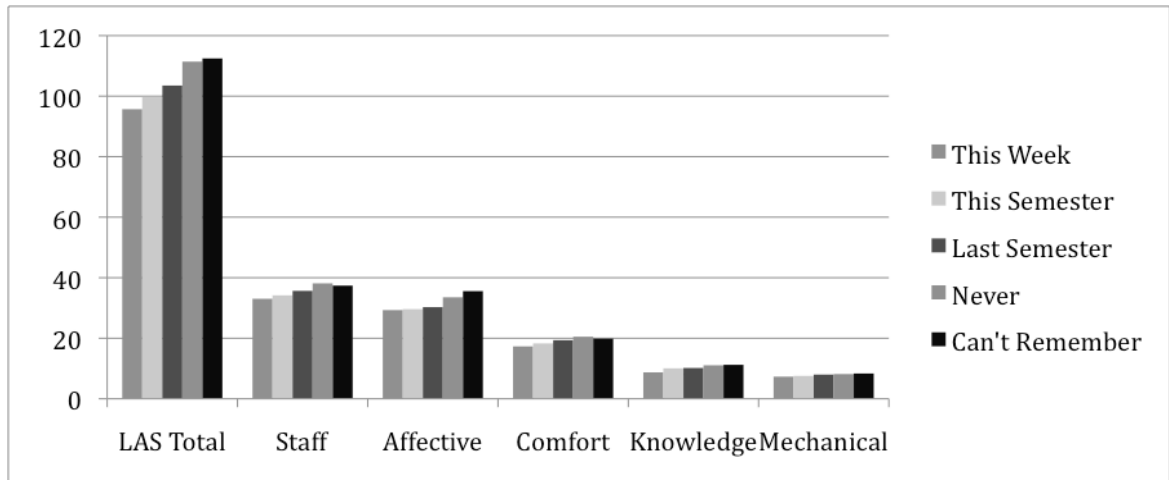
Figure 8. LAS and subscale means by visits to the campus library.
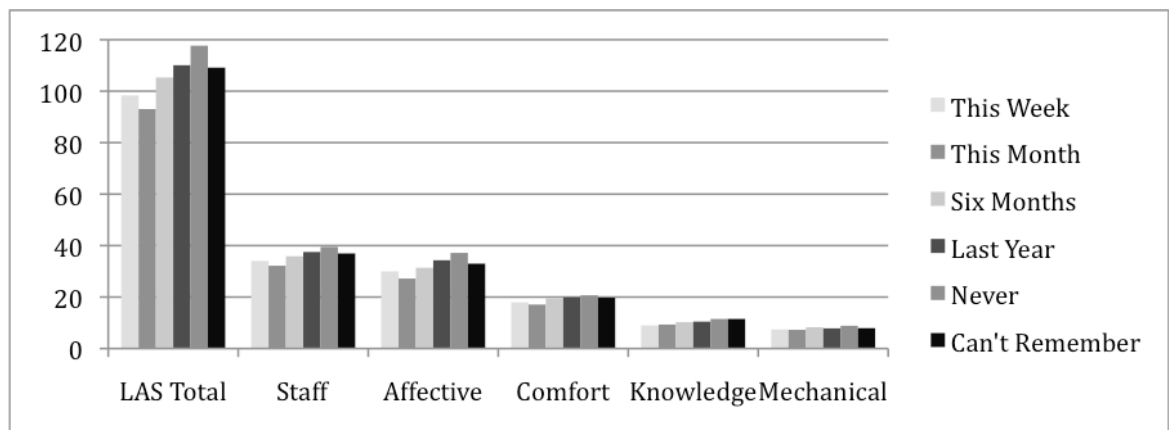
Figure 9. LAS and subscale means by visits to any library.
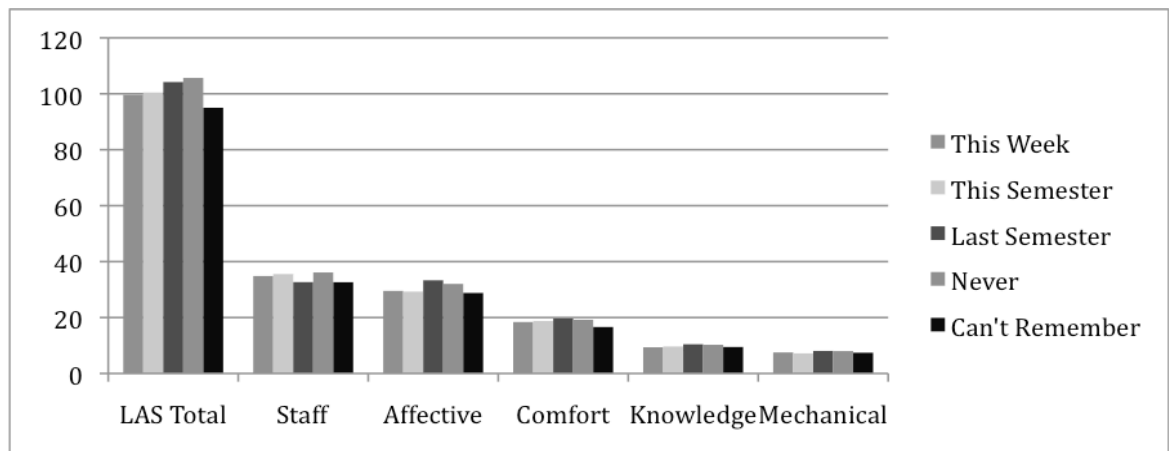
Figure 10. LAS and subscale means by visits to the college library website.

The ranges of scores for virtually all BIF data points were not large. While traits such as ethnicity, age and visits to the library did have some effect on levels of library anxiety – which is supported by past research that this study's data agrees with – it is clear that these effects are not large.

How do low library-anxious and high library-anxious basic skills English students in a large, multi-campus California community college district differ in the use of their college libraries?

Description of Sample

Thirteen participants from five of the colleges of the LACCD – Los Angeles City College (LACC), Los Angeles Harbor College (LAHC), Los Angeles Mission College (LAMC), Pierce College (LAPC), and Los Angeles Trade-Technical College (LATT) – were interviewed between April and May of 2010. All interviews took place in a private room on campus and were conducted one-on-one, by me, except for the two participants from LAMC who were interviewed together at their request. The median age for the group was 21 with a mode of 19. The minimum age was 18 and the maximum age was forty-seven. There were six Hispanics, five White Non-Hispanics, and two African-Americans. There were eight females and five males (See Table 9). Pseudonyms for the participants are used throughout this section of the paper.

The mean LAS total score for the group was 107.92, which was slightly higher than the LACCD mean of 102.07 (See Table 10). The highest score was

149 and the lowest score was 66 for a range of eighty-three. As explained in

chapter three, the initial plan called for interviewing 24 students who would be

defined as high-anxious and low-anxious based on having an LAS Total score

within the upper 20% (high-anxious) and lower 20% (low-anxious) of the range of

all survey participants throughout the district. However, due to the difficulty in

getting participants, that plan had to be adjusted and all students who agreed to

be interviewed by the end of the spring 2010 were interviewed regardless of LAS

score.

A new definition of high-anxious and low-anxious was also developed with

high-anxious participants defined as having an LAS total score above the LACCD

mean and low-anxious participants having an LAS total score below the LACCD

mean (See Figure 11). This resulted in a population of six high-anxious

participants (Robert, Marisol, Patrice, Angela, Anthony, Roberta) and four low-

anxious participants (Olivia, Vincent, Taylor, Beverly). I also created a neutral

category as three participants (Benjamin, Hannah, Albert) all had scores within

two points of the LACCD mean.

Table 9

BIF Data of Interview Participants

Name	College	Age	Ethnicity	Gender	It this First Sem?	Units	Educational Goal	Hours Of Employment	Parental Education	Last Visit Campus Lib	Last Visit Any Lib	Last Visit Lib Website
Albert	LAPC	19	Hispanic	Male	Yes	10-30	Grad Degree	1-20	HS Diploma	This Week	This Week	Never
Angela	LAMC	21	Hispanic	Female	No	10-30	Grad Degree	NONE	Some HS	This Week	This Week	This Sem
Anthony	LAPC	19	White Non-His	Male	Yes	10-30	Grad Degree	21-39	Grad Deg	This Sem	Six Months	Never
Benjamin	LACC	31	White Non-His	Male	No	30-60	Bachelor's	21-39	Bachelor's	This Week	This Month	This Week
Beverly	LAPC	19	African-Amer	Female	No	10-30	Associate's	1-20	Some College	Last Sem	This Week	Never
Hannah	LAPC	18	White Non-His	Female	No	<10	Bachelor's	NONE	Bachelor's	Can't Remem	This Month	Never
Marisol	LAHC	23	Hispanic	Female	Yes	<10	Job Training	>40	HS Diploma	Never	This Week	This Week
Olivia	LACC	30	White Non-His	Female	Yes	<10	Associate's	NONE	Bachelor's	This Week	This Week	Never
Patrice	LAMC	19	Hispanic	Female	No	<10	Bachelor's	NONE	Some HS	This Week	This Week	This Week
Robert	LACC	18	Hispanic	Male	No	10-30	Grad Degree	21-39	HS Diploma	Last Sem	Six Months	This Week
Roberta	LATT	23	African-Amer	Female	No	10-30	Associate's	21-39	Some College	This Week	Six Months	This Week
Taylor	LAHC	21	Hispanic	Female	No	<10	Associate's	NONE	HS Diploma	Last Sem	This Month	This Sem
Vincent	LAHC	47	White Non-His	Male	No	>60	Grad Degree	1-20	Some HS	This Week	This Week	Can't Remem
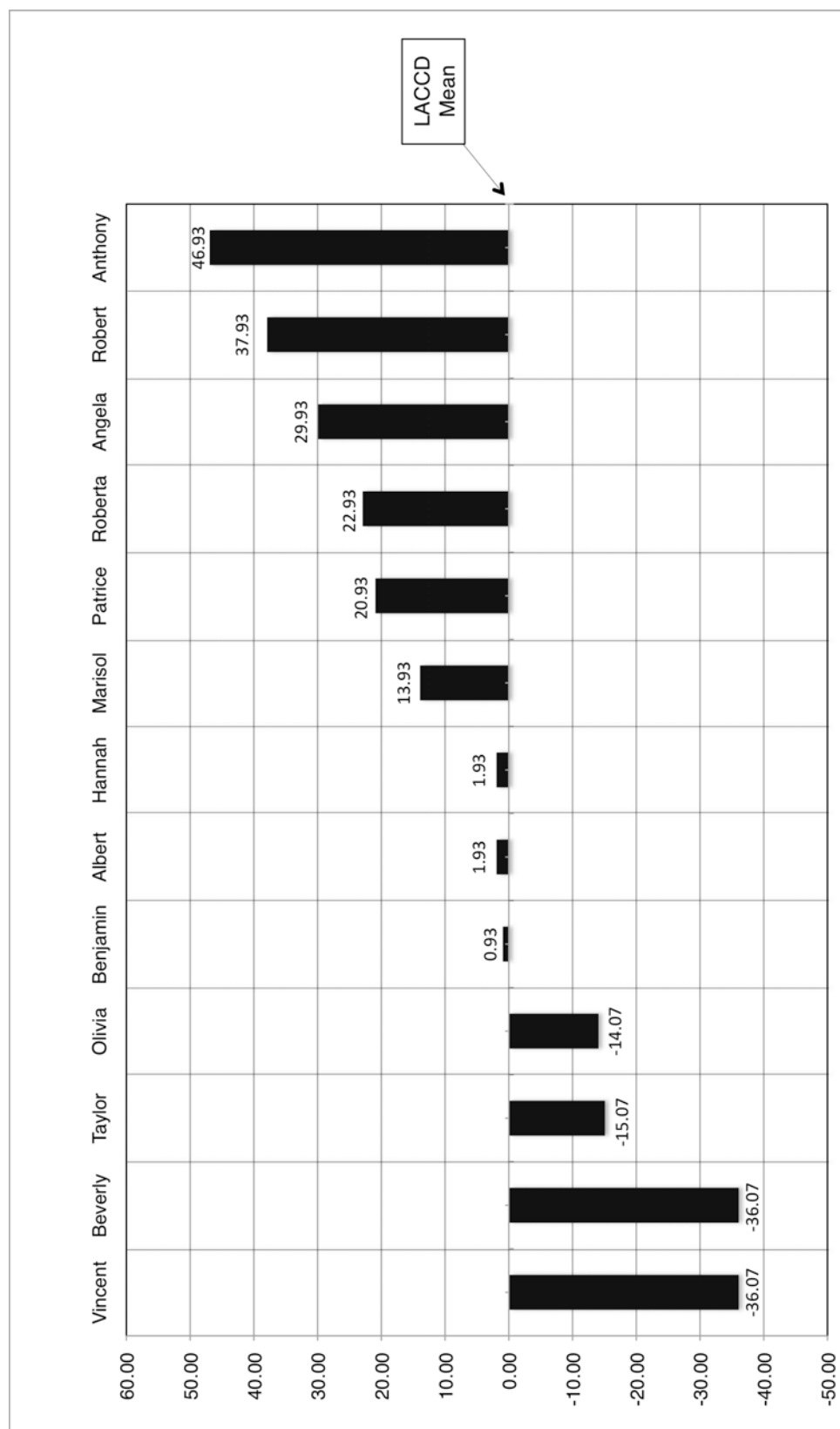
Figure 11. Interview participant LAS total scores compared to the LACCD LAS total mean.

Table 10

Interview Participant LAS and Subscale Scores

Name	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
Albert	104.00	35.00	29.00	22.00	12.00	6.00
Angela	132.00	55.00	41.00	21.00	6.00	9.00
Anthony	149.00	51.00	53.00	25.00	9.00	11.00
Benjamin	103.00	32.00	44.00	14.00	7.00	6.00
Beverly	66.00	20.00	22.00	14.00	7.00	3.00
Hannah	104.00	37.00	29.00	16.00	13.00	9.00
Marisol	116.00	38.00	33.00	24.00	12.00	9.00
Olivia	88.00	27.00	34.00	16.00	5.00	6.00
Patrice	123.00	58.00	35.00	17.00	7.00	6.00
Robert	140.00	56.00	25.00	35.00	13.00	11.00
Roberta	125.00	38.00	43.00	21.00	8.00	15.00
Taylor	87.00	32.00	21.00	16.00	9.00	9.00
Vincent	66.00	24.00	17.00	13.00	8.00	4.00

Library Services to Basic Skills Students

Four of the five libraries at colleges where interviews took place answered an email questionnaire about the types of services they offer to basic skills students (See Appendix G). The only library not represented is LATT (See Table 11). All of the responding libraries offered bibliographic instruction (BI) to basic skills English courses, with three designing BI's for the basic skills level. All of the libraries had pre-collegiate level materials and half had received funds from a basic skills grant to purchase materials. Only one library had created a specific program for basic skills students. Only one library provided service in all areas surveyed and no library failed to provide service in any area. Because of the

similarities between the different libraries, I do not believe library service had an effect on participant data. There is one peculiarity in the sample in that two of the three neutral participants came from LAPC. However, the other two participants from LAPC also had the highest overall levels of LA (Anthony) and tied for the lowest levels of LA (Beverly). As such, it is unlikely that the two neutral participants represent an effect of the LAPC library.

Table 11

Library Responses to Basic Skills Service Questionnaire

College	Provides Pre-collegiate Level Materials?	Received Basic Skills Grants?	Created a Basic Skills Program?	BI's Available to Basic Skills English students?	BI's Aimed at Basic Skills Level?	Additional Information and Connections?
LACC	Yes	No	No	Yes	Yes	Recommended purchasing online learning modules for the Basic Skills program, but no instructors expressed an interest.
LAHC	Yes	Yes	No	Yes	Yes	Purchased materials on pedagogy for instructors teaching Basic Skills English courses.
LAMC	Yes	No	No	Yes	No	English 28 used to require students to take three library workshops, but stopped after Fall 2009.
LAPC	Yes	Yes	Yes	Yes	Yes	A library faculty member sits on the Basic Skills committee. Used a grant to start a book club for Basic Skills and ESL students that also has a bibliographic instruction component and library lobby displays.

Sub Question a: How aware is each group of the array of services and resources available to them through their college library?

Analysis of interview data found no differences between high and low-anxious participants in terms of their awareness of their college library's services and resources. Both groups displayed some knowledge of the library, but most individuals did not have extensive awareness and some showed little awareness

93

at all. As groups, neither showed significantly less or more awareness than the

other. Within the neutral group, two out of the three participants (Hannah and

Albert) indicated a profound lack of awareness of what the library offers. A

representative exchange with Albert:

> Me: What services, beyond the building, are you aware of that this
> library offers?
> Albert: What services?
> Me: If you're not aware of any that's fine, I'm just curious to know
> what you're aware of.
> Albert: I will say I'm not aware of any. What services do they
> provide?

I listed a sampling of the types of services that academic libraries typically

provide, of which Albert indicated he had no previous knowledge. Hannah, the

other LAPC neutral student, indicated that she was unaware of the library's

databases, bibliographic instruction sessions or reserve materials. The key factor

in the lack of awareness of Hannah and Albert is also the most important trend to

come out of this area of inquiry, which is the effect of classroom faculty on

participant's awareness of the library. Those whose classroom instructors

guided or directed them towards the library reported higher levels of awareness

than those who whose instructors did not. As seen in Table 12, participants who

reported being guided towards the library by one or more faculty generally

demonstrated awareness of a wider array of library services than participants

who did not have this guidance. Participants who reported no guidance were

very aware of the libraries computers services – which are the physical

Table 12

Library Services Mentioned by Interview Participants

Service Mentioned	# Participants Mentioning	The Participant Mentioning the Service
Computers	10	Albert, Angela, Anthony, Benjamin, Beverly, Hannah, Marisol, Patrice, Olivia, Robert, Roberta, Vincent
Databases	7	Angela, Beverly, Marisol, Patrice, Roberta, Taylor, Vincent
Reference	11	Angela, Anthony, Benjamin, Beverly, Hannah, Marisol, Olivia, Patrice, Roberta, Tiffany, Vincent
Reserves	3	Angela, Beverly, Patrice
Website	3	Marisol, Olivia, Robert

▮ Students who did not discuss being guided to the library.

computers in the library building available for students use – the reference desk and the library's website. The computers are often the most obvious service to identify in a library building, after the general book collection, and the reference desk is usually situated in the building to be easily identified. Other participants could also identify those services as well as others such as library databases, and the reserves collection. This section will discuss what these participants reported about the relationship between classroom faculty and the library. It will cover discussions by instructors, the lack of assignments that require research or the use of library materials, and the limited use of bibliographic instruction by instructors.

Discussion of the Library by Classroom Instructors

Some participants had classroom instructors who discussed or recommended the library for either specific assignments or as a general resource to aid their overall academic performance. Beverly (low anxious) had a history instructor who emphasized using the library. Angela (high anxious) had two instructors – English and Chicano History – make recommendations to use the library. She also had an English instructor who required using library databases for assignments – instead of using the general World Wide Web – and said that this requirement led her to learn about the databases. She reported her Chicano History instructor as saying, "if you guys wanna learn more, go to the library and they have more information there". She also reported this instructor as the only one that regularly recommended going to the library. Roberta (high anxious) did

not receive direction from a classroom faculty member, but was guided to using the library databases by an English tutor. She did have an English instructor who directed her class to an online resource, but as a method to avoid going into the library. She did not indicate if this resource was or was not owned by the library. Benjamin (neutral) found it amusing that the only instructor to specifically direct him to the library was his physical education instructor. An English instructor had directed him to a specific website but with no discussion of using the library as an intermediary. Most of the participants expressed a general sense of surprise at how few of their instructors seemed to place any value in using the library at all.

Of students who did not receive direction toward using the library, Hannah (neutral) reported that none of her instructors had ever talked about the library, made recommendations to use it, or mention any of its services as evidenced by this exchange:

Me: Do instructors ever talk about the library?
Hannah: No.
Me: No recommendations to use it or . . .
Hannah: No.
Me: Do they ever mention things like having reading lists or books
on reserve at the library or materials there?
Hannah: No.
Me: No? Okay.

Albert (neutral) also said that none of his instructors had ever directed him to use the library as did Olivia (low anxious) who reported that what she did know about the library she learned from its website. Past research has shown that

classroom instructors can affect student library behaviors (Hardesty, 1995; Knapp, 1958; McInnis, 1978) and these results further confirm that.

Lack of Research Assignments

One possible cause of so little discussion of the library may be a dearth of assignments that actually require its use. Five of the thirteen participants reported little or no research-based assignments in any of their classes. Three of the other eight are from LAHC and they discussed the same research assignment from their common English 28 instructor. From those three, Taylor (low anxious) also talked about an anthropology research assignment, but said she was told to use her textbook, class notes, or the Internet as resources. This was similar to Anthony (high anxious), whose class was specifically not allowed to use any resource for research beyond textbooks and instructor notes. Such directions could indicate that classroom instructors are trying to reduce the overall complexity of research required for their assignments. Low expectations by instructors of basic skills students could also be a likely cause. Additionally, as libraries have little to no connection to developmental education programs, as evidenced in chapter two, classroom faculty may not be aware of how the library on their campus can assist in the development of research skills by their students. As no data was collected from instructors, their motivations for this behavior are not known.

Robert (high anxious), who found the organization of the library's book collection confusing, had never spoken to a librarian, and freely admitted to feeling "lost", "not aware" and "afraid to ask", stated: "I've been fortunate enough not to come across professors that have given me research papers". He uses the word "fortunate" because he acknowledged having little awareness of or knowledge of how to use the library and would have difficulty using it if required to do so for an assignment. Although he has taken both psychology and philosophy courses, in addition to English, he reported that they primarily involved exams and quizzes with little homework and no significant research assignments. However, he had concerns about this situation. His concerns were specific to how it will affect his future success in a university, especially an elite university such as UCLA, which he identified as a target school to attend. One source of his concern is former high school classmates who are currently attending universities and who have encouraged him to get familiar with the library. Discussing conversations he's had with them:

> And they're like, you should try to get out [to the library] more
> often, because when you do come here, you're going to be using a
> lot of your time in the library. What do you mean I'm gonna be in
> the library a lot? They're like, this is gonna become like your
> second home. So, like I said, not a lot of my professors are telling
> me to come here, they don't tell me to read books from here, most
> of my books are bought. I would love to use the resources the
> library has, but I just haven't been able to use them.

Robert scored highest or second highest on the LAS total and all LAS subscales accept for the affective subscale. When comparing his interview data

with his LAS scale levels, there are connections between his score on the

Knowledge subscale – he had the highest level of anxiety in this area for all of

the interview participants – and statements such as:

> I should be more aware of the research [tools] we have on
> campus, but like I said that I don't hear about it, I don't find out
> about it or have my professors tell me to go to the library and use
> it.

Although his interview statements would seem to point to a sense of

inadequacy about using the library, his low Affective score would indicate

otherwise. This contradiction could be explained by his high-school library

experience, which he described positively:

> In my high school, I did use my library a little bit more. Just
> because I was familiar, because our library was much
> smaller than this one. It was one floor. I was more aware
> and I was a friend with the librarian. I knew his name.

His high school also provided library training and gave a tour of the library

on his first day of school. When discussing the two libraries, Robert clearly had a

much lower level of comfort with his current library compared to his high-school

library. This is further supported by having the highest level of anxiety on the

Comfort subscale. Anthony, who had the highest LAS total score, also reported

a similar disconnect between his high school experience, which he said required

using the school library to succeed, and his college experience where he has had

few research-based assignments.

Bibliographic Instruction (BI)

Although, all of the libraries surveyed reported offering BI to basic skills students, with some offering instruction targeted to the developmental level, only three interviewed participants had any actual library training in college. These were the three participants from LAHC. Their English 28 instructor took them to the library for a BI session between the time of the LAS administration and the interviews. Other interview participants were asked if any of their classes had ever come to the library for instruction or had a librarian visit one of their classes and all responded that neither had occurred. Some were surprised to discover that the library actually offered such a service. The only non-LAHC participant who reported any awareness of this service was Beverly who had friends in other courses that had been visited by a librarian. As mentioned in chapter three, LAHC is the only college in the study that discussed teaching research techniques in its English 28 catalog course description.

All of the Harbor participants reported the library visit as a positive experience and acknowledged that it significantly increased their awareness of what the college library had to offer. As a result of the visit, Taylor reported learning about the library databases, specialized encyclopedias and what she described as "all the stuff that basically the library offers that nobody knows about". She described her feelings during the visit:

> I thought like, I'm gonna go sit there for an hour and a half in the
> library and learn things that I already know. But I got there and I

thought, Jesus I should be taking notes. Like I went and left my
backpack in the car, cause I thought I wouldn't need it, but I was
like I should really write this stuff down. I actually learned a lot.

Taylor's expectation of and reaction to BI is an interesting reflection on

some of the quantitative data. The Knowledge subscale was lower, compared to

the other subscales, for all quantitative participants. It is possible that

participants feel they know more about the library than they actually do because

they need additional knowledge to understand their actual level of ignorance.

Taylor demonstrated this idea in her expectation that she would not learn much

about the library from her BI session and then being surprised at how much there

was to learn. She also felt that library education is something all students should

have:

> [Students] don't really know how to use the library. They're just
> kinda like, jump into school and it's like, I have to do this research
> paper and they go to the library kinda like, you know, completely
> lost and don't know what they're doing. But I think everybody
> should meet with the librarian and then do that little seminar. It's
> really helpful.

Marisol (high anxious) had not visited the library at all before her BI

session; however, this was also her first semester attending this or any college.

She believes that many students are ignorant of the library and said, "a lot of

people don't even know where [it] is." She reported learning about the

assortment of resources available through the library's website and its

databases. She was the only participant interviewed who was employed full-time

and felt these online resources would be particularly valuable to her. At the time

102

of the interview she had not yet used any of the library resources but expected to as she had an English 28 research paper to complete. She also learned how much help is available through the library and stated, "I had no clue. I mean I thought I just had to go online and look for things on my own." She also said that other students in the class reported learning much from the instruction session stating, "It opened our eyes to a lot of things." Vincent (low anxious) had the most experience using the library before the instruction session and reported being a frequent user of the library building, computers and reference services. He also shared the lowest LAS total score of all interview participants and was also the oldest. He reported learning more about the library's databases and the advanced features of search engines. All LAHC participants said this was the first time any instructor had taken them to the library and Taylor reported that no other instructor had ever discussed or recommended the library at all.

Bibliographic instruction is a common service offered by academic libraries to their faculty and students. Unfortunately, most of the participants in this study reported that their instructors make little use of the service, denying students the opportunity to gain valuable knowledge of the library and its resources and develop information literacy skills. Those few that did have exposure self reported their own learning and placed great value in what they learned. This is notable because the BI session they attended occurred a few weeks before I interviewed them, but they still had clear memories of the experience and could

identify what they learned. All libraries at study sites offered bibliographic

instruction, however, this study cannot say why instructors did not make use of

the service.

Sub Question b: How frequently does each group use their college library to

complete educational and non-educational tasks?

There was a noticeable difference in the frequency of library use based on

library anxiety level. All participants were directly asked how frequently they

used their college library and responses were either positive such as "all the

time" or "frequently" or negative such as "hardly ever" or "I never go in there". In

the most noticeable trend of this area of inquiry, four of the six high-anxious

participants (Robert, Marisol, Anthony, Roberta) had negative responses to the

question, indicating limited to no use of the library. Roberta had this exchange

with me:

> Me: Do you use the library much at all?
> Roberta: No.
> Me: Have you used it any at all this semester?
> Roberta: No.
> Me: How about last semester?
> Roberta: Only a couple of times. I don't go in that library.
> Me: Why not?
> Roberta: I found that there's a bigger computer lab with more computers
> and it's more easier to get a computer versus there's only like fifteen
> computers in the library and you have to sign a sign-in sheet and
> sometimes you have to wait an hour just to use the computer.
> Me: So the primary reason you went in was to be able to use the Internet?
> Roberta: I think I checked out one book, that was it. But other than that, I
> haven't been in there.

All four of these participants scored higher than the means for the interviewed group on the Staff and Mechanical subscales, and some provided statements that shed light on those areas of anxiety. Roberta discussed a particular librarian that she found intimidating in addition to the above-mentioned difficultly in gaining access to library computers. She indicated these as the primary causes of her reluctance to go into the library. Anthony talked about two incidents in a previous semester in which he was unable to use library computer equipment and the library staff seemed, to him, not only unhelpful but also apathetic to his difficulties. Marisol said she was not comfortable in her library's building which she described as too old, too small and with uncomfortable furniture. Robert, who scored highest of all interview participants on the Comfort and Knowledge subscales, admitted to generally being unaware of library policies, not knowing how to use call numbers, and being intimidated by the crowds of students in the building the few times he has ventured in. He also said he was afraid to ask questions, a common component of LA. He made the following statement which is emblematic of what Mellon (1986) saw in her original research twenty-five years ago:

> I was in here once, and I remember I was on the computer and asked for help from one of the librarians, and it took her awhile to get to me. That's why like, I'm kinda like, apprehensive about asking people. Just because I feel maybe they might be busy or I don't wanna be like a bother for them. I don't know. I just feel like sometimes you can't ask questions.

Of the four low-anxious participants, there was an even split between positive comments (Vincent, Olivia) and negative comments (Beverly, Taylor). Of the two negative low-anxious participants, need of the library was indicated as the primary cause for their lack of use. Beverly said she had used the library frequently in a previous semester but that the classes she was currently taking did not require it. Taylor stated that although she had not yet used the library, she expected to soon because of assignments she had coming due. Of those making positive comments, Vincent said he used the library "frequently" including going there about an hour before his first class everyday. Olivia said she used the library "at least once a week" and sometimes more. All three neutral participants (Benjamin, Hannah, Albert) indicated regular and frequent use of the library. Given the effects of library anxiety, it is not surprising that high LA students use the library less. Of the three areas related to this research question (awareness, use, and value), use was likely to be more directly affected by levels of anxiety.

Beyond frequency of use there is the deeper question of what library resources participants made use of. There were two driving forces that brought most into the library. One was using the library computers for Internet access and completing assignments, and the other was using the library building for studying. The use of print materials was seldom mentioned as a reason for going into the library. Only Patrice, Angela, and Benjamin mentioned regularly

106

checking out books. Robert said he had never checked out a book, as did

Vincent who is a frequent user of the library building. Reference service received

little discussion with only four participants (Benjamin, Vincent, Patrice, Angela)

saying that they regularly used it. Other participants mentioned using reference

service only once, not using it at all or did not discuss it. Beverly said she had

used it a few times in a previous semester. Participants also reported limited use

of library periodical databases with only Patrice, Angela and Vincent reporting

regular use. Olivia, Anthony, Albert, and Roberta all specifically said they had

never used the databases and Beverly said she had used it once in a previous

semester. The following sections will address the two areas of use discussed

above as well as another topic that was not part of the original research plan but

was frequently mentioned: the use of the public library for academic purposes.

The Library as Computer Center

Participants mentioned a heavy reliance on the personal computers of

their college library to complete educational tasks such as conducting class-

related research, writing papers, and accessing class-specific resources.

Additionally they also used the computers for non-educational tasks such as

email, personal research, and general Internet browsing. Some participants

indicated that use of the computers represented the primary, if not the only,

library resource they use. As Hannah stated, "I don't use the library per se, I use

the computers in the library". She said that she used the library computers about

once a week and that she used them to write papers and conduct research on the Internet. She reported that her primary research tools were Google and Wikipedia and that she does not use books. She also never mentioned using reference services. The rate of once a week was the same mentioned by Olivia who said her primary reason for using the library is studying and printing documents. Albert also discussed a focus on using computers and said, "I use it frequently, but mostly for the computer access." He used the library computers for email, writing papers and some research. Even Vincent, who reported regular use of reference services, library databases and reference books, said computers are the primary library resource he uses. Patrice and Angela also mentioned the use of computers as a primary reason for using the library, though, like Vincent, they mentioned regularly using a number of other library services.

These participants, regardless of levels of LA, seem to view the library primarily as a building with computers. This view is not contingent on awareness as participants with varying levels all placed a significant focus on the library's computers. Although computers draw them into the library, computer use does not seem to cause the participants to learn about or use other library resources. Those who reported using a variety of services and resources never reported computer use as a pathway to that knowledge or experience. As evidenced in the Awareness section, classroom faculty place little to no focus on the library's

108

educational role. This combination could lead students to see non-computer services of the library as extra or even extraneous.

Factors that negatively affected participant use of library computers were difficulty gaining access and the rules governing their use. As mentioned above, Roberta said that she found the wait times too long due to the limited numbers of library computers. She is active in student government and prefers using the computers in the student government office. Benjamin also complained about computer overcrowding as did Anthony who was further annoyed by a 20-minute time limit on using the library computers. To avoid issues with library computers, both Benjamin and Angela reported purchasing their own laptop computers preferring to bring them into the library and use Wi-Fi services. Robert said he used computers at home and at work as a way to avoid using the library's computers. In addition to finding the library computers overcrowded, he was also disturbed that other students were using them for non-academic purposes such as accessing Facebook and YouTube. This issue was also mentioned by Benjamin.

The Library as a Place to Study

Participants reported extensive use of the library building for studying. Most who reported this indicated that the library was good for this because it was quiet. Anthony, Olivia and Vincent all used the word "quiet" and Hannah used the words "tranquil" and "serene". She also said, however, that she and a group

of other students were more likely to study in a small plaza outside of the library rather than in the building itself. Beverly was the only person to say that she found the library too quiet to study because it puts her to sleep. Olivia had this to say about her overall use of the library, which reflects this and the immediate previous section of this paper: "I come in to use the computers and I use it for studying. I haven't needed to come in for books just because everything is online." Some participants discussed making time to study in the library. Vincent studied in the library before his classes and Taylor also mentioned doing this in the past because she often had free time in the morning. Albert and Roberta both said that they planned to make more time for studying in the library with Albert specifically saying he was going to shape his class schedule in the next semester to allow for this. Not all participants used the library for studying and some actually had a negative view of it for that purpose. Robert, again, found the library too crowded. Marisol, in addition to her problems with the library building, also had problems with the behavior of other students in the library, which she felt created too disruptive an atmosphere for study.

Library Swirl

In an unexpected finding, interview participants indicated that they made extensive use of the public library for academic assignments, personal research and recreational reading. For some, there was a distinct difference in purpose for visiting a public library versus the college library. Benjamin stated, "If I go to the

public library it's for my personal research. If I come [to the college library] it's for

my school research". Olivia, Marisol and Angela, however, all said they used the

public library to complete college work in addition to the college library. Some

students actually preferred the public library for all purposes. Taylor, who

admitted that she did not like her college library, had a long history of using the

Central Library of the Los Angeles Public Library, which she described as

"beautiful" and "quieter" in comparison. She feels that the staff in the college

library have an "attitude", due to being "overwhelmed" by the demands of

students, as opposed to staff in the public library who she feels "are there

because they enjoy it" which, she feels, makes them "seem more pleasant". She

also believed that patrons of the public library behave better than the students of

the college library. She stated, "I think its because [those people] are there

because they want to be. [At the college library], people come here because

they have something to complete. They have to get something done." Anthony

also indicated a preference for public libraries and said that other students also

preferred them. He discussed this in the following exchange:

> Me: Have you talked to other students about their opinion of the library?
> Anthony: They don't go in. Most of the students I talk to have never set
> foot in the library.
> Me: Do they ever say why?
> Anthony: They don't need it. It's too much of a hassle I guess.
> Me: To go into the library?
> Anthony: Yeah. They would rather just go to a public library. It's easier
> there. I've been to a public library too, it's much easier there.
> Me: So you, overall, would prefer a public library to this one?
> Anthony: Certainly.

111

Me: And you've heard other students say that?
Anthony: Mm-hmm [a positive response].

Other participants clearly preferred using the college library over a public

library. Patrice and Angela both preferred the college library because of its

databases, computer access and the belief that the librarians are more

knowledgeable of the campus and course needs. They also said the specific

public library branch they used is crowded and small. Benjamin also talked about

the college librarians being better acquainted with the campus and the

assignments that students have to complete. Additionally, in direct opposition to

Taylor, he felt that public librarians are "obnoxious" due to their having to deal

with the assortment of social problems that can often be found in a public library.

Beverly actually finds the organization of materials in the public library more

complicated and confusing. Robert, Hannah, Albert, and Roberta all said they

did not use the public library at all.

As this was not an initial area of investigation for this study, there is no

coverage of it in the review of the literature in chapter two. However, I identified

previous research on the topic of college students using public libraries and

found that, while this area of research is not large, it does go back decades.

Gocek (1970) interviewed commuting college students who were using public

libraries. The students she talked with identified convenience as a heavy draw to

the public library, especially more weekend hours and the closer proximity of

public libraries. They also mentioned difficulty navigating the academic library

building as a factor. It must be noted, however, that one important issue her

students mentioned about navigating the building was dealing with closed stacks.

These are library books only accessible by library staff. Closed stacks are

extremely rare in a modern academic library – except for special collections and

archives – so this would not be much of an issue with current college students.

Grosser (1987) surveyed Australian higher education students and found similar

results to Gocek. His students also reported using public libraries primarily

because they were more accessible, had more convenient hours and were easier

to use, in part due to familiarity. They also reported their academic libraries as

being too crowded and lacking enough materials. Antell (2004) also found some

of these same reasons for college students using public libraries: personal

convenience, the belief that the materials at the public library are more plentiful or

useful, and familiarity with the public library and its staff. Participants in my study

who reported using public libraries mentioned many of these factors as reasons.

This is an area that community college librarians should be concerned

about. If college students are using public libraries they may not be getting the

full range of resources, services and counsel they need. Additionally, the types

of resources students are using and whether those resources, and the public

librarians providing access to them, can or cannot meet all the needs of college

students needs to be understood. If not, are those students being guided to the

college library. Interview participants did identify anxiety-related issues as partly

113

affecting their choice of the public library over college, seeing it primarily as an issue of comfort. Such students could find it difficult to make the transition to the college library even if they understand that it would provide better services and resources for their needs. It would help if community college students could see the public library and the college library as existing on a continuum as opposed to being discrete. Building visible and public connections between the two could help achieve this. However, given that the primary reasons stated by study participants for using any library were a need for computers or a quiet building to study in, perhaps it is not surprising that so many could find equal satisfaction in either setting.

Sub Question c: How does each group value their college library as a resource to achieve educational goals?

Participants were asked questions related to how they valued their college library. Questions centered on if they felt students needed the library to be successful, what role or purpose they felt the library served on a college campus and what personal value they were getting from their use of the library. Analysis of interview transcripts looked for answers to these questions as well as other expressions of attitude towards the library and its value to participants, other students and the college as a whole. This analysis found no differences between high-anxious and low-anxious participants. Neither group indicated holding the library at a higher or lesser value than the other.   No positive or negative

114

statements about the value of the library could be trended to high-anxious, low-anxious or neutral participants. The following sections will cover participant's ideas about the need for a college library, including what personal value they feel the library serves them, and what purpose they feel a library serves on a college campus.

Do college students need the library?

This area of inquiry had the most mixed collection of opinions. Some participants (Angela, Anthony, Beverly, Roberta) said, unequivocally, that college students need to use the college library to be successful. Beverly (low anxious) said it was "definitely important", Angela (high anxious) feels it is important to have a place to study and work on campus and Roberta (high anxious) said it was "absolutely necessary." Anthony (high anxious) feels you need it to be successful because "it makes college a lot easier". However, for two of these students, their own behavior contradicts their opinions. In the Use section, both Beverly and Roberta reported they do not use their campus library much at all, which is in opposition to the opinions they expressed in this section saying that library use is vital to student success. Beverly said in the Use section that using the library is dependant on class need, of which there was none during the semester I interviewed her. Roberta indicated that she had not used her college library at all during that semester and used it sparingly in the previous semester. Anthony also reported limited use of the library and frustration with his

115

experiences when he did use it. His use of the word "easier" in this section is

also in opposition to having the highest score on the LAS for all interview

participants and also contradicts his statements in the Use section about

preferring the public library because he felt it was "easier" than the college library.

It is possible that these participants were responding in a way they felt would

please me and were not expressing their true feelings. It is also possible they

were identifying a standard they felt they should meet, although they were not

actually meeting it. Values can often be an expression of how we feel things

should be as opposed to how they actually are.

Of the participants who felt that using the library was not a requirement to

success, Robert (high anxious) believed the library was important, but that it was

not a necessity to academic success. This was largely influenced by his own

success in college despite limited use of the library. As he stated, "In my case, I

haven't used the library and I'm still getting good grades." Marisol (high anxious)

called use of the library "optional", but believed it would be good for her to "get

into the habit of coming here." She went on to say:

> I think it will be useful for [students], but I don't exactly think that it
> would necessarily affect the outcome of their studies or anything
> like that. With all of the information that's available now online.

The view that the Internet partially replaces the library was expressed by

other participants and was a significant factor for those of the opinion that the

library is not a necessity. Taylor (low anxious) said, "I think you can get by

116

without having to use the library. You could basically do everything on the Internet". She felt that if a student needed to use a library resource, it is because a classroom instructor required it of them. However, Patrice (high anxious) and Angela (high anxious) had such a requirement placed on them by their English 28 instructor, which they described as both "helpful" and "annoying". Hannah (neutral) had a very pointed comment on this issue:

> [The library is] pretty archaic. [Students] don't talk about it. Like, I don't know why, in this generation, the library is kind of prehistoric. We don't go in there to check out books, because the people nowadays, they don't really read. They just go on the Internet. If they can find anything they need on the computer, then they don't need to be in the library . . . [it has] sort of become, as an institution, less necessary than it used to be.

She went on to say, however, that choosing the Internet over the library was "really sad" and that it was indicative of being "lazy". However, she does not feel that use of the library is a necessity.

As discussed in the Use section, participants viewed the library as a place to gain access to the Internet. Some, however, felt the value of having the Internet in the library was to help students use the Internet better. Olivia (low anxious) felt that difficulty in using the Internet can be helped by librarians and said, "sometimes on the Internet, you don't know exactly where to look". She went on to say, "you don't really know what's real and what's not on the Internet". Beverly and Patrice also viewed the library as a resource to help students better

use the Internet. Patrice summed it up well saying, "I just feel that the Internet doesn't always solve everything".

Although some participants viewed the use of the library as extraneous for students in general, most felt using the library was personally important to their future academic careers. As discussed in the Awareness section, Robert was quite nervous about needing to use the library more in a university despite having no ill effects from his current lack of use. Beverly and Roberta both discussed plans to attend graduate school in the future and both believed use of the library will be more significant when that time arrives, with Roberta saying that she will "absolutely" be using it more. Beverly, who wants to become a doctor or dentist, had this exchange with me:

> Beverly: I know when it comes to the sciences, I need a lot of research and to do a lot of research. The library is going to become a second home.
> Me: Throughout your educational career?
> Beverly: Through my educational career.

Time will tell if her prediction comes true, but it is clear that she sees such an outcome despite its contradiction to her current behavior.   Albert (neutral), who mostly uses Google for research, feels the library will be needed to achieve his long-term goals primarily as a tool to find non-Internet sources. Participants also talked about the current value they are getting from their libraries. Taylor said that she was getting "an education" from her library and that she was "learning things that [she] didn't know before". Vincent (low anxious) also said

118

using the library "educates you". Although the Use section showed that not all of these participants regularly used the library, and many that did used it for limited purposes, most felt that using the library is important to their current and future education goals. Clearly a disconnect exits between what they view as important and how they actually behave. Such conflict between human ideals and human behavior is common and it is clear that it can also manifest itself in library-related behaviors.

What is the role of the library on a college campus?

Participants were asked to give their definition of the role or purpose of the library on a college campus. Most viewed the library as a valuable collection of resources to support student success. Olivia, Vincent and Anthony all referred to it as a "tool" for success and Albert used the word "accommodation", as in a resource for students to use for various needs including academic and entertainment. Some were specifically talking about the library building itself, such as Vincent who spoke of the quiet of the library building for studying, which was also mentioned by Anthony who talked about it being "a quiet place to study if [you] don't have that condition at home". This was similar to Marisol who talked about the library being "conveniently located" for students who have nowhere else to go. Benjamin and Angela also mentioned convenience. In the Use section, participants discussed heavy use of library computers, so they, naturally, also placed a significant value on those computers. Taylor, Marisol, Patrice,

Anthony, Albert, and Roberta all mentioned providing computers and/or Internet access as a primary and important role for a college library. Marisol saw this as a particular value for students who do not have their own computing hardware, saying, "all of our work has to be typed and not [everyone] has access to a computer at home". Anthony and Albert expressed similar feelings.

Hannah said the library's purpose is "basically to let people borrow knowledge". Other participants also discussed the library as a place of knowledge or a place to access knowledge. Some talked about the materials and resources of the library when describing this knowledge. Patrice and Angela agreed that they see the library "mostly as a place that houses important resources". Olivia, Taylor, Patrice, and Angela all talked about books with Olivia and Angela specifically mentioning the availably of textbooks at the library. Olivia, Marisol, and Angela also mentioned the likelihood that college library materials would relate more to the courses being taught, as opposed to another library.

Another source of knowledge that was discussed were librarians. All participants who mentioned librarians had a positive view of their value to college students. Taylor and Anthony had the least effusive, but still positive, opinion of librarians. They viewed librarians as being there to assist students and organize materials. Others had much higher praise. Benjamin has worked extensively with his college librarians and is surprised by other students who do not. When

asked how he would describe librarians, he used the word "guru" and said, "they know exactly what we wanna learn about." He acknowledged the expertise of campus librarians to guide students to the best resources and talked about the familiarity they have with instructor assignments:

> The librarians are so used to you asking questions about all the assignments. So they already know. What do my other classmates come and get? You can ask them, they know. The teachers gotta teach a couple classes where they give the same thing. Librarians know.

Patrice also had this view and felt that the knowledge of college librarians would "be more related to the campus [than] going to a public library where they don't know what you're really talking about. Basically, if you ask them for a subject, [they've] heard it before". Vincent said that he believes "librarians are teachers" and felt they were "critical" to the campus for their ability to "direct" students to proper references. He also felt the relationship between the librarian and the student was more personal compared to a student's relationship with a classroom instructor.

The participants interviewed for this study generally held the library's role on the college in high regard. Although some viewed the need to use the library as optional, they all felt that the existence of the library was important for the variety of services and resources, including librarians, it provides to students.

CHAPTER FIVE: CONCLUSIONS & RECOMMENDATIONS

Introduction

This project was a descriptive case study that used a sequential, mixed-methods design to examine and explore library anxiety (LA) among basic skills students at a large California community college (CCC) district. The first phase of the study was quantitative and measured levels of LA among study participants using a tool previously developed and validated by other researchers. Some participants from the quantitative phase were asked to participate in a qualitative phase, which consisted of face-to-face interviews. These interviews were recorded, the recordings were transcribed, and the transcripts were analyzed to identify major themes and trends.

Summary of Research and Findings

This study was guided by two research questions and their sub-questions:

1. What is the prevalence of library anxiety among basic skills English students in a large, multi-campus California community college district?

    a. What components of library anxiety have the most and least prevalence?

    b. What variations, if any, exist across colleges within the district?

2. How do low library-anxious and high library-anxious basic skills English

    students in a large, multi-campus California community college district

    differ in the use of their college libraries?

    c. How aware is each group of the array of services and resources

        available to them through their college library?

    d. How frequently does each group use their college library to

        complete educational and non-educational tasks?

    e. How does each group value their college library as a resource to

        achieve educational goals?

Basic skills is the term used by the California Community College

Chancellor's Office (CCCCO) to identify its developmental education (DE)

students and programs. Although this study was conducted at a CCC, the

recommendations in this chapter are aimed at all community college libraries;

therefore, I will use the term developmental education instead of basic skills.

The first research question, and its sub-questions, was answered through

a quantitative examination of levels of LA among a sample population. That

sample consisted of 191 students enrolled in sections of English 28 at eight of

the nine colleges of the Los Angeles Community College District (LACCD).

English 28 is the last level of developmental English before transfer-level English

for the LACCD. Being enrolled in this course was the only criterion to be included

in the study beyond being 18-years of age or older. The instrument used to

measure levels of LA was the Library Anxiety Scale (LAS), which has been used in over thirty studies for this purpose since its creation in 1992. Students took the LAS during the spring semester of 2010 and all surveys were administered, by me, in class at a pre-arranged time between myself and the instructor.

The mean LAS score for the district was 102.07 out of a scale maximum of 215. This shows that levels of LA among this sample were not high compared to the scale maximum, but that LA was present. As this is the first group of DE students to be examined with the LAS, there is no past data with which to compare. However, past research with non-developmental students shows the mean for this group to be close to that of other populations studied (98.47, 96.25, 129.68), indicating that levels of LA do not seem to vary widely among higher education students. Previous populations studied include undergraduate and graduate students, GED students and international students.

Four of the five subscales of the LAS showed consistent levels throughout the study sample. However, the Knowledge subscale was 15% to 23% lower than the other scales. The Knowledge subscale reflects how participants feel about their level of knowledge of the library, and it would appear that the participants in this study feel much more comfortable about their knowledge of the library than other aspects of it. Without additional research with the survey participants, it is difficult to identify why this scale is so different. One possible explanation is that the other subscales (Affective, Comfort, Mechanical, Staff) are

more directly related to the experience of being in the library. In order to measure ones feeling toward library staff, you must enter the library. The same holds true for the other four non-varying subscales. However, the Knowledge subscale would not require direct interaction with the library. A participant could have an idea of how much they know about the library without actually going into it, based on their assumptions. This, in turn, may have created a false sense of security in regard to their level of knowledge of the library.

When comparing the different colleges of the district, there was little variation among them, indicating that no particular college or its library had a noticeable effect on levels of library anxiety. This included two libraries that were closed for renovation and temporarily replaced with smaller substitutes offering less space, services and resources. Additionally, none of the libraries had made identifying or treating LA a part of their services.

A Background Information Form (BIF) was also used in this study to collect demographic information on ethnicity, gender, age, college experience, parental education, educational goals, employment, most recent visit to the college library, most recent visit to any library and most recent visit to the college library's website. Using bivariate frequency tables, this data was analyzed against LAS levels. For most BIF data points, some differences or trends could be seen, but they were not large. Asian students showed the highest levels of LA by a slight margin and African-American students showed the lowest levels by a

slight margin. These findings match previous research. One clear trend was related to recentness of library visits. Students' levels of LA increased as the length of time since they had last visited a library increased. Qualitative data, discussed later in this chapter, will show a similar connection between use of the library and levels of library anxiety. Another consistent data point was employment. As students' hours of employment per week increased, so did their levels of LA, another finding that matched previous research. Ultimately, analysis of the BIF did not show large variations or trends in LA levels to allow me to conclude that any data point had a significant or predictable effect.

Qualitative research techniques were used to answer the second research question its sub-questions. I conducted face-to-face interviews with thirteen students who completed the LAS at five of the eight quantitatively sampled colleges. All interviews were one-on-one, except for two who were interviewed together at their request. All interviews were recorded and transcripts were produced and analyzed. For purposes of comparison, all participants were grouped into high, low, or neutral anxiety level categories based on the proximity of their LAS total score to the district mean. There were six high-anxious, four low-anxious and three neutral students interviewed. The three areas of inquiry for this part of the study were awareness of the library and its services, use of the library, and the value students placed on the library.

No differences could be seen between the different groups in terms of

their awareness of library services or resources. It was actually the behavior and

attitudes of classroom instructors that mattered most to students' levels of library

awareness. Students talked about their instructors' discussions, or lack thereof,

regarding the library and what it could offer them as students. Students whose

classroom instructors guided them toward or discussed the library demonstrated

higher levels of awareness of library services than other students. This shows

that instructors can have a significant effect on their students' investment of time

towards learning about the library and discovering what it has available for them.

As an example, two students who demonstrated significant knowledge of the

library also had an English 28 instructor who required using library resources for

research projects. Other students said they learned of a library resource because

an instructor required its use or discussed it in class. In contrast, the less

knowledgeable students tended to report little to no discussions about library-

related topics during their classes. Some students first learned of services such

as library instruction or periodical databases during our interview. My findings

confirm previous research showing that instructor behavior can affect students'

awareness of and use of the library and its services and resources. This could be

attributed to pragmatism on the part of students as they choose not to invest time

or effort in that not deemed important by their instructors. It can also be viewed

metacognitively. Students cannot be aware of what they have not been taught. They also cannot be aware that they were never taught it.

Another factor that influenced awareness of library services was the type of assignments student were given. Students who had research-based assignments demonstrated greater knowledge than those who did not. Unfortunately, about half of the students interviewed reported few if any research assignments for their classes. Of those that did report a research assignment, three discussed the same assignment from the same English 28 class. The classroom instructors discussed in this study seemed to place little if any emphasis on the research-based assignment. A lack of data from these instructors prevented further investigation or understanding of this finding. I can speculate that it relates to the developmental level of the students in the study; however, two English 28 instructors were reported as giving a significant research assignment for their classes. Additionally, not all of the students' courses were developmental, yet those non-developmental courses also had few research assignments. It is possible that this is a larger trend among classroom instructors, but further data would be needed to confirm this. When students did have research assignments, some reported significant restrictions on the resources they were allowed to use. Students reported being limited to textbooks, class notes or materials passed out by the instructor. Some students also said that instructors sent them directly to specific websites with no

recommendation to locate other resources or see help from the library. Again, without additional data, I cannot identify why instructors are placing such restrictions on their students. It does, however, lead me to further speculate that the instructors may also lack awareness of the library's resources and services and their ignorance prevents them from guiding students to the library.

Most libraries provide bibliographic instruction (BI) as a service that instructors can request for their classes. This is done to increase the awareness of both students and instructors about the library's offerings. All of the libraries in this study provided such service with some even shaping their instruction to a developmental education level. However, most of the participants in this study, reported no BI experiences. Only three students had ever had a bibliographic instruction session, and they were all from the same class. Only one other student even reported being aware that such a service existed. The fact that instructors are not offering this service to their students would have to be attributed to either a lack of awareness or a lack of interest. Further study is needed to identify which is the cause.

Student use of the library did show a connection to levels of LA. Four of the six high-anxious students reported the lowest levels of library use. These four students also scored high on the Staff and Mechanical subscales and all reported having problems with library staff and/or computers from their limited library experience. Problems with library computers are particularly important as

both high-anxious and low-anxious students reported computer use as their primary reason for entering the library. The next most cited reason was using the library building as a place to study. This concerns me as students seem to view the library as little more than a quiet building with computers. Even students who regularly used a variety of library resources and services, such as reference and databases, still reported use of computers for Internet access and completing class work as the main attraction of the library. Of course, this can be seen positively as computers clearly draw students into the library. However, this raises the question of how librarians can use this to inform and connect students to the full variety of services and resources available to them. Additionally, what is the role and responsibility of classroom faculty? If they make no effort to inform or direct students towards the library, this study shows how little awareness of library services student will have. Lack of awareness would naturally lead to lack of use and both could lead to limited development of information literacy sills.

The biggest surprise of this study was how frequently students reported using public libraries. Public libraries were not an initial focus of my inquiry, but it was discussed frequently. How students used public libraries varied. Some used them to complete homework assignments or study for classes, while others only used them for non-academic purposes such as personal research or web browsing for entertainment. Some students used college and public libraries

interchangeably and some expressed a preference. For those who preferred public libraries, convenience and familiarity were the most cited reasons. Displeasure or frustration with their college library was also mentioned. For those who preferred the college library, they believed that its resources and librarians were more suited to the needs of a college student. I believe this issue also stems from a lack of awareness as students may not understand that different types of libraries normally design their services and resources to the specific populations they were created to serve. However, some students did understand this and only used the college library for college work. Although they may understand, they may also not care. While some students in this study reported finding the public library less anxiety inducing, most seemed primarily concerned with matters of convenience such as proximity to home and/or work or the ability to bring children. This finding also supports past research. As such, properly matching services to academic need can be quickly disregarded. Given that most of the students interviewed primarily just wanted computers and a place to sit, the idea that they would need a specific library may not ever occur to them.

Students were contradictory regarding their use of and valuations of libraries. Many of the interviewed participants, especially high-anxious students, reported limited to little use of their campus libraries, but these students also said they felt library use was vital for student success. I cannot say if this represents

a general contradiction in behavior and values, which can be found in many areas of human experience, or something else. Some students mentioned expecting to need the library more in the future than they do now and based their valuation on that. Some students discussed not seeing any negative consequences from their current limited library use but worried it might hurt them in the future. This was especially evident in students who talked of plans for university study or graduate school. I believe this further connects to the issue of classroom faculty failing to give assignments that have a significant research component, thus causing use of the library to be of limited pragmatic value to students. As these students progress through higher education, I am concerned that their current lack of research experience will not prepare them for greater demands on their research skills. Students are also concerned about this with a few expressing significant anxiety about it. However, other students are not worried as they have come to view Internet resources such as Google and Wikipedia as adequate replacements for a library. Unfortunately, their current classroom experiences are supporting this point of view.

Recommendations

Based on the data I have collected and my analysis of it, I have developed four recommendations. These recommendations are aimed at community college libraries and the librarians and administrators who operate them. They are created to help them improve their service to developmental education

students, though most of the recommendations need not be limited to that population.

Recommendation #1: Community college libraries should recognize the existence of library anxiety in developmental education students and consider it for all services to that population.

Although the overall levels of library anxiety found in this study were not high, most students had some amount of it and some did test quite high. When working with developmental students in any aspect of the library including reference, bibliographic instruction or classes, consider how LA might be affecting their behavior or attitudes as it can have both cognitive and affective effects. Previous research has shown that library anxiety exists in an array of higher education student populations (Carlile, 2007; Mech & Brooks, 1995; Mellon, 1986), so consideration of it should not be limited to DE students. Community college librarians should be proactive in approaching students who may be afraid to approach them or the reference desk. Many librarians do this already, but not all view it as a standard activity of the position. Additionally, in many colleges, fewer librarians are actually on the reference desk further reducing their ability to spot students who appear lost but are unwilling to ask for assistance from authority figures. Librarians should remember that developmental students are likely to be the children of non-college graduates, as were most of the students in this study (79%). They can be easily intimidated by

college culture in general, but especially the library, which, as a physical presence, can be scary and confusing. Additionally, many of the libraries best resources – such as databases, user guides, and information literacy instruction – cannot be easily spotted by a walk through the building and may require active engagement on the part of library staff to see that students are made aware.

Information literacy instruction (usually in the form of bibliographic instruction) has been found to be an effective tool to reduce LA (Battle, 2004; Carlile, 2007; Mohundro, 1999); however, consider student stress when presenting information. Too much information in a one time cognitive-based class can actually have a negative effect on levels of anxiety (Carlile, 2007; Kracker & Wang, 2002). When developing information literacy instruction sessions or programs, college librarians should consider both cognitive and affective issues with a focus on the research process (Collins & Veal, 2004; Kuhlthau, 1988; Zahner, 1992). Additionally, college librarians should make sure to maximize an advantage they have over classroom faculty. Because librarians interact with students in a less formal manner and usually in a one–on-one relationship, they can often be in a better position to identify and alleviate student anxiety about college in general. It is possible this may already be happening as research has shown that student use of the library has positive effects on retention (Mallinckrodt & Sedlacek, 1987) and that librarians have a beneficial effect on student engagement (Kuh & Gonyea, 2003). The students in my study

had generally positive opinions of librarians, although, some students reported bad incidents with individual library staff. Most who expressed a judgment of librarians, however, saw them as valuable with some expressly pointing to the value of college librarians over public librarians.

Recommendation #2: Community college libraries should develop better connections with the developmental education staff on their campuses.

As indicated in chapter two, the literature of developmental education is significant in depth and scope but basically ignores any role for the academic library. Library literature has some discussion of DE; however, it is not significant. These are the results of my own research as well as that of researchers who precede me (Breivik, 1974; McDermott, 2005; Rippey & Truett, 1983; Roselle, 2008; Truett, 1983). As such, it is likely that DE faculty, administrators and other personnel are not thinking of the library when developing programs, policies and practices on campus. Although the role of instructional support services (ISS) is deemed vital to the success of developmental students (Boylan, 1999; Kozeracki, 2002; McCusker, 1999), library services are usually not included among ISS. Librarians will need to find a place for themselves in DE if they are to positively affect its students. Academic librarians should push for inclusion on developmental education advisory committees and boards. Such groups may exist on the campus, district, and/or state level. Communicating the value of information literacy for students can be a

focal point of discussions of why librarians should be a part of these activities. Librarians should work with DE faculty to demonstrate that research skills are a basic and developmental skill necessary for student success. Teaching skills that promote matriculation is at the core of the developmental education philosophy.

When searching for DE connections, there is usually an English and reading contingent in these programs, and faculty from those areas may be more open to a relationship with the library than Mathematics faculty or DE specialists. Learning resources specialists, who may already have a strong partnership with the library, are also worth talking with regarding the inclusion of libraries as part of ISS. There should be no assumption, however, that not considering the library indicates a negative view of it or its staff. It could be as much oversight as anything else. The Academic Senate for California Community Colleges (ASCCC) (2007) produced one of the most thorough collections of best practices for developmental education and failed to even mention libraries once in the report's 152 pages. However, a later document produced by the ASCCC as a collection of successful DE techniques (Fulks & Alancraig, 2008) does cover library-related strategies. Academic librarians should not begin discussions with DE personnel concerned that the library has been deemed unimportant or insignificant in these efforts, for it may be that no one has considered its role. As with students, library awareness can be lacking among faculty and other

academic personnel; however, it is crucial that libraries have a role in supporting developmental students' academic growth, and enlightening the DE staff can be a first step.

Recommendation #3: Community college libraries should engage classroom instructors to inform them of the value that libraries can offer to students.

As indicated in chapter two, research shows positive connections between student use of the library and persistence and success. This can be used to shape conversations with classroom instructors. Building connections with instructors can be difficult as they may not come into the library with any frequency or regularity and librarians are accustomed to having contact with students. However, instructors do affect colleges students' use of the library (Hardesty, 1995), as indicated by the findings of this study. As such, the importance of classroom instructors in the relationship between the librarian and the college student cannot be overlooked.

Most of the students interviewed for this study reported little to no recommendations or guidance from instructors to use the library or to view it as a resource of any value. Additionally, only three students in my study had ever attended a bibliographic instruction (BI) session, which they all reported as a positive experience that they valued and remembered weeks later. While, this is a small finding, it is important, and may represent what is happening to many other students who attend BI sessions. Librarians should capitalize on the

marketing value of instructors who currently make use of library services, such as

BI, to attract additional instructors to participate. Instructors may be more readily

convinced by their peers to make use of different campus services and to add

new elements to their courses. Students in this study also indicated having few

research-based assignments and many of those that did had significant

restrictions placed on the resources they could use. This could be interpreted as

instructors having no faith in their students' ability to carry out competent

research or to locate acceptable resources. This is a perfect place for the library

to offer its assistance and to promote the value of information literacy.

Community college librarians should also attempt to quantify the value of what

they do by working with institutional researchers to identify differences, if any,

between students of instructors who regularly connect them to the library and

students of instructors who do not. If librarians can identify a value-added

component to their services, this is the type of data that is often well received by

discipline-area administrators who may help carry the message to classroom

instructors.

　　　While attempting to address issues of instructor and student awareness,

librarians should increase their own awareness of the needs of classroom faculty.

Instructors may know of the services the library offers but do not see anything

they need. Librarians cannot rely on instructors to take the initiative and come

into the library to discuss this issue. Indeed, classroom faculty may also suffer

from aspects of library anxiety, something the body of LA research, including this study, have not investigated. However, given that LA has been found in graduate students (Jiao & Onwuegbuzie, 1998; Jiao, et al., 2004), it should be seen as farfetched. A number of tools and techniques can be used to learn from instructors including surveys, focus groups and personal conversations. If instructors are making conscious decisions to not use the library or not recommend it to their students, librarians need to know why. This knowledge can be used to change current services, offer new ones and provide justification for resource requests.

Recommendation #4: Community college libraries should find a balance between serving the technology needs of students and fulfilling an educational role at the college.

Interview participants in this study tended to view their college library as a large building with computers. Most identified their primary purpose for using the library as needing a place to study and/or needing access to computers. This is not inherently negative and is, in fact, a traditional role that libraries have served for decades. However, as academic librarians have sought to better engage students and to position libraries as centers for information literacy development, they should be concerned that students have such limited demands. Librarians must consider the metacognitive limits of students to recognize their own levels of ignorance regarding libraries. Additionally, classroom instructors may

exacerbate student ignorance through a lack of attention to the library in classroom discussions and homework assignments. Being proactive in approaching students is a way to provide awareness. If, despite that, students continue to only use study tables and computers at least they are making an informed decision. Helping students make informed and reasoned decisions is at the heart of providing a liberal arts education, even if we disagree with the decision. Also, the ability of students to recognize their own needs is part of being information literate. If students are not aware of what is available to them, they cannot determine if they need it or not. I, like many academic librarians, have had the experience of being timidly approached by a student to ask what initially appeared to be a simple question. After talking with the student, I discovered that their simple question hid a much more complex need which I helped them satisfy. The student then expressed surprise, gratitude, and even shock that such extensive service and personal instruction was readily available to them. Often these are the students who become regular users of the library and who develop a close relationship with one or more librarians. Good student relationships with academic personnel have been shown to have positive effects on undergraduate student success (Astin, 1996). With an eye towards library anxiety, librarians should be concerned about those students who do not make that walk to the desk and limit themselves to the physical facilities of the library. Librarians should be prepared to meet those students halfway. The space and

140

technology of our buildings draw students in, but that is when librarians also have an opportunity to make those valuable and positive connections. Of course, there must be limits to such behavior as there is a point where enlightenment can become harassment. However, there is a long continuum between nothing and too much. Educated, experience, and knowledgeable professionals should be able to identify the appropriate point to be on that continuum.

Limitations and Recommendations for Further Study

There are three areas of this study that limit its applicability to a larger population. The first is the size of the study population. The quantitative portion of this study involved 191 participants. Even within the Los Angeles Community College District, this represents less than one percent of the total population of developmental English students. Qualitatively, 13 students were interviewed. A study with a larger population of developmental English students would need to be carried out to verify the results of this study. The second limitation is scope. This study involved students who were in the last level of developmental English. However, developmental education also includes mathematics, reading and students learning English as a Second Language (ESL). None of these were used as inclusion criteria for this study; however, neither were they used as an exclusion criteria. An additional study that includes the full range of developmental students should be performed and compared with these results to apply them to a wider developmental education student population. Studying

students at lower levels of developmental English would also need to be done to determine if the results of this study are limited to the last level of DE English. Additionally, a study that looked beyond one district and involved colleges throughout the state of California would provide a more diverse data set to test. The final limitation of the study was the research methods used. Quantitatively, the analysis methods used were descriptive and lacked sophistication. More complex analysis methods such a regressions, multivariate correlations, or power analysis could be employed to provide a deeper level of analysis of LA levels and their possible causes within DE groups. Such procedures have been used in past studies of library anxiety. Qualitatively, the initial plan of only using students who tested into the top 20% and lower 20% of library anxiety levels had to be abandoned due to difficultly garnering participants. I believe that original plan is still good and, if executed, would provide qualitative data with more comparability than the data ultimately collected here. Increasing the comparability of the qualitative data would, I believe, allow for better analysis and drawing more concrete conclusions.

Conclusion

In conclusion, this study has discovered three important aspects of the relationship between developmental education students and libraries. First, there is an historical disconnect between librarians and developmental education specialists, as evidence by the literature of each discipline. In my view, the

primary cause of this is that DE experts lack an understanding of how the academic library can affect the outcomes of developmental students and librarians have little evidence with which to engage them in discussion on the issue. Second, DE students suffer from levels of LA that are consistent with other higher education student populations studied. Library anxiety levels did not show signs of being affected by student background factors or individual library facilities. However, services were fairly consistent across the libraries studied and none made identifying or treating library anxiety a part of their services. Finally, developmental education students have a complex relationship with their college libraries. While most placed significant value on the academic library as a resource to support their growth and development as college students – although others practically viewed it as obsolete – they had a fairly limited knowledge of the library and often asked little of it. This is further complicated by classroom faculty, who often do not foster or encourage a relationship between their students and the college library, and student use of public libraries, which can delay their acclimation to the college library and the campus itself. How these affect the future growth of developmental students as library users and researchers remains to be seen. Community college libraries do work that is important to the development of successful and well-rounded higher education students. To do this work it is vital that community college librarians understand the diverse populations of students that exist on their campuses and how those

students awareness of, use of, and valuation of the college library is being

affected or even hindered by anxiety.

LIST OF APPENDICES

APPENDIX A: Background Information Form & Interview Participation Form

How old are you? _____

What is your race or ethnicity? _____

For the rest of this page, please mark the box next to the best answer.

What is your gender?

☐ Male   ☐ Female

Is this semester your first time attending college?

☐ Yes   ☐ No

About how many units have you completed at this or any college or university?

☐ Less Than 10   ☐ 10-30   ☐ 30-60   ☐ Over 60

What is your long-term educational goal?

☐ Take a Few Courses   ☐ Train for a Specific Job or Career

☐ Earn an Associate's Degree   ☐ Earn a Bachelor's Degree
   or Certificate

☐ Earn a Graduate Degree

If you have a job, what are your average hours of work per week?

☐ I do not work   ☐ 1-20   ☐ 21-39   ☐ 40 or Over

What is the highest level of education that either of your parents have completed?

☐ Some High School   ☐ Graduated High School or GED

☐ Some College   ☐ Earned an Associate's Degree or
   Certificate

☐ Earned a Bachelor's Degree   ☐ Earned a Graduate Degree

How long ago was it since you last visited the campus library?

☐ This Week   ☐ This Semester   ☐ Last Semester

☐ Never   ☐ I can't remember

How long ago was it since you last visited any library?

☐ This Week ☐ This Month ☐ In the Last Six Months

☐ In the Last Year ☐ Never ☐ I can't remember

How long ago was it since you last visited the campus library's website?

☐ This Week ☐ This Semester ☐ Last Semester

☐ Never ☐ I can't remember

An additional part of this study involves interviewing students who have completed this survey about their opinions and feelings about the campus library. All students who are invited to be interviewed and choose to participate will be paid with a $10 retail gift card. In addition, these students will also be entered into a raffle to win either an iPod Nano or one of two iPod Shuffles.

If you are interested in participating in the second part of this study, please provide your first name and a phone number and/or email address where you can be reached. If selected, you will be contacted in about three weeks.

Name: _____

Phone Number:

☐ ☐ ☐ - ☐ ☐ ☐ - ☐ ☐ ☐ ☐

Email Address:

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

APPENDIX B: Interview Protocols

Initial Protocol

Would you say that you use the campus library a lot, a little, or not at all?

>   Can you tell me why that is?

Talk to me about your experiences using the campus library. (Only use if the answer to the first question isn't "not at all".)

What sorts of things do you do at the library? (Only use if the answer to the first question isn't "not at all".)

>   Can you rank those in order by what you do the most?

How do you feel when you walk into the library? (Only use if the answer to the first question is affirmative. If needed give examples: happy, confused, safe, annoyed.)

Talk to me about your experiences using libraries before you came to college. (If they indicate that they have not used other libraries, push for elaboration by asking about why they have not.)

Can you tell me about a particularly good or bad experience you can remember happening in a library?

What role do you feel a library serves on a college campus?

Do you believe a college student needs to use the library to be successful? (Push for elaboration if a short answer by asking why or for what purpose.)

What are your long-term educational goals?

Do you believe you will need to use the library to accomplish those goals? (Push for elaboration by asking "How will you need it" and "How will you use it".)

What do you think the library here has to offer students? (Push for knowledge or expectations about specific services and materials.)

Are there things that you feel the library should be doing that it does not? (Push for elaboration if a short answer. Ask about ideas for services, about their needs, about services they are aware of at other libraries.)

Do your instructors talk about the library?

>   What do they say about it?

Do your classmates talk about the library?

What do they say about it?

Do you thing your English 28 classmates talk about the library more or less than your students in your other classes? (Push for elaboration by asking about what they say and how they interpret student attitude.)

What do you think about the people who work in the library?

What do you think that people who work in the library do?

Do you feel the using the library is something you need to learn how to do?

How do you think students learn how to use libraries?

Would you say that you use the campus library a lot, a little, or not at all?

     Can you tell me why that is?

Talk to me about your experiences using the campus library.

What sorts of things do you do at the library? (Only use if the answer to the first question isn't "not at all".)

How do you feel when you walk into the library? (Only use if the answer to the first question is affirmative. If needed give examples: happy, confused, safe, annoyed.)

Talk to me about your experiences using libraries before you came to college. (If they indicate that they have not used other libraries, push for elaboration by asking about why they have not.)

What role do you feel a library serves on a college campus?

Do you believe a college student needs to use the library to be successful? (Push for elaboration if a short answer by asking why or for what purpose.)

Do you ever use a public library to work on college assignments?

     Do you have a preference?

What are your long-term educational goals?

Do you believe you will need to use the library to accomplish those goals? (Push for elaboration by asking "How will you need it" and "How will you use it".)

Are there things that you feel the library should be doing that it does not? (Push for elaboration if a short answer. Ask about ideas for services, about their needs, about services they are aware of at other libraries.)

Do your instructors talk about the library?

Do your classmates talk about the library?

Do you feel the using the library is something you need to learn how to do?

How do you think students learn how to use libraries?

Have you ever had a training session at the library or in any of your classes?

Do you access library resources from home?

Do you feel the Internet makes the library more or less necessary?

Do you use the Internet instead of the using the library?

Do you go into the library just to use the Internet?

Have any of your instructors directed you to use the library for a specific assignment?

APPENDIX C: Announcement Script for Survey Administrations

You are being asked to participate in a research study on how Basic Skills students use libraries. Participation in this study is completely voluntary and you do not have to participate if you choose not to. If you chose to participate, please read and sign the consent form on the first page of the survey or the researchers will not be able to use your data.

Please complete the survey being given to you and answer each question as thoroughly as you can. This survey will ask you questions about your feelings and attitudes about the library here on campus. If you have never used the campus library, please make sure to select 'Never' at the appropriate questions on the second to last page of the survey, but please complete the rest of the survey as best you can.

The last page of the survey will ask you if you are interested in participating in a second phase of the study. Please read it and provide your contact information if you are interested.

Thank you very much for your time and effort in this study.

APPENDIX D: Interview Invitation Script

Hello. my name is Scott Lee and I am contacting you about a survey you recently completed in your English 28 class on [date].

Due to the results of your survey and the fact that you are attending [school], I would like to interview you. During this interview I will ask you questions about how you use and feel about libraries, especially the library on your campus. The interview will be carried out in a private room on the [school] campus and should take about one hour.

Participation in this interview is completely voluntary; you only need to participate if you want. If you choose to, you will be paid with a $10 gift card and will be eligible to win an iPod Nano or one of two iPod Shuffles. I am planning to interview 24 students, so that gives you a 1 in 8 chance of winning a prize.

If contacted by phone:

So are you interested in participating in this interview?

If contacted by email:

If you are interested, please respond to this email or call me at XXX-XXX-XXXX.

APPENDIX E: Consent Form For Quantitative and Qualitative Data Collection

University of California, Los Angeles

CONSENT TO PARTICIPATE IN RESEARCH

An Exploration of Library Anxiety in Basic Skills Students in a Large, Multi-Campus California Community College

You are being asked to participate in a research study conducted by Scott Lee M.S.L.S., and associates from the Education Department, at the University of California, Los Angeles. You were selected as a possible participant in this study because you are enrolled in a section of English 28 in the Los Angeles Commuinty College District. Your participation in this research study is completely voluntary.

Why is this study being done?

This study is being done to gain a better understanding of how basic skills students feel about and use college libraries

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

Complete this survey that will ask you about your feelings about libraries as well as collect some descriptive information about you. In addition, if your response to this first phase of the study is different from the average responses, you may be asked to participate in a second phase of the study, which will be interviews. These interviews will be conducted during the Spring 2010 semester by Scott Lee. You would be interviewed in a private room and asked questions about your use, feelings, and attitudes towards libraries.

How long will I be in the research study?

Participation in the study will take about 20 minutes to complete the survey and, if you are asked, about one hour to complete the interview.

Are there any potential risks or discomforts that I can expect from this study?

 This study will ask you about anxieties you may have related to libraries, so you may experience some anxiety while discussing or thinking about it.

Are there any potential benefits if I participate?

You will not directly benefit from your participation in the research. However, this research will help colleges and universities learn more about the affects of library anxiety on basic skills students.

Will I receive any payment if I participate in this study?

Those who are invited and complete an interview, will be paid $10 as a gift card and will be eligible to win an iPod Nano or one of two iPod Shuffles.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will not be disclosed at any time.   Confidentiality will be maintained by keeping all surveys in a locked file drawer in a locked building that will only be accessed by one person. All personal information will be removed during the

analysis and will not appear in any published information from the study. When the study is finished, all identifying information about you will be deleted and the original paperwork will be destroyed.

Withdrawal of participation by the investigator

You must be 18 years of age or older to participate in this study. If you are under 18, the investigator will not use any of your data for the study.

What are my rights if I take part in this study?

You may withdraw your consent at any time and discontinue participation without penalty or loss of benefits to which you were otherwise entitled.

You can choose whether or not you want to be in this study. If you volunteer to be in this study, you may leave the study at any time without consequences of any kind. You are not waiving any of your legal rights if you choose to be in this research study. You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can answer questions I might have about this study?

If you have any questions, comments or concerns about the research, please contact Scott W. Lee at XXX-XXX-XXXX or XXX@ucla.edu.

If you wish to ask questions about your rights as a research participant or if you wish to voice any problems or concerns you may have about the study to someone other than the researchers, please call the Office for Protection of Research Subjects at (310) 825-7122 or write to Office for Protection of Research Subjects, UCLA, 11000 Kinross Avenue, Suite 102, Box 951694, Los Angeles, CA 90095-1694.

SIGNATURE OF STUDY PARTICIPANT

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____

Name of Participant

_____   _____

Signature of Participant   Date

SIGNATURE OF PERSON OBTAINING CONSENT

In my judgment the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_____   _____

Name of Person Obtaining Consent   Contact Number

_____   _____

Signature of Person Obtaining Consent   Date

UCLA IRB Number: #G10-01-069-01
Expiration Date: 02/24/2011

APPENDIX F: Services to Basic Skills Students Questionnaire for Libraries

Do you have print or electronic materials aimed at a below college level?

Have you received funding from a Basic Skills grant to purchase materials or create a program?

If yes to creating a program, please briefly describe it.

Have you given bibliographic instruction session or library tours to Basic Skills English courses?

If yes, were these sessions specifically aimed at a Basic Skills level or were they the same session you provide to college-level courses?

Please briefly describe any other connections to the Basic Skills program at your college that your library has, if any.

Table H.1

Difference of College Scale Means Compared to District Scale Means

College	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
ELAC	+5.13	+0.65	+2.77	+0.87	+0.14	+0.68
LACC	-2.65	-0.82	-1.00	-0.77	+0.58	-0.65
LAHC	-14.52	-4.25	-6.23	-2.25	-1.37	-0.38
LAMC	+6.36	+3.45	+1.48	+1.17	+0.16	+0.09
LAPC	-1.24	-0.59	+0.02	-0.45	+0.08	-0.31
LATT	+2.93	+1.51	+0.96	+0.35	-0.48	+0.62
LAVC	+3.00	+0.36	+1.37	+0.55	+0.53	+0.17
WLAC	-16.79	-6.20	-6.73	-1.51	-0.49	-1.87

Table H.2

LAS and Subscale Means by Ethnicity

Ethnicity	n	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
African-American	20	94.35	31.75	28.65	17.35	9.35	7.25
Asian	23	106.48	36.48	32.17	19.39	10.61	7.83
Hispanic	96	103.14	35.36	30.92	19.05	10.00	7.82
White Non-Hispanic	27	97.70	33.63	30.15	17.48	9.41	7.04

Table H.3

LAS and Subscale Means by Age Groups

Age Group	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
19 or Less	96.65	33.24	28.49	17.98	9.78	7.18
20 to 24	104.13	36.00	31.60	18.81	9.79	7.93
25 to 29	110.41	37.86	33.23	20.68	10.68	8.00
30 to 34	102.25	35.13	31.31	17.56	10.31	7.94
35 to 39	103.88	33.13	33.38	19.25	9.50	8.63
40 to 49	93.36	31.45	29.00	17.00	8.64	7.27
50+	112.25	38.25	32.75	21.50	11.25	8.50

Table H.4

LAS and Subscale Means by Works Hours Per Week

Work Hours	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
None	96.99	33.19	29.37	17.59	9.40	7.44
"1-20"	99.93	35.11	29.61	18.43	9.68	7.10
"21-30"	106.02	36.27	31.94	19.67	10.22	7.92
>40	106.54	36.34	32.39	19.24	10.39	8.17

⬜ = Only points where scale scores dropped.

Table H.5

LAS and Subscale Means by Units Completed

Units	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
<10	102.56	35.49	30.71	18.75	9.76	7.85
10-30	99.65	34.29	29.74	18.48	9.78	7.36
30-60	104.75	34.78	32.94	18.72	10.19	8.11
>60	107.78	39.11	31.56	18.89	10.11	8.11

Table H.6

LAS and Subscale Means by Educational Goal

Ed Goal	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
Take Courses	105.40	36.00	30.20	19.60	12.00	7.60
Job Training	99.82	34.27	29.27	18.36	10.05	7.86
Associate's Degree	101.62	34.28	31.17	18.64	9.55	7.98
Bachelor's Degree	101.38	35.09	30.29	18.58	9.81	7.60
Graduate Degree	104.41	35.56	32.41	18.81	10.15	7.48

Table H.7

LAS and Subscale Means by Most Current Visit to the Campus Library

Last Visit	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
This Week	95.69	33.05	29.31	17.31	8.72	7.31
This Semester	99.63	34.15	29.60	18.28	10.05	7.55
Last Semester	103.50	35.67	30.28	19.36	10.19	8.00
Never	111.40	38.13	33.53	20.50	11.07	8.17
Can't Remember	112.47	37.41	35.59	19.88	11.24	8.35

Table H.8

LAS and Subscale Means by Most Current Visit to Any Library

Last Visit	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
This Week	98.30	34.01	29.99	17.94	8.97	7.39
This Month	93.03	32.18	27.18	17.09	9.30	7.27
Six Months	105.29	35.83	31.37	19.59	10.24	8.27
Last Year	110.08	37.54	34.31	19.92	10.46	7.85
Never	117.67	39.50	37.17	20.67	11.50	8.83
Can't Remember	109.15	36.96	33.00	19.74	11.52	7.93

Table H.9

LAS and Subscale Means by Most Current Visit to the College Library's Website

Last Visit	LAS Total	Staff	Affective	Comfort	Knowledge	Mechanical
This Week	99.66	34.84	29.53	18.39	9.37	7.53
This Semester	100.43	35.57	29.26	18.78	9.65	7.17
Last Semester	104.20	32.67	33.33	19.67	10.47	8.07
Never	105.65	36.12	32.05	19.21	10.26	8.01
Can't Remember	95.00	32.63	28.81	16.63	9.48	7.44

REFERENCES

Academic Affairs Division System Office. (2008). Report of the system's current programs in English as a second language (ESL) and basic skills. Sacramento, CA: Board of Governors of the California Community Colleges.

Academic Senate for California Community Colleges. (1999, Fall). The role of academic senates in enrollment management Retrieved May 31, 2009, from http://www.clpccd.org/education/documents/StateAS_Position_on_EM.pdf

Academic Senate for California Community Colleges. (2007). Basic skills as a foundation for students success in California community colleges (2nd ed.). Sacramento, CA: California Community Colleges Basic Skills Initiative.

Affleck, M. A. (1992). Bibliographic instruction in community colleges: Current practice and the new standards. *Research Strategies, 10*(1), 24-33.

American Library Association. (2006a, September 1). Information Literacy Competency Standards for Higher Education Retrieved Novermber 5, 2008, from http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm

American Library Association. (2006b, July 24). Presidential Committee on Information Literacy Retrieved Novermber 1, 2008, from http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm

Antell, K. (2004). Why do college students use public libraries? A phenomenological study. *Reference & User Services Quarterly, 43*(3), 227-236.

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.

Astin, A. W. (1968). Undergrduate achievement and institutional "excellence.". *Science*(161), 661-668.

Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bas.

Astin, A. W. (1985). Involvement: The conerstone of excellence. *Change*(17), 35-39.

Astin, A. W. (1996). Involvement in learning revisited: Lessons we have learned. *Journal of College Student Development, 37*, 123-134.

Bailey, T. (2009). Rethinking developmental education in community college. New York: Community College Research Center, Columbia University.

Ball, A., Cooks, J. A., & Pettigrew, R. W. (1999, Sep 22, 1999). The Expository Writing Program. Retrieved June 7, 2009, from http://www.stanford.edu/~arnetha/expowrite/index.html

Barkey, P. (1965). Patterns of students use of a college library. *College & Research Libraries, 20*(2), 115-118.

Battle, J. C. (2004). *The effect of information literacy instruction on library anxiety among international students [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 3126554).*

Ben Omran, A. I. (2001). *Library anxiety and Internet anxiety among graduate students of a major research university. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 3013234).*

Bettinger, E. P., & Long, B. T. (2005). Remediation at the community college: Student participation and outcomes. *New Directions for Community Colleges*(129), 17-26.

Bostick, S. L. (1992). *The development and validation of the library anxiety scale. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 9310624).*

Boyer, P. G., Butner, B. K., & Smith, D. (2007). A portrait of remedial instruction: Faculty workload and assessment techniques. *Higher Education, 54*(4), 605-613.

Boylan, H. R. (1999). Demographics, outcomes, and activities. *Journal of Developmental Education, 23*(2), 2.

Boylan, H. R. (2002). *What works : research-based best practices in developmental education.* Boone, N.C.: Continuous Quality Improvement Network with the National Center for Developmental Education, Appalachian State University.

Boylan, H. R., Bonham, B. S., & Bliss, L. B. (1992). *Summary report of the national study of developmental educaiton: Students, programs, and institutions of higher education.* Paper presented at the First National Conference on Research in Developmental Education, Charlotte, NC, Charlotte, NC.

Boylan, H. R., Bonham, B. S., & White, S. R. (1999). Developmental and remedial education in postsecondary education. *New Directions for Higher Education, 27*(4), 87-101.

Boylan, H. R., & et al. (1997). Program components and their relationship to student performance. *Journal of Developmental Education, 20*(3), 2-8.

Boylan, H. R., & Saxon, D. P. (1998). The origin, scope, and outcomes of developmental educaiton in the 20th Century. In J. L. Higbee & P. L. Dwinell (Eds.), *Developmental educaiton: Preparing successful college*

163

students. Columbia, SC: National Resource Center for the First Year Exerience and Students in Transition, University of South Carolina.

Breivik, P. S. (1974). *Effects of library-based instruction in the academic success of disadvantaged college freshmen. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 7505206).*

Breivik, P. S. (1977). Resources: The fourth R. *Community College Frontiers*(5), 46-50.

Calcagno, J. C., & Long, B. T. (2008). The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach: Addressing Endogenous Sorting and Noncompliance. An NCPR Working Paper. New York: National Center for Postsecondary Research, Teachers College, Columbia University.

California Community College Chancellor's Office. (2010, 06/27/2010). Data mart and reports Retrieved 06/27/2010, 2009, from http://www.cccco.edu/ChancellorsOffice/Divisions/TechResearchInfo/MIS/DataMartandReports/tabid/282/Default.aspx

California Community Colleges Chancellor's Office. (2009, 05/08/2009). Data mart and reports Retrieved 05/08/2009, 2009, from http://www.cccco.edu/ChancellorsOffice/Divisions/TechResearchInfo/MIS/DataMartandReports/tabid/282/Default.aspx

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.

Casazza, M. E., & Silverman, S. L. (1996). *Learning assistance and developmental education : a guide for effective practice*. San Francisco: Jossey-Bass Publishers.

CCCBSI. (2009, 2009). Basic Skills Initiative Retrieved Jan 1, 2009, from http://www.cccbsi.org/

Churchill, W. D., & Iwai, S. I. (1981). College attrition, student use of campus facilities, and a consideration of self-reported poersonal problems. *Research in Higher Education, 14*, 353-365.

Clowes, D. A. (1980). More than a definitional problem: Remedial, compensatory, and developmental education. *Journal of Developmental & Remedial Education, 4*(1), 8-10.

Collins, K. M. T., & Veal, R. E. (2004). Off-campus adult learners' levels of library anxiety as a predictor of attitudes toward the Internet. *Library & Information Science Research, 26*(1), 5-14.

Creswell, J. W. (2003). *Research design : qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

De Jager, K. (2002). *Imacts & outcomes: Searching for the most elusive indicators of academic library performance.* Paper presented at the Meaningful measures for emerging realities. Proceedings of the 4th Northumbria International Conference on Performance Measurement in Libraries and Information Services 2001, Washington, DC.

De Jong, M., & Eckard, S. (2005). Faculty and librarian cooperation in designing course projects for at-risk freshmen. *NADE Digest, 1*(2), 8-13.

Dolman, A. U. (1996). *Predicting library anxiety, computer anxiety, and library performance (Unpublished master's thesis).* University of North Carolina, Chapel Hill, Chapel Hill, NC.

Farrell, S. L. (2004). Start-up of a mandatory library orientation program in developmental education. *Community & Junior College Libraries, 13*(1).

Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review, 36*(2), 68-88.

Fulks, J., & Alancraig, M. (2008). Constructing a framework for success A holistic approach to basic skills. Sacramento, CA: Academic Senate for California Community Colleges.

Gerlaugh, K., Thompson, L., Boylan, H., & Davis, H. (2007). National study of developmental education II: Baseline data for community colleges. *Research in Developmental Education, 20*(4), 1-4.

Gocek, M. A. (1970). Library services for community students: A preliminary study of problems in four southeastern New York counties. Poughkeepsie: Southeastern New York Library Resources Council.

Goudy, F. W., & Moushey, E. (1984). Library instruction and foreign students: A survey of opinions and practices among selected libraries. *Reference Librarian*(10), 215-226.

Green, M., & Milbourne, L. (1998). Making Learning Support Work. *FE Matters, 2*(6), 1-58.

Grosser, K. (1987). Tertiary students & library usage with particular emphasis on public libraries: A report of a 1986 Melbourne survey. Melbourne: Library Association of Australia.

Hamrick, F. A., Schuh, J. H., & Shelley, M. C. (2004). Predicting higher education graduation rates from institutional chracteristics and resource allocation. *Education Policy Analysis Archives, 12*(19), 1-24.

Hardesty, L. (1995). Faculty culture and bibliographic instruction: An exploratory analysis. *Library Trends, 44*(2), 339-367.

Hays, K. (1994). Student assessment in the community college and the use of technology in testing. In G. Baker (Ed.), *A handbook on the community college in America* (pp. 474-484). Westport, CT: Greenwood Press.

Higbee, J. L., Arendale, D. R., & Lundell, D. B. (2005). Using theory and research to improve access and retention in developmental education. *New Directions for Community Colleges, 2005*(129), 5-15.

Hiscock, J. E. (1986). Does library usage affect academic performance? A study of the relationship between academic performance and usage of libraries at the Underdale site of the South Australian College of Advanced Education. *Australian Academic & Research Libraries, 17*(4), 207-214.

Holton, B., Hardesty, L., & O'Shea, P. (2008). Academic Libraries: 2006 (NCES Report No. 2008337): National Center for Education Statistics.

Jerabek, J. A., Meyer, L. S., & Kordinak, S. T. (2001). 'Library anxiety' and 'computer anxiety': measures, validity, and research implications. *Library & Information Science Research, 23*(3), 277-289.

Jiao, Q. G., & Onwuegbuzie, A. J. (1997). Antecedents of library anxiety. *The Library Quarterly, 67*(4), 372-389.

Jiao, Q. G., & Onwuegbuzie, A. J. (1998). Perfectionism and library anxiety among graduate students. *The Journal of Academic Librarianship, 24*(5), 365-371.

Jiao, Q. G., & Onwuegbuzie, A. J. (1999a). Identifying library anxiety through students' learning-modality preferences. *The Library Quarterly, 69*(2), 202-216.

Jiao, Q. G., & Onwuegbuzie, A. J. (1999b). Self-perception and library anxiety: an empirical study. *Library Review, 48*(3), 140-147.

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.

Jiao, Q. G., & Onwuegbuzie, A. J. (2002). *Reliability generalization of the library anxiety scale scores: Initial findings (Unpublished manuscript)*. Baruch College, The City University of New York. New York.

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

Jiao, Q. G., Onwuegbuzie, A. J., & Lichtenstein, A. A. (1996). Library anxiety characteristics of 'at-risk' college students. *Library & Information Science Research, 18*, 151-163.

Jiao, Q. G., 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 & Management, 44*(2), 948-956.

Jiao, Q. G., Onwuegbuzie, A. W., & Bostick, S. L. (2006). The relationship between race and library anxiety among graduate students: A replication study. *Information Processing & Management, 42*(3), 843-851.

Kaplan, A. (1964). *The conduct of inquiry; methodology for behavioral science*. San Francisco: Chandler Pub. Co.

Knapp, P. B. (1958). College teaching and the library. *Illinois Libraries, 40*(10), 828-833.

Knapp, P. B., & Wayne State University. (1966). *The Monteith College library experiment*. New York: Scarecrow Press.

Kosa, G. A. (1982). The psychological barrier between college students and the librarian. *Australian Academic & Research Libraries, 13*(2), 107-112.

Kozeracki, C. A. (2002). Issues in Developmental Education. *Community College Review, 29*(4), 83-100.

Kozeracki, C. A. (2004). *The socialization of community college instructors who teach developmental English classes. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 3135549).*

Kracker, J., & Wang, P. (2002). Research anxiety and students' perceptions of research: An experiment. Part II. Content analysis of their writing on two experiences. *Journal of the American Society for Information Science and Technology, 53*(4), 295-307.

Kraemer, B. A. (1997). The academic and social integration of Hispanic students into college. *Review of Higher Education, 20*(2), 163-179.

Kramer, L. A., & Kramer, M. B. (1968). The college library and the drop-out. *College & Research Libraries, 29*(4), 310-312.

Kuh, G. D., & Gonyea, R. M. (2003). The role of the academic library in promoting student engagement in learning. *College & Research Libraries, 64*(4), 256-282.

Kuhlthau, C. C. (1988). Developing a model of the library search process: cognitive and affective aspects. *Rq, 28*, 232-242.

Kuhlthau, C. C. (1991). Inside the search process: information seeking from the user's perspective. *Journal of the American Society for Information Science, 42*, 361-371.

LACCD Office of Institutional Research and Information. (2008). English and math placements of African-American students. Los Angeles, CA.

Light, R. J., Singer, J. D., & Willett, J. B. (1990). *By design : planning research on higher education.* Cambridge, Mass.: Harvard University Press.

Lijphart, A. (1971). Comparative politics and the comparative method. *American Political Science Review, 65*, 682-694.

Lindauer, B. G. (2007). Preparing basic skills students to success with information competency: Sabbatical report for Spring 2007: City College of San Francisco.

Los Angeles Community College District. (2010, 2010). Los Angeles Community College District - Home Page Retrieved Jan 3, 2009, from http://www.laccd.edu

Mallinckrodt, B., & Sedlacek, W. E. (1987). Student retention and the use of campus facilities by race. *NASPA Journal, 24*(3), 28-32.

Malvasi, M., Rudowsky, C., & Valencia, J. M. (2009). *Library Rx : measuring and treating library anxiety : a research study*. Chicago: Association of College and Research Libraries.

McCabe, R. H. (2000). No one to waste: A report to public decision-makers and community college leaders. Philadelphia, PA: American Association of Community Colleges.

McCabe, R. H., & Day, P. R. (1998). What works in developmental education. In R. H. McCabe & P. R. Day (Eds.), *Developmental education: A twenty-first century social and economic imperative* (pp. 19-26). Mission Viejo, CA: League for Innovation in the Community College.

McCusker, M. (1999). ERIC eeview: Effective elements of developmental reading and writing programs. *Community College Review, 27*(2), 93-105.

McDermott, D. (2005). Library instruction for high-risk freshman. *Reference Services Review, 33*(4), 418-437.

McInnis, R. G. (1978). *New perspectives for reference service in academic libraries*. Westport, CT: Greenwood.

Mech, T. F., & Brooks, C. I. (1995). *Library anxiety among college students: An exloratory study.* Paper presented at the Seventh National Conference of the Association of College and Research Libraries, Pittsburgh, PA.

170

Mellon, C. A. (1986). Library anxiety: a grounded theory and its development. *College & Research Libraries, 47*(2), 160-165.

Mellon, C. A. (1988). Attitudes: The forgotton deminsion in library instruction. *Library Journal, 113*(14), 137-139.

Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco: Jossey-Bass Publishers.

Mezick, E. M. (2007). Return on investment: Libraries and student retention. *Journal of Academic Librarianship, 33*(5), 561-566.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook* (2nd ed.). Thousand Oaks: Sage Publications.

Mohundro, J. L. (1999). *The effectiveness of bibliographic instruction on reducing library anxiety in GED students at a community college (Doctoral dissertation). Available from ProQuest Dissertations and Theses database.(UMI No. 9934462).*

Muraskin, L. (1997). "Best Practices" in student support services: A study of five exemplary sites. Followup study of student support services programs (pp. 71). Washington, DC: US Department of Education.

Nardi, P. M. (2006). *Doing survey research : a guide to quantitative methods* (2nd ed.). Boston, Mass.: Pearson/Allyn & Bacon.

National Association for Developmental Education. (2009, September 28). Definition of Developmental Education Retrieved December 30, 2009, from http://www.nade.net/aboutDevEd/definition.html

National Association of Student Personnel Administrators. (1989). Points of view. A perspective on student affairs, 1987. The student personnel point of view, 1949. The student personnel point of view, 1937. Washington, DC.

Nichols, R. C. (1964). Effects of various college characteristics on student aptitude test scores. *Journal of Education Psychology, 55*(1), 45-54.

Onwuegbuzie, A. J. (1997). Writing a research proposal: the role of library anxiety, statistics anxiety, and composition anxiety. [Feature]. *Library & Information Science Research, 19*(1), 5-33.

Onwuegbuzie, A. J., & Jiao, Q. G. (1998). The relationship between library anxiety and learning styles among graduate students: implications for library instruction. [Feature]. *Library & Information Science Research, 20*(3), 235-249.

Onwuegbuzie, A. J., & Jiao, Q. G. (2000). I'll go to the library later: the relationship between academic procrastination and library anxiety. [Feature]. *College & Research Libraries, 61*(1), 45-54.

Onwuegbuzie, A. J., Jiao, Q. G., & Bostick, S. L. (2004). *Library anxiety : theory, research, and applications*. Lanham, Md.: Scarecrow Press.

Parsad, B., & Lewis, L. (2003). Remedial education at degree-granting postsecondary institutions in fall 2000. Statistical analysis report (NCES Report No. 2004010): U.S. Department of Education, National Center for Education Statistics.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, Calif.: Sage Publications.

Phifer, K. O., & Person, R. J. (1983). The role of community college libraries and learning resource centers in literacy education. *Community & Junior College Libraries, 2*(1), 9-22.

Rippey, D. T., & Truett, C. (1983). The developmental student and the community college library. *Community College Review, 11*(3), 41-47.

Ritchie, J., & Lewis, J. (2003). *Qualitative research practice : a guide for social science students and researchers*. London ; Thousand Oaks, CA: SAGE.

Rock, D. A., Centra, J. A., & Linn, R. L. (1970). Relationship between college chracteristics and student achievement. *American Educational Research Journal, 7*, 109-121.

Roselle, A. (2008). Community College Library Practices in Developmental Education. *Journal of Developmental Education v. 32 no. 2 (Winter 2008) p. 24-6, 28, 30, 32, 32*(2), 24-26, 28, 30, 32.

Roselle, A. (2009). Preparing the Underprepared: Current Academic Library Practices in Developmental Education. [Feature]. *College & Research Libraries, 70*(2), 142-156.

Roueche, J. E., & Roueche, S. D. (1999). *High stakes, high performance : making remedial education work*. Washington, D.C.: Community College Press.

Russell, R. E. (1982). *The relationship of documented library use to academic achievement, program of study, and progress toward a degree. AIR Forum 1982 Paper*. Paper presented at the 22nd Annual Form of the Association for Institutional Research, Denver, CO.

Seidman, I. (2006). *Interviewing as qualitative research : a guide for researchers in education and the social sciences* (3rd ed.). New York: Teachers College Press.

Self, J. (1987). Reserve readings and student grades. Analysis of a case study. *Library & Information Science Research, 9*(1), 29-40.

Shaughnessy, T. W. (1975). Library services to educationally disadvantaged students. *College and Research Libraries, 36*(6), 443-448.

Shoham, S., & Mizrachi, D. (2001). PERSPECTIVES ON...Library anxiety among undergraduates: A study of Israeli B.Ed students. *Journal of Academic Librarianship, 27*(4), 305.

Starks, G. (1994). Retention and developmental education: What the research has to say. In M. Maxwell (Ed.), *From access to success*. Clearwater, FL: H7H Publishing.

Swope, M. J., & Katzer, J. (1972). Why don't they ask questions? *RQ, 12*(Winter), 161-166.

Thomas, S. E. (2000). The Necessary library revolution in community college developmental and remedial programs. *Community & Junior College Libraries, 9*(2), 47.

Trounson, R. (2002, Jan 31). Cal state ouster rate rises slightly, *The Los Angeles Times,* p. B.1.

Truett, C. (1980). *The relationship of library services provided to developmental studies students and student persistence rates in Texas public community junior colleges. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 8100976).*

Truett, C. (1983). Services to developmental education students in the community college: Does the library have a role? *College and Research Libraries, 44*(1), 20-28.

U.S. Department of Education National Center for Education Statistics. (1996). Remedial education at higher education institutions in Fall 1995 (NCES Report 97-584). Retrieved from http://www.nces.ed.gov/pubs/97584.pdf.

Van Kampen, D. J. (2003). *Library anxiety, the information search process and doctoral use of the library. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 3094823).*

Van Scoyoc, A. M. (2003). Reducing library anxiety in first-year students. *Reference & User Services Quarterly, 42*(4), 329.

Veal, R. (2002). The relationship between library anxiety and off-campus adult learners. *Journal of Library Administration, 37*(3/4), 529.

Wells, J. (1995). The influence of library usage on undergraduate academic success. [Feature]. *Australian Academic & Research Libraries, 26*, 121-128.

Yin, R. K. (2009). *Case study research : design and methods* (4th ed.). Los Angeles, Calif.: Sage Publications.

Zahner, J. E. (1992). *A cognitive strategies framework for domain-integrated process-oriented library instruction : the effects on research process orientation, library anxiety, attitudes, and research products of college students. [Doctoral Dissertation]. Available from ProQuest Dissertations & Theses database (UMI No. 9306070).*