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Investigating the Effectiveness of a Credit-Bearing Information Literacy Course in Reducing Library Anxiety for Adult Learners

Roslyn Grandy, The College of New Rochelle

Abstract

This study examines levels of library anxiety in 30 adult learners before and after completing a two-credit hybrid information literacy course. A modified version of the Multidimensional Library Anxiety Scale was administered at the beginning and end of the course to compare levels of library anxiety. An analysis of the data revealed that the course was moderately effective in reducing library anxiety in adult learners. Awareness of library resources, comfort with the search process, and comfort level with library technology significantly increased after course completion. No significant decreases in library anxiety were reported in the areas of comfort level with staff or the library space.

Keywords: library anxiety, adult learners, nontraditional students, information literacy, academic libraries, credit courses

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Introduction

Attending college can be an overwhelming experience for adult learners, especially for those who have been away from formal education for many years. These students often face work, family, and community responsibilities that constrain their ability complete assignments on time. In order to conduct research for their papers and projects, it is vital for adult students to familiarize themselves with a place they may have never visited before: the college library. Anxiety surrounding use of the library can create additional barriers to their academic success.

The School of New Resources at The College of New Rochelle offers a course called Research and Information Literacy to help adult students become more aware of available library resources and services. The purpose of this study was to determine if the andragogical design and methods used in this two-credit, 12-week hybrid course are effective in reducing library anxiety for students at SNR. A modified version of Van Kampen-Breit's (2013) Multidimensional Library Anxiety Scale (MLAS) was administered at the beginning and the end of the RIL course to assess students' perceptions of academic libraries and the information search process.

Literature Review

The idea that using the library can be daunting and uncomfortable for students was first labeled *library anxiety* by Constance Mellon. She found that 75-85% of students who were beginning research for a paper described their initial reaction to conducting library research in terms of fear (Mellon, 1986). Bostick (1993) identified "a tendency for students to view library staff, particularly librarians, as intimidating and aloof" (p. 6) or too busy with other tasks to provide help. Library anxiety was later described as an "uncomfortable feeling or emotional disposition experienced in a library setting, which has cognitive, affective, physiological, and behavioral ramifications" (Jiao, Onwuegbuzie, & Lichtenstein, 1996, p. 152).

Onwuegbuzie and Jiao (2000) found that several dimensions of library anxiety, including perceived barriers between students and staff, comfort with the library, affective barriers, and knowledge of the library were significantly correlated with academic procrastination. In a literature review on this topic, Carlile (2007) identified words that were most frequently used to describe the negative feelings of library-anxious students. These included: confused,

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lost, fear, embarrassed, frustrated, overwhelmed, threatened, nervousness, worry, discomfort, helpless, incompetent, intimidated, inadequate, and unsure.

In an effort to quantitatively measure library anxiety in college students, Bostick developed the 43-item Library Anxiety Scale (Onwuegbuzie, Jiao, & Bostick, 2004). To reflect changes in information theory and research methods, due in part to the ubiquity of the internet, Van Kampen (2004) built upon Bostick's scale in creating the 54-item Multidimensional Library Anxiety Scale. This Likert-style scale measures six dimensions of library anxiety: "(1) comfort and confidence when using the library, (2) information search process and general library anxiety, (3) barriers concerning staff, (4) importance of understanding how to use the library, (5) comfort level with technology as it applies to the library, and (6) comfort level inside the library building" (p. 33).

Information literacy (IL) instruction has been shown to help reduce library anxiety, especially for international students (Carlile, 2007; Van Scoyoc, 2003). Platt and Platt (2013) found that after only two 50-minute IL sessions, library anxiety levels of graduate students in a research methods in psychology class were significantly reduced. Participants reported that they were much more comfortable finding and accessing library resources but were not more likely to seek help from library staff after attending the sessions.

Although most IL instruction occurs in a one-shot setting, credit-bearing IL courses are being offered at 19% of academic institutions in the United States (Cohen et al., 2016). Credit-bearing IL courses have been shown to have a significant impact on attitudes toward the library as well as overall academic success. Cook (2014) found that 56% of students who took a credit-bearing library course persisted to graduation, while only 30% of those who did not take the course graduated. Students in a 15-week IL course improved their skills in developing a research strategy and evaluating information sources by more than 45% (O'Malley, 2009). After taking a three-credit IL course, nearly 73% of participating students indicated that the class made them more confident in using their library's website (Chen, 2015). Neff (2013) found significant improvement in competencies such as correct understanding of truncation, Boolean operators, and the purpose of an abstract in a 12-week IL course. To date, no other studies have examined the effect of a credit-bearing IL course on library anxiety in adult learners.

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Teaching adult learners as opposed to traditional college students may require special considerations and unique methodology. Andragogy refers to teaching theory and methods for adults, as opposed to pedagogy, the discipline of theory and practice for teaching children (Knowles, 1968). The six basic assumptions of andragogy are: (a) adult learners are self-directed, (b) they have life experience which informs their learning, (c) they want to actively participate in the learning process, (d) their learning should be problem-based and applicable to their lives, (e) they are internally motivated to learn, and (f) they need to know why they are learning (Merriam, Caffarella, & Baumgartner, 2007).

Adult education theorist Jack Mezirow's (1996) transformative learning theory stated that "learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action" (p. 162). Older students interpret meaning and ideas through the lens of their prior experiences. Their reasons for returning to school may be different from those of traditional undergraduates, such as career change or advancement, the need to provide for dependents, or a better understanding of life situations (Holmes, 2000). Keeping adult learning theory in mind can help librarians to better serve adult learners.

Cooke (2010) described an *andragogical librarian* as being aware of the particular concerns of adult library users, including limited technology skills, the fear of appearing unknowledgeable, and feeling completely overwhelmed by the research process. Given (2001) pointed out that traditional student support models do not always serve adult learners who need assistance during evenings and weekends. Models of instruction that work well for adult learners include "collaborative learning, active participation, and a relaxed atmosphere" (Gold, 2005, p. 469). When adult learners have a more active role in a course, librarians can take on the role of coach or mentor rather than instructor (Cooke, 2010). By encouraging adults to draw upon their prior experiences and make connections between familiar processes and new methods, librarians may be able to decrease library anxiety in adult learners and facilitate lifelong IL.

Background

The School of New Resources (SNR) at The College of New Rochelle (CNR) was founded in 1972 to serve adults age 21 and over exclusively. All SNR graduates receive a Bachelor of Arts degree with the option to specialize in communications, foreign languages, letters,

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psychology, or social sciences. In addition to the suburban New Rochelle campus, the School of New Resources has four urban campuses throughout the boroughs of New York City. SNR students have either high school diplomas or GEDs. Most students in this school are "African-American or Latino, and the typical SNR student is a 37-year-old, first generation single mother, who works full-time while attending classes" (Fontoura & LaFontana, 2014, p. 2-3).

Currently, the final assignment for the six-credit seminar courses at SNR is called the Life Arts Project (LAP). The LAP is experiential in nature and is "intended to provide students with an opportunity to integrate course content and research with life experiences" (Dinwiddie-Boyd, 2016, p. 52). The students are expected to combine primary research such as reflective analyses, case studies, surveys, observations, or interviews on a specific topic with past experiences and secondary research in the form of a literature review of scholarly sources (The School of New Resources, 2016, *Life Arts*).

Historically, SNR had offered a course called Library as a Research Tool that was not designed or taught by librarians. After the most recent self-study evaluation by CNR's accrediting body, all departments were encouraged to participate in developing a culture of assessment. The library collaborated with SNR in creating a new course, Research and Information Literacy (RIL) that was taught by librarians in order to promote and evaluate information literacy skills more effectively. This unique collaboration between staff from SNR and the library resulted in a course specifically designed for adult learners that incorporated both andragogical theory and principles of information literacy.

The RIL course has been taught by librarians at SNR since January 2014. It began as an 18-week course and evolved into a 12-week, two-credit hybrid course as part of a college-wide initiative to offer more hybrid and online courses. In addition to a weekly one-and-a-half-hour class session, students complete an additional half-hour online tutorial via the InfoLit Modules from Credo Reference. The RIL course description in the SNR catalog states:

In this course, students will develop the research skills necessary for both completing college assignments and sustaining life-long learning. Working hands-on through Gill Library and completing in-class and weekly assignments, students will cultivate the information literacy skills essential for success in a college setting. The goals of this course are to assist students

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in acquiring confidence and proficiency in seeking, evaluating, and managing the wealth of information currently available in print, media and online. The Research and Information Literacy course is designed to work in conjunction with Language, Thought and Critical Analysis and Core Seminars such as Urban Community and Human Body to assist students in the successful completion of their research assignments (The School of New Resources, 2016, ENG 216A).

In keeping with the Association of College and Research Libraries (2000) *Information Literacy Competency Standards for Higher Education*, subjects covered in the course include refining a topic, formulating a thesis statement, developing effective search strategies, citing and ethically using information in various formats, and using the Gill Library website and other websites for academic research.

RIL instructors have implemented principles of andragogy into curriculum design and teaching strategies. The textbook that is used in most sections of the course was tailored specifically for SNR students. Five RIL instructors remixed an open textbook to create *The Information Literacy User's Guide: A Remixed Open, Online Textbook* (Fazzino, Kahn, Octobre, Sucre, & Turley, 2017). This free, online textbook includes screenshots from the CNR library's resources and examples such as, "Pedro is a student at The College of New Rochelle's Brooklyn campus. Using intercampus loan, Pedro is able to request a book held by The College of New Rochelle's Rosa Parks campus to be sent to the Brooklyn campus" (p. 14). Students responded positively to seeing the campus they attend mentioned in a textbook, and it helped them to take more ownership of the learning process.

Because of the hybrid course format, the RIL professors were able to use a flipped classroom model, in which the passive aspects of learning (lecture, reading, videos) are done at home so that students can engage in active learning techniques such as group discussions, problem-solving, and practical experience when they are in the classroom (Arner, Aldorasi, & Morris, 2017). During the class session, "instructors function as coaches or advisors, encouraging students in individual inquiry and collaborative effort" (EDUCAUSE, 2012). For example, students read a passage from the textbook and viewed a Credo InfoLit tutorial on plagiarism at home. In the classroom, they discussed what they learned in groups and tried their hand at paraphrasing and quoting passages to avoid plagiarism. In this self-

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directed approach, students take more responsibility for their own learning, and professors serve as guides or mentors rather than lecturers.

The hybrid format of RIL also required many students to develop digital literacy skills in order to succeed in the course. For many students, this was their first encounter with an online learning management system (LMS). At the onset of the course, some students were uncomfortable with using Canvas (CNR's LMS), typing on a desktop computer, searching online, formatting in Microsoft Word, and other technological tasks. This course provided them with an opportunity to get hands-on help and practice to increase their comfort level with technology.

Another aspect of andragogy that RIL professors emphasized in the course was the applicability of concepts covered to other courses as well as non-academic aspects of students' lives. When demonstrating effective topic development and search strategies, the professors used topics that were being studied in their other classes such as Maya Angelou, addiction treatment, or urban farming. Students were encouraged to use their own LAP topics when developing a thesis statement or creating an annotated bibliography. The RIL curriculum also covers the usage of open access and public library resources that could be relevant their jobs, families, or communities. These strategies enabled the students to connect course content with their prior and future life experiences.

Method

Participants

This study involved adult learners enrolled in the RIL course at the five SNR campuses during the Spring 2017 semester. The professors of this course, who were all librarians, were asked to invite their students to participate in the identical pretest and posttest surveys. Of the 15 sections offered across the five campuses, professors in 10 sections elected to invite their students to participate. Of the 218 students in these 10 sections, 61 students completed the pretest, and 30 (7.3%) completed the pretest and posttest.

As this is a course designed to be taken during the students' second semester, the majority of participants (60%) were first-year students, while 30% were sophomores and 10% were juniors. There were approximately six times as many female participants (83.3%) as male participants (16.7%). The majority of participants (76.6%) fell within the 25-44 age range,

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Grandy Effectiveness of a Credit-Bearing Information Literacy Course 6.7% were 18-24 years old, and 13.4% were 45 or older. The majority of participants (73.3%) were Black or African American, while 16.7% were Hispanic or Latino, and 6.7% were White. One student (3.3%) declined to report age and race.

Data collection instrument

The pretest/posttest survey included 51 Likert-style statements concerning library resources and services taken with permission from Van Kampen-Breit's 2013 version of the Multidimensional Library Anxiety Scale (MLAS). Questions on the MLAS that were specific to nursing students and on-campus students were omitted from this study as they do not apply to the SNR population. The MLAS was shown to have adequate internal consistency (Cronbach's $\alpha = .88$) (Van Kampen, 2004). The five answer options were (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree.

Additional questions taken from the MLAS covered library usage information, including students' primary reason for going to the library, how often they access library resources in person and off-campus, and the use of other libraries for research. Demographic information including gender, age, ethnicity, and academic classification was also collected, making 58 questions in total.

The MLAS used in this study was stored online in LibWizard, a password-protected Springshare product. The purpose of the study was explained in the informed consent narrative that preceded the survey. Names were also required so that the author could match the pretests with the posttests. The survey results were analyzed in the open-source program PSPP using a paired *t*-test. Negatively-worded statements were reverse-scored for uniformity in data reporting. Items that were reverse-scored are indicated by an *R* in the first column of Appendix 1.

Procedure

Professors who chose to invite their students to participate in the study made the link to the survey available to their students in Canvas. Students were given the first three weeks of the Spring 2017 semester to complete the pretest in order to account for students who may have added the class. The posttest was opened during the last week of the hybrid semester and remained open for two weeks after the end of the semester.

Extra credit in the course was offered for completing both surveys. Professors encouraged students in class and via email to take the pretests/posttests on their own time. Some of the

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30 students who completed the pretest and posttest skipped questions, so the number (n) of students who answered each question is indicated in Table 1 and Appendix 1.

Results

Of the 51 Likert scale statements on the MLAS, 44 (86.3%) indicated a decrease in library anxiety from the pretest to the posttest, five (9.8%) of the statements indicated an increase in library anxiety, and two (3.9%) indicated no change. Statistically significant differences (p < .05) were observed in five of the statements. These items are indicated in Table 1. None of the pretest and posttest differences were highly significant (p < .001).

Table 1 - MLAS Statistically Significant Items, Pretest vs. Posttest Comparison

Statement	N	Pre Mean	Post Mean	Diff.	Sig. (2-tailed)
I have considerable knowledge of services offered by the library for students.	30	3.23	3.87	0.63	0.021
I am able to locate resources in the library.	30	3.23	3.60	0.50	0.049
I would rather use the library online.	30	2.87	3.43	0.57	0.024
The library's resources are satisfactory.	29	3.55	3.90	0.34	0.039
Being comfortable using the library online.	30	3.87	4.33	0.47	0.041

Questions from the MLAS that reflect changes in library usage habits are indicated in Table 2. More students (10%) indicated in the posttest that the primary reason they went to the library was to receive help, not just to complete homework assignments. Reported inperson usage of library resources decreased by 6%, but use of online library resources increased by 16.7%. More students (6.6%) also indicated that they made use of other libraries in the posttest. Although some items on the scale indicate no change or an increase in library anxiety, the majority of items indicate a decrease in levels of library anxiety across various dimensions after completion of the RIL course.

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Statement	Pretest Responses	Posttest Responses
My main purpose of visiting the library is to get help.	20%	30%
On average, I go to the library in person at least once every 2-3 weeks.	63.3%	56.7%
On average, I use the library's resources online from home or another location at least once every 2-3 weeks.	63.3%	80%
I use other libraries for research.	56.7%	63.3%

Table 2 - Library Usage, Pretest vs. Posttest Comparison

Discussion

Of the five statements that demonstrated a significant decrease in library anxiety after the end of the RIL course, two of them indicate increased comfort when using the library's online resources (Dimension 5). Additionally, although students reported that the frequency with which they visited the library in person decreased after the RIL course, the number of students who accessed the library online at least every 2-3 weeks increased by 16.7%. This is an important finding because technostress is one of the largest obstacles that adult learners face in college (Quinn, 2000). In addition to the stress of completing their assignments, they often have to learn how to use computers and other technology that they did not grow up using or encounter in previous educational settings. The findings of this study indicate that when librarians are able to provide the hands-on help that a credit-bearing course allows, adult learners' anxiety surrounding library technology decreases.

Responses to the other three statements that significantly changed from pretest to posttest indicate increased confidence when using the library (Dimension 1), decreased anxiety concerning the information search process (Dimension 2), and more understanding of the importance of knowing how to use the library (Dimension 4). No statistically significant decrease in library anxiety was reported in terms of barriers with staff (Dimension 3) or comfort in the library space (Dimension 6).

Of the five statements that indicated an increase in library anxiety after the RIL course, none of them were found to be statistically significant. Some findings in this study appear to be contradictory. In the posttest, fewer students said they were willing to ask for help from

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staff; however, more students reported that staff members were friendly and never too busy to help. This contradiction could have resulted from students not picking up on the negative wording of the statement "I am not willing to ask for help from a staff member." Participants also indicated stronger agreement on the posttest with both of the following statements: "The library is well-organized" and "The library is confusing." These unexpected results could be due to participants reading questions quickly without comprehending the meaning.

It is also possible that students are more anxious about some aspects of using the library after the course, especially if the course itself or being graded on library research skills caused them anxiety. Some research suggests that IL instruction "may contribute to students' feelings of incompetence, ignorance, confusion, and anxiety by highlighting how much they don't know" (Carlile, 2007, p. 134).

Limitations and Further Research

Limitations of the study include a sample of students who voluntarily completed the surveys, which may mean students who had higher levels of anxiety did not choose to take either the pretest or the posttest. Generalizability of the study may be limited due to the small sample size and the fact that most participants were female. Responses to questions pertaining to comfort level inside the library building (Dimension 6) may be skewed because the students were at five different campuses/library spaces. Although the RIL curriculum is identical across all sections, each professor tailored the syllabus to their class and teaching style, which could have also skewed the results of this study.

The MLAS was originally developed to measure library anxiety in doctoral students (Van Kampen, 2004). A modified version of the MLAS was created in 2013 for undergraduate students (Van Kampen-Breit, 2013). Although the 2013 version was used for this study, it was designed for traditional undergraduates. A scale that considers the characteristics and needs of non-traditional undergraduate students would more accurately measure library anxiety in adult learners. Some items on the MLAS, such as "I only want access to books if they are available full text online" or "I would rather use the library in person" could simply indicate preference rather than library anxiety.

Future studies could investigate the relationship between library anxiety and IL skills in adult learners who are enrolled in a credit-bearing IL course. As a professor of the RIL course, the author observed students who reported higher levels of comfort with technology

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and library resources on the MLAS than they demonstrated at the beginning of the RIL course, which could account for the lack of more significant differences between pretest and posttest results in this study. This observation is consistent with findings in the literature that suggest students feel more proficient in their research and IL skills than they are able to demonstrate on IL assessments (Mahmood, 2016; Maughan, 2001). Kruger and Dunning (1999) found large discrepancies between self-reported abilities and actual test performance in intellectual and social domains. Participants who scored in the bottom quartile on several different tests had grossly overestimated their skills in those areas. Gross and Latham (2007) investigated the relationship between IL skill level and library anxiety. They found that students from the bottom 25% of the incoming first-year class "not only overestimate their own level of skill attainment but also believe they are performing at an above-average level" (p. 345), and that these students were less likely to see the need for information literacy

Future studies could also investigate making the completion of the pretest/posttest a requirement of the RIL course, which would increase the sample size. The course could also be extended from 12 to 18 weeks to see if additional class time has a more significant effect on library anxiety. It is unknown if information-seeking behaviors outside of the classroom such as number of meetings with professors or librarians impacted the results of this study. Additionally, the effects of other factors such as gender, year in school, and academic major on library anxiety could be examined more closely.

Conclusions

instruction.

The RIL course was moderately effective in reducing overall library anxiety in adult learners for several possible reasons. IL instruction in the form of a course offers significantly more time for students to practically apply concepts learned and receive feedback than a one-shot IL session. The hybrid course format allowed students to review course content at their own pace, which lowered anxiety and enabled more self-directed learning. Although the professors functioned as adjuncts at SNR, they were also full-time librarians who worked evening hours at the college, which provided students with additional opportunities to receive support.

Professors took various aspects of andragogy into account in both designing and implementing the RIL course. They encouraged adult learners to draw upon their internal

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motivations to learn by actively participating in a curriculum that can help them to reach their academic, employment, and personal goals. RIL instructors successfully employed methods that lead to decreased anxiety in adult learners by being available to assist with research and technology during evening hours, using a hybrid course format, and connecting IL principles to current school projects as well as life experiences.

As adult students become more comfortable with finding and using library resources, they will be better prepared to participate in class discussions and complete well-researched assignments. Decreased library anxiety could lead to less procrastination on assignments, improved overall academic success, and higher levels of persistence to graduation. The results of this study support the continuation of the RIL course and possible expansion to other schools at CNR. They also could have implications about the importance of credit-bearing IL courses in reducing library anxiety for adult learners at other institutions, particularly in the areas of comfort with technology and understanding of the resources and services offered by the college library.

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Appendix 1 - MLAS Pretest vs. Posttest Comparison

Dir.	Statement	n	Pre	Post	Diff.	Sig.
	1 I	20	Mean	Mean	0.17	0.517
	1. I can usually find things I	30	3.73	3.90	0.17	0.517
	need in the library. 2. I know what to do next when	20	2.00	2.02	-0.07	0.702
	the book I need is not on the	30	3.90	3.83	-0.07	0.783
	shelf.					
	3. The people at the circulation	30	3.83	4.20	0.37	0.183
	(front) desk are friendly.	30	3.63	4.20	0.57	0.165
		29	3.41	3.86	0.45	0.062
	4. I feel very capable when doing research in the library.	29	3.41	3.80	0.43	0.002
R	5. It is not easy to locate	29	3.43	3.63	0.20	0.476
IX.	materials I need in the library.	29	3.43	3.03	0.20	0.470
	6. The library is well organized.	30	3.97	4.07	0.10	0.655
	7. The library is a comfortable	30	3.93	3.93	0.00	1.000
	place to study.	30	3.73	3.73	0.00	1.000
	8. I feel at ease in the library.	29	4.03	3.97	-0.07	0.795
	9. I feel safe in the library.	30	4.13	4.20	0.07	0.783
R	10. The library is too big.	30	3.80	4.00	0.20	0.396
R	11. The library is confusing.	30	3.97	3.70	-0.27	0.310
	12. I have considerable	30	3.23	3.87	0.63	0.021
	knowledge of services offered					
	by the library for students.					
	13. The staff in the library are	30	3.97	4.13	0.17	0.465
	helpful.					
	14. I am willing to call the	30	3.70	3.90	0.20	0.501
	library for help.					
R	15. My knowledge of the library	30	3.23	3.60	0.37	0.078
	is limited to class assignments.					
	16. I am able to locate	30	3.23	3.60	0.50	0.049
	resources in the library.					
	17. I would rather use the	30	2.87	3.43	0.57	0.024
	library online.					
	18. I understand how to begin	29	3.38	3.76	0.38	0.133
	my research in the library.					
R	19. The library is not easy to use.	28	3.96	4.04	0.07	0.663
R	20. When I use the library for	29	3.45	3.66	0.21	0.326
	research, I feel overwhelmed.					

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				1		
	21. I enjoy using the library to find information.	29	3.55	3.66	0.10	0.688
R	22. Narrowing my research topic	29	3.00	3.24	0.24	0.326
	is not easy.					
R	23. When I think about my research topic as it relates to the locating information, I feel stressed.	28	3.32	3.32	0.00	1.000
R	24. There are too many possible sources of information; I don't know where to start.	29	3.24	3.62	0.38	0.133
	25. The library needs study areas that are close to the reference desk so I can get help	28	2.82	2.86	0.04	0.902
	26. The library is an important part of my college life.	30	4.20	4.27	0.07	0.801
	27. I need to know how to use the library to complete my research.	30	3.93	3.80	-0.13	0.620
	28. I am comfortable using a computer.	30	4.13	4.27	0.13	0.546
	29. I am comfortable using my computer at home to access the library's resources.	30	3.70	4.10	0.40	0.246
R	30. I can't find things on the library's website.	30	3.57	3.80	0.23	0.199
	31. I only want to access articles if they are available full text online.	30	3.00	3.03	0.03	0.915
R	32. I only want to access books if they are available full text online.	30	3.00	3.07	0.07	0.825
R	33. I feel intimidated when I walk into the library.	30	3.97	4.24	0.28	0.147
R	34. When I think about using the library, I feel anxious.	29	3.66	3.93	0.28	0.234
	35. The library's resources are satisfactory.	29	3.55	3.90	0.34	0.039

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R	36. I have problems accessing	29	3.62	3.66	0.03	0.892
	the library's online resources					
	that require a login.					
	37. The staff at the reference	29	3.97	4.28	0.31	0.059
	desk are helpful.					
	38. The staff are never too busy	27	3.48	3.89	0.41	0.078
	to stop and help me.					
	39. I am willing to get help from	30	3.97	4.00	0.03	0.905
	staff to get materials from a					
	different library.					
R	40. I would rather use the library	29	2.48	2.55	0.07	0.783
	in person.					
R	41. I am not willing to ask for	29	4.14	3.79	-0.34	0.152
	help from a staff member.					
	42. I know what resources are	29	2.93	3.48	0.55	0.088
	available from the library for					
	students.					
R	43. In general, I think my ability	29	4.07	4.17	0.10	0.648
	to use the library has affected my					
	research negatively.					
	44. Having a library staff	30	4.07	4.23	0.17	0.444
	member give one-on-one					
	instruction for my research					
	needs.					
	45. Being comfortable using the	30	4.13	4.23	0.10	0.586
	library in person.					
	46. Being comfortable using	30	3.87	4.33	0.47	0.041
	the library online.					
	47. Being able to locate full text	30	3.87	4.10	0.23	0.335
	articles and ebooks from the					
	library's online resources.					
	48. Considerable knowledge	29	3.93	4.07	0.14	0.556
	about things in the library.					
	49. Knowledge of how to look	30	3.87	4.17	0.30	0.174
	for specific information.					
	50. Knowing how to search	29	3.90	4.17	0.28	0.161
	through various library sources.					
	51. Knowing how to navigate the	26	3.96	4.23	0.27	0.183
	library's website.					1

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