Fear at First Sight: Library Anxiety, Race, and Nova Scotia

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Abstract

Multidisciplinary research and services have attempted to decrease educational barriers and increase university success for African Canadian students. However, these efforts have put limited focus on the influence of academic libraries on student success. This study examined racial differences in library anxiety and the coping methods undergraduates used in Nova Scotia, Canada. To examine student experiences, this study used a mixed-methods approach with surveys and interviews. In the preliminary phase, survey findings demonstrated no significant racial difference. The interview phase revealed that African Nova Scotian undergraduates experienced lower library anxiety than Caucasian Nova Scotians. Specifically, African Nova Scotians expressed comfort interacting with their community and public libraries prior to attending university. While attending university, their initial reaction was overwhelmingly positive, reflecting their previous experiences with community libraries. However, throughout their degree programs their library anxiety increased when faced with barriers, particularly with staff. In contrast, the interviews revealed that Caucasian Nova Scotian undergraduates experienced higher levels of discomfort and anxiety during their pre-university interactions with public libraries and throughout their university programs. Based on the findings, this study contributes to a racial and Canadian context rarely discussed in Library and Information Science. This exploratory study recognized inclusive practices
and spaces as methods that librarians and staff can use to alleviate library anxiety. These practices and spaces are particularly significant in lowering library anxiety for African Nova Scotian students and should continue in order to assure a successful transition into university for these students.

**Keywords**

library anxiety, Nova Scotia, race, staff barriers, undergraduate students

**Introduction**

African Canadian student achievement has been continuously examined, critiqued, and evaluated since the early 20th century. Researchers from many areas have argued that household income, family structure (e.g., Caldas, Bernier, & Marceau, 2009; Codjoe, 2007; Livingstone & Weinfeld, 2017), and cultural identity (e.g., Codjoe, 2006; Dei, 2008) impact student success. Efforts in Nova Scotia have been made to reduce financial and environmental barriers to education from a community, university, provincial, and government perspective (African Canadian Services, 2009; Black Learners Advisory Committee, 1994; Bombay & Hewitt, 2015; Thiessen, 2009). However, African Nova Scotian students are less likely to enroll in university or obtain university degrees (18%) compared to other Nova Scotians (22%) (African Nova Scotian Affairs, 2014, p.4). Although multidisciplinary research in areas such as education, cultural studies, and sociology has endeavoured to eliminate barriers and motivate African Nova Scotian students, limited research has focused on the impact of academic libraries on student success.

Academic libraries are among the largest resources serving the academic community. Students, faculty, staff, and external communities rely on academic libraries for resources and services to complete their academic projects and course work. Library and Information Science research shows that reference and research assistance is a vital service that supports users' research endeavors (e.g., Arroyo, 2015; Kilzer, 2011; Megwalu, 2016). However, students often initially fear or avoid interacting with these services and academic resources (e.g., Black, 2016; Mellon, 1986). Library anxiety causes students to experience negative reactions toward the library (Mellon, 1986) and thus limits their scholarly potential and development of required research skills. Examining the interactions of African Nova Scotian university students with the library can provide an important new perspective on African Canadian achievement research and reveal different ways academic libraries can decrease barriers to their services.

**Research Questions**

This study compared African Nova Scotian students’ undergraduate experiences with their academic libraries with those of their Caucasian peers. The following research questions directed this study:
RQ1: Is there a racial difference in library anxiety among Nova Scotians?

RQ2: Which aspect(s) of library anxiety affect the two racial groups?

RQ3: How do students alleviate library anxiety?

This study used Research Question 1 as a preliminary and background question to then fully explore Research Questions 2 and 3.

A Brief History of the African Nova Scotian Community and Education Barriers

Following Indigenous Peoples, the African Nova Scotian community is the oldest visible minority group in Canada (Statistics Canada, 2006a; Statistics Canada, 2006b). When Halifax was founded on Mi’kmaq territory in 1749, recordings of 100 enslaved African people existed among this population (Saney, 1998). A few decades later, three large migrations to Nova Scotia occurred: the Black Loyalists from the United States in 1782, Maroons from Jamaica in 1796, and Black Refugees from the United States and Bermuda in 1812 (Saney, 1998; Sehatzadeh, 2008). All three migrations included free and enslaved people of African descent who were relocated to the margins of land and society in Nova Scotia, forming 48 historic communities across the province such as Africville, Beechville, Birchtown, Dartmouth, Preston, Tracadie, and Weymouth (Bombay & Hewitt, 2015; Cottreau-Robins, 2014; Saney, 1998; Sehatzadeh, 2008). Throughout history, some communities were separated and destroyed by institutional racism (e.g., the recent community of Africville (Clairmont & Magill, 1999)). The remaining communities have persisted and survived by building their own institutions and social networks, especially their churches. These remaining communities did not escape racism, hardship, or marginalization by leaving the United States or the Caribbean. Living in Nova Scotia presented several barriers to basic services such as sewage, transportation, and education.

African Nova Scotians have faced education access barriers and post-secondary education enrolment challenges since they arrived in Nova Scotia (Black Learners Advisory Committee, 1994). African Nova Scotians began their education in poorly resourced segregated schooling with undertrained teachers until the late 20th century. Their curriculum excluded core courses such as math and geography that are required to advance students into post-secondary education, which further reinforced the racist notions of their social status in Nova Scotia (Black Learners Advisory Committee, 1994, p.55). Among the current population of 21,915 African Nova Scotians, only a small portion (n= 3461) hold university degrees (African Nova Scotian Affairs, 2014, p. 4) despite efforts by the African Nova Scotian community to decrease financial and other barriers to post-secondary education (e.g., African United Baptist Association Scholarship, Black Educators Association Scholarship, Delmore “Buddy” Daye Learning Institute Graduate Research Fellowship Grant, and the African Nova Scotian Student Scholarship program administered through African Canadian Services under the Nova Scotia Department of Education (Nova Scotia Department of Education, 2006)). In addition, university transition programs and student support
centres aim to increase student success (e.g., Dalhousie University’s Transition Year Program (Bombay & Hewitt, 2015)). Yet after providing supports and decreasing barriers a retention issue remains once students enter university programs (Bombay & Hewitt, 2015).

**Literature Review**

**Library Anxiety**

University and college students often experience discomfort or anxious feelings when interacting with the library, library staff, services, and resources. In her groundbreaking qualitative study, Mellon (1986) referred to these emotions as library anxiety. She found that 75-85% of undergraduates experience anxiety or terror as their initial response to academic libraries (p. 162). This finding led Mellon to develop the theory of library anxiety, which posits that students who conduct their first research paper become so overwhelmed with anxiety they cannot perform logically (p.163). Bostick (1992) built upon these findings to argue that library anxiety stems from barriers with staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers. Bostick (1992) also developed the Library Anxiety Scale, a 43-item Likert scale to test the five areas of library anxiety in undergraduates. Many subsequent quantitative studies found that library anxiety is influenced by barriers with staff (e.g., Karim & Ansari, 2010), race (e.g., Jiao, Onwuegbuzie, & Bostick, 2004, 2006), year of study, gender, native language (e.g., Jiao, Onwuegbuzie, & Lichtenstein, 1996), and structured learning styles (e.g., Onwuegbuzie & Jiao, 1998). In addition, researchers found no significant relationship between library anxiety and trait anxiety (Jiao & Onwuegbuzie, 1999). Trait anxiety is the continuous anxiety that one experiences, while library anxiety occurs in a specific situation or context; therefore, students experiencing library anxiety are not anxious outside of the library (Jiao & Onwuegbuzie, 1999, p. 281; Onwuegbuzie, Jiao, & Bostick, 2004, pp.29-32). This finding further establishes library anxiety and its influence on university success.

Library anxiety is further comprised of three factors affecting students’ reactions to the library: dispositional, situational, and environmental antecedents (Onwuegbuzie et al., 2004). Dispositional antecedents are the student’s individual internal traits, such as self-esteem, self-perception, and personality (e.g., Abusin, Zainab, & Karim, 2011; Kwon, Onwuegbuzie, & Alexander, 2007; Vernon, Evans, & Frissen, 2016). Situational antecedents are the immediate surroundings of the library: library size and students’ knowledge of its structure or layout, students’ comfort finding resources and approaching staff, and students’ difficulties with starting research or using the resources (e.g., Katopol, 2012). Lastly, environmental antecedents are demographic categories external to a student. Examples include gender, language, year of study, and race (e.g., Jiao et al., 1996; Jiao et al., 2004).

In the 30 years since Mellon’s work, university libraries have transformed in the technological era, managing and combining print resources with online resources. Technology in libraries did not eliminate and may even have increased the discomfort that students experience while using the library. For example, Atlas (2005) argued that
the presence of technology and instant information on the web increased avoidance of the library and its services. Library anxious students also avoided asking for help from reference librarians in person or via online applications (p.315-16). Wallis (2014) and Lichtenstein (1999) demonstrated that creating positive interactions between students and library staff helped ease fears and increased students’ academic research skills throughout their degrees.

**Intersections of Race, Stereotypes, and Anxieties**

*Library anxiety and race research*

Although race has been identified as an environmental antecedent of library anxiety, research, including the experiences of Canadian minority students such as African Nova Scotian students, is limited. At the University of Alberta, Melancon and Goebel (2016) delivered a Personal Librarian for Aboriginal Students (PLAS) program focused on decreasing library anxiety for Indigenous first-year undergraduates. Librarians involved in the PLAS program reflected on previous interactions with Indigenous students and noted that these students displayed library anxiety (p.184). The program aimed to address barriers to student success such as low student engagement with libraries, decreased knowledge of information services and technology, and staff-related barriers. The findings demonstrated a decrease in overall anxiety toward the library, and most specifically a decrease in staff-related barriers and resources (p.192). In the United States, Jiao et al. (2004, p.31) conducted the first study on racial differences and library anxiety among students. This study investigated African American graduate students at historically Black colleges and universities and Caucasian graduate students at predominantly Caucasian-populated institutions. Findings suggested that African American students have lower library anxiety than Caucasian students (Jiao et al., 2004). This study was replicated to ensure validity in 2006. Both groups attended graduate-level courses at predominantly Caucasian-populated institutions. In the new study, researchers found similarly that African American graduate students have lower library anxiety (Jiao et al., 2006). A later study demonstrated racial differences in library anxiety (Blundell & Lambert, 2014): while African American students felt the library was central to their education, their Caucasian American peers experienced barriers with staff and resources (p. 266). After surveying 300,000 students between 1984 and 2002, Kuh and Gonyea (2003) found that students of colour, including African American/Black students, used the library more than their Caucasian peers. The research suggests that these students feel the library is a safe space that supports their academic growth and allows them to engage with other students from the same ethnic background (p. 267). Although these studies provided insights on race and library anxiety, the intertwined racialized experiences that impact minority students while completing their degrees are important for discussion.

*African Americans’ library access*

African American library anxiety has been often associated with a lack of access to resources. Historically, public and academic libraries did not service African American communities (Richards, 1998), and the historically Black universities and colleges
became the only sources for cultural information sharing (Richards, 1998, p.94). The academic library continues to lack the diverse resources and culturally competent content to sufficiently fulfill the information needs of students of African descent (Warner, 2005; Wong & Figueroa, 2015). These findings urge the academic library to acknowledge the cultural experiences of diverse students, increase culturally diverse collections, and provide equitable services in an inclusive environment (e.g., McGinn, 2001; Wong & Figueroa, 2015). Access to diverse content will promote a welcoming and encouraging library that decreases barriers for students.

**Minority stress at university**

While most undergraduates face certain anxieties, African American undergraduate students also confront challenges based on their lived experiences as minorities (e.g., Lichtenstein, 1999; Owens & Massey, 2011; Salami & Walker, 2014). Rucker, West, and Roemer (2010) argued that limited attention has been paid to minority students’ anxiety because of a racial bias suggesting that African American students rarely face general anxiety. However, minority students face additional stressors and anxious feelings that go beyond typical undergraduate discomfort. Minority stress refers to the added stress minorities face because of discrimination and their minority status (Greer & Brown, 2011; Meyer, 2003, p.675). Minorities attending predominantly Caucasian-populated universities or colleges have reported higher levels of minority stress than their peers in historically Black universities and colleges (Greer & Brown, 2011, p. 34). To decrease risks of anxiety and increase academic success, minority students need to feel that their culture is supported and encouraged during their studies (Baker, 2013).

**Stereotype threat**

In university environments, minority students are constrained often by another minority stress known as the stereotype threat (e.g., Harper, 2015; Katopol, 2012; Salami & Walker, 2014). The stereotype threat refers to the anxiety or fear of being judged by or confirming negative stereotypes through one’s actions (Steel, 1997, p. 614). Students feel additional pressure to combat the stereotype threat by performing at higher levels and proving themselves intellectually equivalent to their peers (e.g., Harper, 2015; Johnson, 2006; Katopol, 2012). Research on social phobia, anxiety, and race revealed that African American students’ fear of being scrutinized in the future causes extensive anxiety and fear (e.g., Johnson, 2006; Rucker et al., 2010, p. 250). This stereotype threat inevitably impacts all academic areas, especially while students interact with libraries.

The stereotype threat has an impact on students’ library anxiety. It causes students to perform poorly on assignments and avoid all interactions with the library staff. For example, based on a perception that librarians lack cultural knowledge, African American students feel they must find information on their own in order to appear more knowledgeable than their Caucasian peers (Katopol, 2012, p.11). Many universities have focused their curricula on Eurocentric topics and have fewer resources on cultural studies of interest to African students (e.g., Warner, 2005). Thus, students feel the staff cannot help them in their search process or in formulating their research topics (e.g.,
Conclusion

Although library anxiety has been well studied for decades, intersections between library anxiety and race studies are limited in the literature, especially in Canada. Historically in the United States, access to library resources was limited for African Americans and they relied on their own institutions for resources (Richards, 1998). Scholars agree that African American students are at a higher risk of anxiety caused by stereotype threats or minority stress at predominantly Caucasian-populated universities because they fear being perceived as inferior by peers. The lack of cultural knowledge among library staff causes additional stress (e.g., Greer & Brown, 2011; Johnson, 2006; Katopol, 2012; Meyer, 2003; Platt & Platt, 2013; Rucker et al., 2010; Steel, 1997). Yet despite historical and current barriers, research shows African American students experience lower levels of library anxiety than their Caucasian peers (e.g., Blundell & Lambert, 2014; Jiao et al., 2004, 2006). Many studies have explored race and library anxiety through quantitative methodologies, but these methods do not fully examine or reflect the in-depth experiential accounts of university students first explored by Mellon (1986). In addition, these studies have not acknowledged pre-university experience among students to understand their anxieties or describe why African American students experience lower library anxiety. This study aims to address these rarely discussed limitations among a racial group in Canada that shares a history with African Americans.

Research Methods

This study followed a two-phase approach combining surveys and interviews. The qualitative methodology focused primarily on exploring students’ experiences to provide a rich, descriptive perspective in library anxiety research. A preliminary survey explored validated subcategories of library anxiety and provided an opportunity to expand on the findings through the interview process. This research was approved by the McGill University Research Ethics Board II on October 5, 2016.

Preliminary Phase: Surveys

Participants

During the survey phase, 48 (34F, 9M, 5 not specified) English-speaking Nova Scotian undergraduates and recent graduates (Class of 2016) participated. Eighteen were African Nova Scotian and 24 were Caucasian Nova Scotian (n=42). For the purpose of this study, Nova Scotian students refers to students who attended public or private high school for at least two years in Nova Scotia and self-identified as African Nova Scotian or Caucasian Nova Scotian. Five students self-identified as “other” ethnicities outside the scope of this study and one student did not self-identify their race/ethnicity; thus,
these six cases were excluded from the analysis. Sixteen students were between the ages of 18-21, 19 were between the ages of 22-25, and seven students were aged 26 or older. Students attended six out of nine Nova Scotian universities where they studied in the Arts, Education, Engineering, Health, Humanities, Science, and Social Science fields.

**Instruments**

The Library Anxiety Scale (LAS) is a 43-item five-point Likert scale survey addressing five categories: barriers with staff, knowledge of the library, affective barriers, library comfort, and mechanical barriers (Bostick, 1992; Onwuebuzie et al., 2004, pp.35-36). The higher students scored on the LAS, the higher their anxiety response when encountering the library and its resources (Onwuebuzie & Jiao, 1998). Participants were asked to complete the LAS survey followed by demographic questions. The demographic questions asked students to self-identify their ethnicity, university, current degree program, gender, and age. The demographics questions ensured that the sample was diversified among the Nova Scotian undergraduate population. However, to protect participants’ anonymity (due to the small population size and the possibility of a combination of individual non-identifying characteristics being linked to a participant), not all measures have been reported. Both surveys were administered on the McGill University online survey service, Lime Survey.

**Procedure**

The survey ran from November 2016 until March 2017. Students were recruited in student common areas online, including email lists targeting Nova Scotian students, social student societies, extracurricular activity groups, and social media (including Instagram and Facebook). Students were invited to share the recruitment poster to encourage more students to participate. Participants completed the 10-15-minute LAS and demographic survey online. After completing the survey, participants were prompted with a new web page outside of the survey where they could leave their email contact details to participate in an interview.

**Analysis**

The survey’s raw data were scanned first for missing values, and then missing values were replaced by mean imputation (Little & Rubin, 2002). Twelve LAS items were reverse coded, each participant's total was calculated, and then the sum of the five categories was calculated (Onwuebuzie et al., 2004, pp. 314-315). An independent samples t-test was conducted to identify whether a difference in library anxiety exists between African Nova Scotians and Caucasian Nova Scotians (Wildemuth, 2016). The survey analysis was conducted in IBM SPSS 24 statistical software.
Main Phase: Interviews

Participants

Five African Nova Scotians and three Caucasian Nova Scotians participated in the interviews (6F, 2M). All were aged 18-25. Students attended four of nine Nova Scotian Universities where they studied in the Arts, Humanities, and Science fields.

Instruments

An interview guide (see Appendix A) was developed from the research questions, questions addressed in Mellon's (1986) original study, and the LAS (Onwuegbuzie et al., 2004). Each category addressed the five areas identified within the LAS survey. Findings from the survey phase informed the interview guide and addressed categories where library anxiety needed further examination. Participants also answered the demographic survey during this phase because their survey data (including demographics) were non-identifying and cannot be linked to a specific participant.

Procedure

Students were recruited from the same online student common areas as in Phase One: email lists targeting Nova Scotian students, social student societies, extracurricular activity groups, and social media (including Instagram and Facebook). Again, students were invited to share the recruitment poster to encourage more participation. Recruitment during this phase was more difficult due to students’ class schedules in the winter term. During the second phase, semi-structured interviews were conducted to address students’ experiences with the academic library and library anxiety. The interview allowed participants to express their experiences freely and allowed new patterns to emerge that were not considered in the structured survey questions. Interviews were conducted in person (2), on Skype (1), and on the telephone (5). The interviews were approximately 30 to 90 minutes long. The interviews were recorded following the ethics-approved informed consent process at the beginning of each interview. Following each interview, the recording was transcribed for analysis.

Analysis

Interview data were analyzed using the Constant Comparative Method (Pickard, 2013). During this analysis process, closed coding and open coding schemes were applied. The closed codes were based on the survey questions and previous literature on library anxiety. Open coding was essential to the exploratory aspect of this study. This method allowed the researchers to compare the difference between the two groups and identify emerging themes in the data. Qualitative data analysis was completed using Atlas.ti, a qualitative research software.
Results

Survey

Both groups averaged mid to low library anxiety levels on a scale between one and five. African Nova Scotians ($N = 18$) displayed a library anxiety level average of 2.3 ($M = 2.32$, $SD = 0.58$). In comparison, Caucasian Nova Scotians ($N = 24$) displayed the same numerical library anxiety level at 2.3 ($M = 2.32$, $SD = 0.48$). An independent samples $t$-test showed no statistically significant difference between the two groups ($t(41) = -0.21$, $p = 0.984$). Therefore, in this small sample, no difference in overall library anxiety scores between African and Caucasian Nova Scotians was observed.

Interview

African Nova Scotian participants were coded as ANS# and Caucasian Nova Scotian participants were coded as CNS#.

Previous experiences with libraries

A picture of students’ previous experience with school, community, or public libraries is vital to understanding their library anxiety. Caucasian Nova Scotians’ prior library experiences were filled with anxiety and avoidance. Students remembered visiting their public libraries, but they found the physical space and staff to be intimidating and avoided library visits after elementary school.

In contrast, African Nova Scotians reported low levels of library anxiety prior to university. African Nova Scotian students described their public/community libraries as “welcoming” and “helpful” places with excellent librarians and staff. For African Nova Scotians, the library is a communal place where they can access emerging technologies, study space, and social activities with friends:

ANS3: “I lived in the library [laughs]. I frequented that a lot. I remember as a younger kid even in elementary school, the big thing was you go home drop all your school things off and meet all of your friends at [community/public library]. That was just the thing, we all did it, we were all close. And it was because back then, not all of us had computers to access at home. So, we knew there were 10 computers at the [community/public library] that you could get on for 30 minutes. We went there quite often. I remember going a lot during school for projects; we would go there and meet up with people that worked at the library. Those are all really good memories because I used to rent movies from the library. A lot of good memories at [community/public library] [laughs].”

ANS5: “I had a library card since I was a kid. My mom and dad used to always take us to the library. So, I was familiar with library settings, you have to be quiet and don’t put the book back where you take it out. Which is foreign to me still. But, even when I found the right place, the librarians would say, “oh no, don’t put
it back. No no, it’s okay.” So, I just respected the system, so I get that. It’s always been a good experience overall. I never had like a bad experience in the community/public library.”

ANS7: “I used to go to some of the community libraries and the school libraries, those experiences were good. I find I was actually going there to look for books and rent books out. More so than in university, I’m just going there to like study and use the computer. They were helpful [public library staff]. If you asked them what book you needed, they would look it up for you and show you where it’s at in the library.”

African Nova Scotians were filled with laughter, smiles, and nostalgic memories while discussing their previous experiences. They received excellent public service at the library; it became a safe space to familiarize themselves with the library environment and access resources not readily available at home.

**Initial reactions to the academic library**

When interacting with academic libraries, African Nova Scotians initially reported lower library anxiety compared to Caucasian Nova Scotians. African Nova Scotians were positive toward interacting with a new library. They visited their academic libraries out of curiosity and to enhance their knowledge. They felt a need to explore the differences in physical space, services, and resources between their community libraries and an academic library:

ANS3: “The first time I remember walking into the library at [university], I was actually quite excited because I never been in a library like that before. Like you know, we all been to like small hometown libraries before…but this library was something... nothing like I ever seen before.”

Students sought to familiarize themselves with the library and adjust to their new educational environment early in their undergraduate programs. They used words such as “excited,” “neutral,” “indifferent,” “positive,” “inclusive,” and “upbeat and bright” to describe their experiences interacting with the library:

ANS5: “It was positive. It wasn’t just one race there. People my age working there, older people, younger people, White, Black, South Asian... So, it was very inclusive, which I liked.”

ANS6: “I guess neutral, indifferent. It wasn’t particularly like intimidating or anything for me. Obviously, at first I wasn’t too familiar with it: how to navigate the whole system. Once I learned it was pretty easy. I didn’t have any problems.”

Only one student [ANS4] used words such as “overwhelming” and “panicked” to describe their initial experience with the volume of resources compared to community libraries: “it was overwhelming because I never looked for a book before in a pile of a thousand of books.” Overall, African Nova Scotians’ initial library experiences reflected their excitement for learning and their new educational journeys.
On the other hand, the prior experiences of Caucasian Nova Scotians mirrored their initial reactions to academic libraries. In fact, all Caucasian Nova Scotian participants displayed high library anxiety while interacting with their libraries. They used terms such as “jail,” “intimidating,” “overwhelmed,” “giant,” “strange,” “difficult,” and “hectic” when asked about their initial library experience:

CNS1: “The first time I ever went in there was like during an orientation and when they were taking all of our pictures for our I.D.s, so it was pretty hectic.”

CNS2: “…possibly overwhelmed at least in the beginning because I wasn’t really sure. Sort of like being in a museum or something. There were people around, there was a lot there, but you didn’t know what you were doing, so it was a bit strange.”

CNS8: “… the library looks like a jail…it’s always so busy and so loud. And I think it took me a few times to actually go into the library. I do remember feeling really intimidated. It was like oh my God, I’m in university, I’m in an academic library…”

For these students, entering the physical library was driven by a specific need, such as an assignment or a library card. They often avoided using the physical library space, resources, and services during the first years of their degrees because of the previous barriers they had experienced with library staff and their self-perceived inadequacies about using the library.

**Staff barriers**

Barriers with librarians, library staff, student librarians, and volunteers are the highest predictors for library anxiety. Onwuebguzie et al. (2004) described barriers with staff as student perceptions of librarians or library staff as unapproachable, not readily available, or too busy to adequately serve users. Although African Nova Scotians reported lower levels of library anxiety upon arrival to university, they reported higher levels of anxiety related to barriers with staff in the following years of their degrees. Both African and Caucasian Nova Scotian students had interactions with staff members that led to negative emotions. Students felt that librarians/staff were not visible in the library and were too few to accommodate the needs of students. Reference interviews often failed to elaborate on students’ needs or teach students the searching skills required for their assignments. This led students to frustration and resentment that hindered their academic growth.

African Nova Scotian students expressed that about half of their experiences were negative. They interacted with supportive librarians that assisted them with their information needs, but they also interacted with unfriendly and condescending library staff that made them avoid future interactions. One of these incidents was described as a racialized experience. One student felt “slightly irritated or anxious” because a librarian would generalize student behaviour by the students’ skin colour:
ANS5: “There are times when I’m in [the library] and I’ve felt slightly irritated or anxious thinking that I may get in trouble for something that I wasn’t doing. Like, I was sitting near people who were making a lot of noise, and we happen to be not so much the same race but the same colour, physical skin colour, and [they would] be rowdy and knowing that if the librarian comes over… like, I could be lumped into a group and I don’t know them. Being told to like quiet down or to tell my friends to quiet down and I don’t know them.”

This student’s anxiety of being stereotyped caused an increased barrier with staff.

Similarly, Caucasian Nova Scotians expressed negative emotions toward staff throughout their degree programs. Students noted that they received minimal to no formal subject-related information literacy sessions from staff or subject librarians. Students did not feel library staff were knowledgeable and they received inadequate information from their subject librarians:

CNS8: “She’s just one of those librarians that just didn’t care. It was never a thing to go and talk to her because she didn’t know much about [the subject]. You would say like I really like this book, and it’s important to be here and she would laugh at you and say ‘oh, we don’t have the budget.’ Now, I know they definitely do.”

Students avoided seeking advice from their subject librarians or library staff because they did not feel their needs were supported. Students often did not want to “bother” or “be a nuisance” to the staff because they seemed unapproachable or unfriendly. Overall, Caucasian Nova Scotian students expressed higher frequencies of negative encounters with staff, especially in the first years of their degrees.

**Coping methods**

For instance, when faced with an issue finding sources or full-text access, half of the African Nova Scotian students would seek help from a librarian or a tutor. The other half would either perform their own searches using internet sources or other universities as access points, or change their topics entirely to address access issues. Caucasian Nova Scotian students used abstracts for references, preview pages, and magnifying techniques to get their needed source or they would “give up” trying to access the title:

CNS2: “I was really trying to find a paper that was not available and I ended up on some other website that had it, you could view the first page and the rest of it was blurred out. But, somehow, I made a magnification to guess what the words were [laughs].”

Students found that by their final years as undergraduates they were only beginning to learn the searching and retrieval skills that were mandatory in first year and that would have been helpful throughout their degrees.
Discussion

This study compared the experiences of African Nova Scotian undergraduate students while interacting with their academic library with those of their Caucasian peers. Moreover, this study examined whether a racial difference in library anxiety exists, which aspect(s) of library anxiety affects both groups, and the coping methods used to overcome library anxiety. The survey found no racial differences and low library anxiety for both groups. However, the interview findings revealed differences in students’ experiences prior to and during university. Interview findings demonstrated that African Nova Scotians experienced lower library anxiety than Caucasian Nova Scotians while interacting with their public, school, and community libraries before entering university and lower library anxiety while interacting with their academic libraries.

These results are consistent with American studies on race and library anxiety. Jiao et al. (2006) found that African American graduate students attending predominantly Caucasian-populated universities have lower library anxiety than their Caucasian peers. Surprisingly, students revealed during the interviews that their previous experiences impacted their initial views of their academic libraries. For the Caucasian Nova Scotian students, their negative pre-university interactions with libraries impacted their initial reactions to their academic library. In contrast, African Nova Scotians were familiar and comfortable early in life with libraries; thus, their initial reactions were positive. McPherson (2015) found that library anxiety increases when students have little to no experience interacting with the library environment. This familiarity with public and community libraries helped African Nova Scotian students transition with less fear into their university libraries. Although their initial responses to academic libraries were completely different, both groups experienced the highest library anxiety when interacting with library employees. Studies have shown that students avoid library staff because they consider them inaccessible or unapproachable (e.g., Black, 2016; Ross, 2003). Participants in this study suggested that staff made assumptions about African Nova Scotian students’ information needs or displayed unfriendly behaviours that left negative impressions on students during reference interviews. Ross (2003) explained that negative closure during the reference interview makes students feel as if their questions are not valued or that librarians are trying to make them leave (p. 41). These negative closure interactions were common and shared by both student groups in this study. Negative interactions led students to avoid library staff, which was a missed opportunity for students to gain much-needed research assistance and a better understanding of the librarian’s supportive role.

African Nova Scotians’ negative experiences with staff reflected racial stereotyping from library staff, which caused additional feelings of discomfort. This was an emerging barrier that was not present for these students in their previous library experiences. Students felt at ease knowing that their public or community librarians were always helpful and accommodating. In their new academic environments, students felt a sudden wall between them and the librarians, causing them to avoid seeking help and receiving the adequate information literacy skills needed to succeed. Rucker et al. (2010) demonstrated that racialized stress leads to chronic worry as a coping strategy (p. 250). Under these racialized stressors, the students also attempted to restrict or
modify their behaviours. This supports the concept of stereotype threats (Steele, 1997) and racialized social phobias (Johnson, 2006) that impact students' information behaviours because they are fearful of scrutiny. To combat stereotype threats and barriers, librarians could help African Nova Scotian students by providing programs such as librarian mentors. In the United States, Hall (2003) and colleagues provided individualized information literacy and library research mentorships for African American undergraduates. The Research Assistance Program (RAP) librarians helped students transition from high school to university research (p.186-187). This type of programming could not only benefit students, but also help educate librarians toward a better understanding of African Nova Scotian student needs to improve their reference interviews.

In this technology-driven era, libraries have adapted their services and resources to reflect the needs of their users. However, electronic resources have caused access and evaluation issues for both student groups reflected in this study. Online resources such as databases and websites that are not clear or user-friendly add barriers to access and increase anxiety (e.g., Blundell & Lambert, 2014; Schmidt & Etches, 2014). Due to their barriers with staff, students do not benefit from the information literacy training necessary to search for, evaluate, and use electronic resources. Library anxiety forces students to find other means to satisfy their information needs. Unfortunately, these coping methods disadvantage students in their academic pursuits. When students avoid librarians and library staff, their information behaviours do not advance at the same rate as their peers. Rather than learning essential skills gradually over time, which is common information behaviour development for undergraduates, their information skills remain at a pre-university level. In many cases, students could have benefited from in-person or online reference help to increase their information literacy. Without training, both groups' frustration led to illogical information seeking and retrieval behaviours, including changing their research topics to match readily available resources. Kuhlthau (1988, 1994) confirmed that conflicts during this selection stage make students anxious. These compromises in information seeking limit their academic potential and cause anxieties, exacerbating the tremendous amount of stress undergraduate students experience while earning their degrees.

**Limitations and Considerations for Future Studies**

Future researchers should recognize that although this study used the LAS as an exploratory instrument, it is not the only survey tool available. The LAS scale was created and validated 25 years ago when technology use in libraries was minimal. This scale does not assess the technological advances and emerging public services now common in academic library environments. However, the scale was not chosen for the technology aspects. It was chosen for this study because the other four subscales, including barriers with staff, have remained foundational to academic libraries. Furthermore, the accessibility of and extensive literature on this scale made it a suitable instrument for the preliminary stage of this study. Moving forward, researchers should use updated surveys or questionnaires that reflect today's use of technology in libraries, such as the Information Seeking Anxiety Scale (Erfanmanesh, Abrizah, & Karim, 2012), AQAK (specifically for undergraduates) (Anwar, Al-Qallaf, Al-Kandari, & Al-Ansari,
or the Multidimensional Library Anxiety Scale (Van Kampen, 2004). Measuring the technology aspect of academic libraries helps researchers understand the current undergraduate population, their information needs, and their information-related anxiety.

The population and sample size are also factors for future researchers to consider. This study focused on the smaller population of African Nova Scotian undergraduates, which limited the sample size. As of 2016, the African Nova Scotian community was comprised of 21,915 members compared with their 849,685 Caucasian neighbours (Statistics Canada, 2016). Within the African Nova Scotian community, only 3,461 members held university degrees compared to the other 194,450 Nova Scotians between the ages of 25 and 64 (African Nova Scotian Affairs, 2014, p. 4). As one of the oldest visible minority communities in Canada (Statistics Canada, 2006a; Statistics Canada, 2006b), African Nova Scotians have faced access barriers to education and enrolment challenges in post-secondary education (Black Learners Advisory Committee, 1994). The strategies used by such a historical community to overcome educational barriers and the challenges impacting current university students are important to explore. This population was ideal for an exploratory study due to the limited research conducted on students’ post-secondary education experiences; however, since participants were self-selected, their experiences may not represent those of the entire population. Future research should consider gathering data on larger visible minority populations to make inferences about the impact of library anxiety on university students.

**Conclusion**

This study provides exploratory evidence of racial differences in undergraduate library anxiety at Nova Scotian universities. This study also highlights the significance of early exposure to libraries. Namely, public and community libraries play important roles in providing relevant resources, services, and communal physical spaces that address community needs. The public/community libraries are safe and inclusive settings for African Nova Scotians to learn, gain access to emerging technologies, and socialize with members within or external to their community. Although they learned how to navigate public libraries prior to attending university, African Nova Scotian students’ initial comfort transitioning from public to academic libraries should not be overlooked, nor should it interpreted by academic libraries as proof that these students have fulfilled university-level information literacy requirements.

Although African Nova Scotians experience lower levels of library anxiety initially at university, they encounter it later in their degrees, particularly through barriers with staff. These students are open and willing to learn more about university libraries and the resources that will strengthen their academic success, but staff barriers prevent them from gaining and improving their information literacy skills. The role of academic libraries is to enhance students’ library experience by increasing their knowledge and literacy. Academic libraries should encourage workshops and information sessions earlier in undergraduate degrees to address this information gap, and should promote these sessions in the type of supportive and accessible learning environments to which students were accustomed prior to attending university. Moreover, librarians and staff
must work toward eliminating barriers in reference services and resources to assure students that their questions and research interests are valued and welcomed in this space.

**Acknowledgements**

This study was conducted for the requirements of the Master of Information Studies research project program of the first author at McGill University. We would like to thank the anonymous participants for their invaluable contribution to this research. We would also like to acknowledge the support of the Delmore “Buddy” Daye Learning Institute Graduate Research Fellowship Grant and the Atlantic Provinces Library Association’s Carin Alma E. Somers Scholarship to the first author.

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**Appendix A: Semi-Structured Interview Guide**

**Opening/Experience**
- Could you describe an average day as a Nova Scotian university student?

**Affect**
- Could you tell me how you use the physical library during your degree?
- Describe how you felt when you first used the university library (using new services, entering the physical library space, talking to a librarian, etc.).
- How do you feel now when using the library?

**Staff**
- Could you discuss your interaction with library staff and librarians at your university?

**Mechanical**
- Describe your experience with online library resources, such as talking with librarians on chat, looking for articles online, using the website, searching for resources, etc.

**Knowledge**
- Explain your research process using the library.
- When you experience difficulties interacting with the library, how do you cope with the situation?

**Comfort**
- How could your university library improve its’ physical space, services, and resources (print and online) to help you succeed in your degree?

**Closing/Experience**
- Could you describe any visits to a library prior to starting university?