

Undergraduate Students' Library Interactions: Does Race Shape How Students Experience Library Help?

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Article abstract

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Methods – The study consisted of a survey distributed by email to undergraduate students at a medium size public university located in North Central Massachusetts. Students answered questions about the frequency of their interactions with librarians and student employees, whether they felt respected during the interactions, whether their information needs were met, and whether the interactions increased their feelings of belonging at the university. Data analysis on the 366 students who completed the survey was conducted in SPSS using Fisher's exact test.

Results – Findings revealed that Black students reported more frequent interactions with librarians/library staff and student employees than Latina/o/e and White students did. The difference across races regarding the frequency of interactions with librarians/library staff and student employees was statistically significant. Although Black students also reported higher levels of agreement for feeling respected, having their information needs met, and feelings of belonging than their counterparts, the differences among races were not statistically significant. Black, Latina/o/e, and White students felt respected, had their information needs met, and felt a sense of belonging regardless of whom they interacted with. Further, preferences for whom students interacted with depended on the type of information needed. Students sought librarians for research help and student employees for logistical support.

Conclusion – To improve the undergraduate student library experience, the authors discuss how to create a more accessible and inclusive library environment by leveraging student employees for peer mentoring, enhancing faculty collaboration to integrate library resources into coursework, and providing professional development for library staff to foster a welcoming atmosphere.





Research Article

Undergraduate Students' Library Interactions: Does Race Shape How Students Experience Library Help?

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Abstract

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Introduction

Many college students have memories of time spent in libraries to locate resources that help them understand a new concept and to work with library staff to support and clarify their ideas. They remember finding a quiet corner to study or consulting with a librarian for writing advice. Whatever the reasons college students use their academic library, their experiences vary. These experiences may or may not bring up fond memories. For some students, libraries are safe, warm, and welcoming spaces used for gathering with friends, studying for classes, and finding valuable resources (Elteto et al., 2008; Whitmire, 1999, 2003). However, for other students, libraries are anxiety-provoking and intimidating spaces used only when required of them for specific purposes, such as reading a book on reserve, printing a paper, or meeting a class (Mellon, 1986; Miller & Murillo, 2011; Robinson & Reid, 2007).

Libraries are beneficial for the success of students enrolled at universities. Academic librarians work with many constituents whose needs and experiences vary. Students often seek help to locate research materials, to use print services, to gather or study (Elteto et al., 2008; Whitmire 2003). Faculty members largely rely on librarians to teach their students the information literacy skills needed to complete course assignments, which can improve students' academic performance (Farrell & Badke, 2015).

Not only can libraries and librarians support the academic success of their students, they also can help to improve the social quality of students' experiences. Libraries can improve a student's ability to increase their social network (Long, 2011). The interactions students have with librarians/library staff and student employees can impact academic performance, create a sense of belonging, and provide useful information and resources (Duffin & Corrigan, 2023; Elteto et al., 2008; Whitmire, 2006). Understanding how often students use the library and whether they have preferences for whom they interact with is an area worthy of study.

In this paper, we examine the interactions of undergraduate students with academic librarians/library staff and student employees, focusing on the quantity and quality of these interactions, students' preferences for whom they choose to interact with, and whether a student's race affects their overall

experience. Based on the analysis, we present recommendations for changes needed to better address the academic and social needs of minoritized undergraduate students at the university.

Literature Review

For this paper, the review of literature explores previous research on minoritized students' use of the library, peer learning in academic libraries, and students' help-seeking behaviours. A deeper understanding of prior research in these areas lays the foundation for additional research.

Minoritized Students' Use of the Library

Whitmire pioneered research examining the academic library use of undergraduates from different cultural and racial backgrounds. According to Whitmire (1999), African American students were more likely than White students to use the online catalog, check out books, and browse the stacks. Whitmire (2003) found that White students spent more hours studying per week, engaged with faculty and course learning activities more frequently, and wrote more term papers. However, students of colour engaged in more academic library use. They used the library to study, find library resources, and ask librarians for help. Yet, Whitmire (2003) also found that year of study was the greatest factor associated with the academic library use of all undergraduates. All upperclassmen used the library more frequently than freshmen and sophomores. Whitmire (2006) found that interacting with faculty increased the academic library use of Asian, African American, and White undergraduates.

Elteto et al. (2008) conducted a case study to examine what racial factors influence the way students use an urban academic library at Portland State University. The researchers analyzed the following themes: (a) frequency of library visits and library areas used; (b) familiarity with the research process and reference service; and (c) perceptions of the library as a safe and welcoming space. They found that students of colour tended to use the library daily, but they did not access reference assistance when doing research. White students visited the library weekly and were more likely to seek research assistance. The floor used most frequently by all students housed essential resources like the reference desk, research computers, interlibrary loan, librarian offices, and the reference collection. The authors found that the library, its physical components, services provided, and hours of operation mattered to all students regardless of race or ethnicity. They recommended building upon hiring initiatives that were underway to increase racial, ethnic, and gender diversity in the library as a way to ensure that the institution is more inclusive, welcoming, and safe.

Duffin and Corrigan (2023) surveyed and held focus groups with African American students about their library experiences, including library resources, interactions with library staff, atmosphere, and outreach. While some students indicated having experienced microaggressions, most students had positive experiences when interacting with library employees and had their research needs met. Additionally, African American students felt that the library was welcoming and friendly, which increased their sense of belonging when in the library space. Along similar lines, Stewart et al. (2019) also explored how engagement with library employees affected Black students' feeling of welcomeness. They found that the concept of "library as place" and having their information needs met had a significant impact on students' feelings of welcomeness. However, interactions with library employees were not a contributing factor to feeling welcomed at the library. Continued research about African American students' experiences in academic libraries by Folk and Overbey (2022) found a lack of interaction with library employees due to students not knowing how staff can support them. Students also perceived their interactions with staff differently based on the race of the librarian. Black students perceived Black

librarians as having more affective traits like caring, acknowledging, and engaging. While Black students did not perceive White librarians negatively, they perceived them to be more neutral, more transactional, and less interested.

For their part, Latina/o/e students represent the fastest growing population of undergraduate students. Bladek (2019) and Long (2011) examined academic development among Latina/o/e students and found that they often enter college less academically prepared than other groups. Many lack English language proficiency and experience financial stress issues. Social and academic integration, college services, and programs to help counter these challenges positively influence Latino students' persistence and related educational outcomes (Bladek, 2019; Long, 2011). According to Long (2011), even when Latino students attend library orientations as part of their initial introduction to higher education as freshmen, they do not avail themselves of library services until later in their undergraduate education. Latino students' engagement in the library is often precipitated by their peers' invitations to study or work collaboratively on coursework. Meaningful and caring interactions with faculty positively correlate with higher grades and retention, as well other measures of student success (Long, 2011). Furthermore, Kiyama et al. (2015) indicated that the cultivation of an inclusive campus climate – through the creation of safe familiar spaces, culturally relevant programming, opportunities to connect, and providing services to the broader Latino community – can maximize Latino student success in higher education.

Peer Learning in Academic Libraries

To provide services that effectively meet their patrons' diverse needs, academic libraries and librarians must offer a wide variety of opportunities. This requires significant resources, specifically time and staffing. Peer learning programs have been developed to address the staffing needs of academic libraries.

Brandeis University conceptualized peer learning within the academic library setting. The Brandeis model includes two areas of library support: an information desk staffed by graduate students and a research consultation office staffed by librarians. At the information desk, graduate students answer quick questions, screen questions, and make referrals to librarians. Patrons who need more advanced help with their research are referred to the librarians in the research consultation office (Massey-Burzio, 1992). Research shows that peer learning models benefit both the mentors and the students who receive their support.

O'Kelly et al. (2015) describe a program developed to meet the academic library needs of college students. Based on peer-to-peer learning theory, which suggests that students learn best from their peers, cohorts of students were trained as peer researcher consultants (PRCs). The PRCs provided reference assistance and tutored other students on how to explore new ideas, to synthesize information, to think collaboratively and critically, to write clearly and cohesively, and to speak confidently and effectively. In the study, 25 consultants conducted 1,386 consultations from September 2012 to April 2014. The authors found that 90.4% of students working with peer consultants felt comfortable, 97% reported a positive experience, and 98% felt confident that they could complete their assignment.

Like the peer consultant program, Baugess et al. (2017) developed a peer research mentor (PRM) program at Gettysburg University. The PRM program provided undergraduate students opportunities to develop their own research skills, as well as assisting their peers with research support. PRMs had a positive impact on the students they helped. As a result of the research help provided by the peer mentors, students felt more skilled at independently researching and more likely to ask for support again when

needed. From fall 2014 through spring 2016, PRMs answered 27% of the questions asked at the research help desk. Students knowing the PRM at the help desk accounted for 16% of these questions.

Student Preferences When Seeking Help

A recurring theme in the library literature relates to library anxiety and students' information seeking behaviours. Mellon's (1986) pioneering study on anxiety experienced by students when conducting research in the library exposed some of the challenges and barriers students face. She found that many students felt intimidated by the size of the library building and did not know where things were. Navigating the library to find a book became a daunting task. She also found that students, many of whom were new to the research process, were unsure where to begin and what to do. Compounded by professors' expectations that they knew how to conduct library research, students' anxiety resulted in an unwillingness or inability to seek assistance from librarians (Mellon, 1986).

To better understand students' information seeking behaviours, Head and Eisenberg (2009) surveyed students at multiple academic institutions across the United States. They found that while students utilized library resources to meet the requirements of an assignment, nearly 80% of the respondents rarely or never sought assistance from a librarian. Students consulted with their professors for research-related questions. The "student-librarian disconnect" may result from different mindsets where librarians strive for thoroughness and students strive for efficiency in the research process (Head & Eisenberg, 2009, p. 24).

In lieu of library staff, many students rely on friends, tutors, professors, and family for assistance with library-related issues. Robinson and Reid (2007) interviewed students about their information seeking behaviours when using the library. Similar to Mellon (1986), they found that students were often embarrassed to ask for help and thought that they should know the answer already. Some students were shy and reluctant to interrupt the librarian to seek help. In the interviews, students described experiencing anxiety about how to use equipment in the library and, as a result, they asked their friends for help, rather than library staff.

Further research conducted in academic libraries demonstrates that, although library professionals are uniquely qualified to support students with their research needs, students do not always seek their help. Miller and Murillo (2011) identified a process called help-seeking that relates to the way that students interact with library professionals. In their research, students provided the following reasons for not asking librarians for help: not wanting to bother librarians and having a negative perception of librarians due to past interactions.

Long (2011) also found that Latino students' past interactions with librarians and a lack of understanding of librarians' roles influence their information seeking behaviours. In a qualitative investigation, Long found that few participants asked for help from librarians or library staff. Latino students' visits to the library began later in their academic careers after prompting from their peers. When Latino students did visit the library, it was to print, to use reference books required for coursework, or to work collaboratively on a class assignment. A few students sought help and experienced negative interactions with librarians. One Latina student who was fluent in English, yet had an accent, felt embarrassed because the librarian spoke slowly and loudly while helping her. Another Latino student felt that the librarian quickly provided support related to online resources, but had little to no interest in the research the student was conducting, nor did the librarian follow up when the sources were not helpful.

Additionally, Long (2011) identified a sense of feeling excluded among the Latino students in the study. Students' prior experiences in public libraries led them to feel a sense of community where people would convene, tell stories, and read Spanish language newspapers and magazines. However, that community atmosphere was missing in their academic library. Students not only mentioned a lack of Spanish language materials, but also a lack of visual representation in the messaging and signage throughout the library. While Latino students viewed libraries generally as culturally inclusive, this is not what they were experiencing in their academic library. The lack of perceived support and representation may be a factor in Latino students' lower library usage and lower levels of information literacy (Long, 2011).

Borrelli et al. (2019) explored first generation students' perceived support from library employees. Among their findings, first generation students had limited, but positive interactions with library employees. Student perceptions differed based on the age of library employees. Students found student employees more relatable, but librarians tended to have more expertise, and they recognized the value of both.

While more research exists that examines why students do not readily seek help from librarians, some research has been conducted to explore why students do ask for help. Vinyard et al. (2017) examined how undergraduate students look for information and what prompts them to seek help from librarians. Easy access to search engines, library databases, and artificial intelligence-assisted technologies allow students to readily begin the inquiry process and identify resources on their own. Yet, some students struggle to generate good search terms and to identify credible sources. In such instances, or when a class assignment requires the use of peer-reviewed resources, students seek help from a librarian. The researchers found that students were satisfied with librarian services and wished they had sought help earlier to save time and diminish stress (Vinyard et al., 2017). Students' do-it-yourself mindset appeared to be a barrier to seeking help from librarians.

Researchers have explored students' use and impression of libraries by race, the benefits of peer learning, and students' reluctance to seek help from librarians. However, there is limited research on whether students prefer interacting with librarians and library staff or with student employees, and if a student's race influences this preference. Lastly, little research has been conducted that explores whether the quality of the interaction, which includes feelings of respect, information needs being met, and sense of belonging, vary based on the student's race.

Research Questions

The following research attempts to fill this gap in the literature by exploring these questions:

- Does an undergraduate student's race affect their interactions and perceived quality of their experiences with librarians/library staff?
- Does an undergraduate student's race affect their interactions and perceived quality of their experiences with student employees?
- Does an undergraduate student's race affect their interactions and perceived quality of their experiences when interacting with librarians/library staff versus student employees?

We examine the quality of students' experiences with questions about respect, meeting information needs, and feelings of belonging.

Methods

Population

This study surveyed undergraduate students at a regional public university located in North Central Massachusetts. The undergraduate student population in fall 2021 was 3,349. The response rate was 12.1%, with 405 students completing the survey. We categorized students' responses by race. The survey asked participants to identify their race with the following options, based on the format of the U.S. Census questionnaire:

- American Indian/Alaskan Native
- Asian or Asian American
- Black or African American
- Native Hawaiian/Pacific Islander
- White
- Unknown/Prefer not to answer

We asked about ethnicity in a separate question: Are you of Hispanic, Latino, or Spanish origin? with answer choices of no, yes, or prefer not to answer. If a student selected yes, we categorized them as Hispanic/Latino, regardless of their race selection(s). If a student selected two or more races and answered no to being of Hispanic, Latino, or Spanish origin, we categorized them as Two or more races. This practice is consistent with National Center for Education Statistics (n.d.) guidance on reporting race and ethnicity data.

In fall 2021, the undergraduate student population at Fitchburg State University was predominantly White. Table 1 shows the racial make-up of the undergraduate student population (Office of Institutional Research and Planning, 2021), the survey response rates by race, and the percentage of survey responses to the students' population. While the groupings are not evenly distributed, they are mostly proportional to the undergraduate student population. Given the small number of samples for American Indian/Alaskan Native (2), Native Hawaiian/Pacific Islander (1), Asian (9), and Two or more races (12), these groups were not analyzed. Answers of Unknown/prefer not to answer (15) were also removed. As a result, the analysis contains 366 cases for the following racial groups: Black/African American, Latino/Hispanic, and White.

Table 1

Fall 2021 Undergraduate Student Population & Spring 2022 Survey Response Rates, by Race

| | Student population | Survey responses | Survey responses as % of student population by race | Included in analysis |
|----------------------------------|--------------------|--------------------|---|----------------------|
| Race | N (%) | N (%) | % | |
| American Indian/Alaskan Native | 8 (0.2%) | 2 (0.5%) | 25% | No |
| Asian or Asian American | 88 (2.6%) | 9 (2.2%) | 10.2% | No |
| Black or African American | 426 (12.7%) | 31 (7.7%) | 7.3% | Yes |
| Hispanic or Latino | 484 (14.5%) | 91 (22.5%) | 18.8% | Yes |
| Native Hawaiian/Pacific Islander | 0 (0%) | 1 (0.2%) | Not divisible | No |
| Non-resident alien | 21(0.6%) | Data not collected | Unknown | No |
| Two or more races | 82 (2.4%) | 12 (2.9%) | 14.6% | No |
| White | 2,181 (65.1%) | 244 (60.2%) | 11.2% | Yes |
| Unknown/Prefer not to answer | 59 (1.8%) | 15 (3.7%) | 25.4% | No |
| Total: | 3,349 | 405 | | |

Timeline & Survey Instrument

The survey was adapted from Folk and Overbey's (2022) focus group protocol. The analysis used a convenience sample. Between February and March 2022, undergraduate students received by email an invitation to participate in the survey, which was estimated to take 15 minutes to complete. The survey was distributed via Google Forms and IRB approval was obtained. To incentivize their participation, students who completed the survey were entered into a drawing for one of three \$100 Amazon gift cards. The survey was extensive (see Appendix), but our analysis focuses on nine survey questions and two open-ended questions. The survey items analyzed here fall into four categories:

1) Frequency and preference for interactions:

- How often do you interact with librarians or library staff?
- How often do you interact with library student employees?
- Who do you prefer to interact with at the library?

2) Respect:

- Librarians and library staff treat me with respect.
- Library student employees treat me with respect.

3) Meeting information needs:

- Librarians and library staff provide me with the information I need.
- Library student employees provide me with the information I need.

4) Sense of belonging:

- Interacting with librarians and library staff increases my sense of belonging at Fitchburg State University.
- Interacting with library student employees increases my sense of belonging at Fitchburg State University.

Open-ended questions:

- Please describe your interactions with librarians/library staff.
- Please describe your interactions with library student employees.

Further analysis of the qualitative data found in these open-ended questions provided confirmation of quantitative findings and the opportunity to elaborate in more detail.

Data Analysis

Students answered the survey questions using a 5-point Likert scale. The Likert scale was collapsed into a 3-point scale to allow for a more precise analysis. Using SPSS statistical data analysis software, Fisher's exact test was used to compare whether there were differences in students' responses based on their race. Fisher's exact test is based on a factorial formula and does not use approximations or probabilities like the Chi Square test does. Fisher's exact test allows for a valid analysis because some cells did not have at least five responses, a requirement for a Chi Square analysis (Williams & Quave, 2019). Statistical significance was set at $p < 0.05$.

Open-ended question responses from our surveys were all located in spreadsheets, then categorized by racial groups aligned with those found in the 2022 US Census Bureau. The data within racial categories revealed similarities in individual experiences and in overall responses. Based on these similarities, emic codes were developed and consisted of words and phrases used by the participants. The emic codes first identified within the racial categories were revealed to appear across the categories. To incorporate the broadest description of qualitative experiences and the frequency of occurrence, a more general category of codes called etic codes was developed. The etic codes of positive and negative experiences were used to describe the qualitative data results.

Results

Students' Interactions With Librarians/Library Staff and Student Employees

Students were asked how often they interacted with librarians/library staff and library student employees. Table 2 presents students' responses by race. The majority of the students across races reported interactions with both librarians/library staff and student employees. Fewer than 20.5% of students across races indicated that they had never had an interaction. Black students responded that they interacted with librarians and library staff (25.8%) and student employees (38.7%) often or very often. In comparison, their counterparts reported interacting with librarians/library staff and student employees less frequently. Fisher's exact test found the differences in frequencies among races to be statistically significant for both interactions with librarians/library staff ($p = 0.030$) and student employees ($p = 0.002$).

Table 2

Frequency of Interactions With Librarians/Library Staff vs. Student Employees, by Race

| Librarians/Library staff (N = 366) | | | | |
|--|------------|------------------|------------------|-----------|
| Responses | Never | Rarely/Sometimes | Often/Very often | Not sure |
| Black (N = 31) | 6 (19.3%) | 15 (48.4%) | 8 (25.8%) | 2 (6.5%) |
| Latina/o/e (N = 91) | 15 (16.5%) | 59 (64.8%) | 11 (12.1%) | 6 (6.6%) |
| White (N = 244) | 44 (18.0%) | 172 (70.5%) | 15 (6.1%) | 13 (5.3%) |
| Library Student employees (N = 365*) | | | | |
| Black (N = 31) | 4 (12.9%) | 15 (48.4%) | 12 (38.7%) | 0 (0.0%) |
| Latina/o/e (N = 30) | 11 (12.2%) | 61 (67.8%) | 12 (13.3%) | 6 (6.7%) |
| White (N = 244) | 50 (20.5%) | 155 (63.5%) | 23 (9.4%) | 16 (6.6%) |
| Fisher's exact test two-sided p-value = 0.030 (Librarians/Library staff) & 0.002 (Student employees) | | | | |
| *one Latina/o/e student did not answer this question | | | | |

When asked with whom they prefer to interact, all students across races indicated that their preference depended on what they needed. Based on the responses, students seem to understand the difference in the levels of service that each group of employees can provide (see Table 3). However, when they did have a preference, both Black and Latina/o/e students preferred to interact with student employees (16.7% and 18.9% respectively) than librarians/library staff (10.0% and 8.9%). White students slightly favoured interacting with librarians/library staff (12.7%) over student employees (10.2%). Although minoritized students preferred interacting with student employees over librarians/library staff, the differences between responses were not statistically significant ($p = 0.252$).

Table 3

Preferred Interactions With Librarians/Library Staff and Student Employees, by Race

| Who do you prefer to interact with at the Library? | | | |
|--|-------------------------|------------------|------------------------|
| Response (N=356*) | Librarian/Library staff | Student employee | Depends on what I need |
| Black (N = 30) | 3 (10.0%) | 5(16.7%) | 22 (73.3%) |
| Latina/o/e (N = 90) | 8 (8.9%) | 17 (18.9%) | 65 (72.2%) |
| White (N = 236) | 30 (12.7%) | 24 (10.2%) | 182 (77.1%) |
| Fisher's exact test two-sided p-value = 0.252 | | | |
| *10 students did not answer this question | | | |

Students' Perceptions of Respect Demonstrated by Librarians/Library Staff and Student Employees

Students were asked to indicate their level of agreement with the prompts Librarians and library staff treat me with respect and Library student employees treat me with respect (see Table 4). Regarding librarians/library staff, Black students (96.8%) tended to agree/strongly agree more often with the statement than their White (84.4%) and Latina/o/e (84.6%) counterparts. While there was not a significant association between a student's race and perceived levels of respect ($p = 0.190$), students regardless of race tended to agree/strongly agree with the statement. When asked the same question in relation to student employees, the majority of students across races also indicated high levels of agreement, although the levels of agreement were slightly lower for Black and White students and slightly higher for Latina/o/e students in comparison to their responses related to librarians/library staff. The analysis showed no significant differences ($p = 0.721$) across responses based on race.

Table 4

Feelings of Being Respected by Librarians/Library Staff vs. Library Student Employees, by Race

| Librarians/Library staff | | | |
|--|----------------------------|----------------------------|----------------------|
| Responses (N = 366) | Strongly disagree/Disagree | Neither agree nor disagree | Agree/Strongly agree |
| Black (N=31) | 0 (0.0%) | 1 (3.2%) | 30 (96.8%) |
| Latina/o/e (N=91) | 0 (0.0%) | 14 (15.4%) | 77 (84.6%) |
| White (N=244) | 7 (2.9%) | 31 (12.7%) | 206 (84.4%) |
| Library student employees | | | |
| Black (N=31) | 0 (0.0%) | 3 (9.7%) | 28 (90.3%) |
| Latina/o/e (N=91) | 2 (2.2%) | 10 (11.0%) | 79 (86.8%) |
| White (N=244) | 5 (2.0%) | 39 (16.0%) | 200 (82.0%) |
| Fisher's exact test two-sided p-value = 0.190 (Librarians/Library staff) and 0.721 (Library student employees) | | | |

Students' Perceptions of Librarians/Library Staff and Student Employees' Ability to Provide Needed Information

Students were asked to indicate their level of agreement with the prompts Librarians and library staff provide me with the information I need, and Library student employees provide me with the information I need. Similar to the respect prompt above, Black students (96.8%) were more likely to agree/strongly agree that librarians/library staff provided them with the information they needed than Latina/o/e (84.6%) and White (82.3%) students (see Table 5). While Black students (96.8%) also agreed/strongly agreed that student employees were able to provide them with the information needed, Latina/o/e students (75.8%) and White students (77.9%) were less likely to agree with the statement. While the percentages of agree/strongly agree were high for all respondents, Latina/o/e and White student responses suggest that they feel that librarians/library staff are better able to provide them with the information they need than student employees. However, Fisher's exact test showed no statistical difference in responses across races ($p = 0.358$, $p = 0.073$).

Table 5

Satisfaction With Information Received by Librarians/Library Staff vs. Student Employees, by Race

| Librarians/Library staff | | | |
|--|----------------------------|----------------------------|----------------------|
| Responses (N = 366) | Strongly disagree/Disagree | Neither agree nor disagree | Agree/Strongly agree |
| Black (N=31) | 0 (0.0%) | 1(3.2%) | 30 (96.8%) |
| Latina/o/e (N=91) | 1 (1.1%) | 13 (14.3%) | 77 (84.6%) |
| White (N=244) | 6 (2.5%) | 37 (15.2%) | 201(82.3%) |
| Library student employees | | | |
| Black (N=31) | 0 (0.0%) | 1(3.2%) | 30 (96.8%) |
| Latina/o/e (N=91) | 3 (3.3%) | 19 (20.9%) | 69 (75.8%) |
| White (N=244) | 4 (1.6%) | 50 (20.5%) | 190 (77.9%) |
| Fisher's exact test two sided p-value = 0.358 (Librarians/Library staff) and 0.073 (Library student employees) | | | |

Students' Perceptions on How Interacting With Librarians/Library Staff and Student Employees Influences Their Sense of Belonging

Table 6 shows students' responses to prompts about interactions and sense of belonging. Black students (71.0%) were more likely to agree/strongly agree that librarian/library staff interactions increased their sense of belonging than Latina/o/e (54.9%) and White (52.9%) students. As well, Black students (74.2%) also agreed/strongly agreed that interacting with student employees increases their sense of belonging. Their positive responses were 16% higher than Latina/o/e students' (58.2%) agreements with the statement and 21% higher than White students' (52.9%). Black and Latina/o/e students agreed/strongly

agreed that their interactions with student employees increase their sense of belonging more than those with librarians/library staff. These trends, however, were not statistically significant ($p = 0.439$, $p = 0.273$).

Table 6

Librarians/Library Staff and Library Students Employees Interactions and Sense of Belonging, by Race

| Librarians/Library staff | | | |
|--|----------------------------|----------------------------|----------------------|
| Responses (N = 366) | Strongly disagree/Disagree | Neither agree nor disagree | Agree/Strongly agree |
| Black (N=31) | 1 (3.2%) | 8 (25.8%) | 22 (71.0%) |
| Latina/o/e (N=91) | 9 (9.9%) | 32 (35.2%) | 50 (54.9%) |
| White (N=244) | 21(8.6%) | 94 (38.5%) | 129(52.9%) |
| Library student employees | | | |
| Black (N=31) | 1 (3.2%) | 7 (22.6%) | 23(74.2%) |
| Latina/o/e (N=91) | 7 (7.7%) | 31(34.1%) | 53(58.2%) |
| White (N=244) | 19 (7.8%) | 96 (39.3%) | 129 (52.9%) |
| Fisher's exact test two sided p-value = 0.439 (Librarians/Library staff) and 0.273 (Library student employees) | | | |

Student Responses to Open-Ended Survey Questions, by Race

To better understand the lived experiences of students who use the library, this study collected qualitative research data in the form of short answers. Qualitative data provides the researcher opportunities to gain some understanding from the insider's point of view, referred to as the emic perspective.

Students were asked the following open-ended questions:

- 1) Please describe your interactions with librarians or library staff.
- 2) Please describe your interactions with library student employees.

The collection and analysis of participants' responses provided researchers greater awareness of students' experiences while interacting with librarians/library staff and while interacting with library student employees. Positive data responses contained words or phrases describing interactions that were constructive, effective, useful, encouraging, or heartening. Neutral data responses included descriptions of interactions or procedures with no descriptive words or phrases. Negative data responses contained words or phrases describing interactions that were unsatisfactory, useless, discouraging, adverse, or disheartening.

Interactions With Librarians and Library Staff

Of the 31 Black students who provided responses to the open-ended survey question regarding their interactions with librarians and library staff, 13 (41.9%) were positive, 11 (35.4%) were neutral, and 0 (0%) were negative. Examples of positive responses include: (a) "very respectful and kind people"; (b) "My

interactions with the librarians and staff have been great. They are patient and kind"; (c) and "Every Librarian I've met has been very nice." Examples of neutral responses include: (a) "would ask them for help finding a book"; (b) "I just ask them general questions like can I borrow a paperclip"; and (c) "assistance with printing."

Of the 91 Latina/o/e students who provided responses to this open-ended question, 55 (60.4%) were positive, 18 (19.8%) were neutral, and 1 (1.1%) was negative. Examples of positive responses include: (a) "The librarians and library staff are always very pleasant and nice"; (b) "Polite, it's mostly to ask things about the library or the check books out"; and (c) "Normally I just have simple questions, though I know that they can help me find research and I am sure I'll be using that for my thesis next year." Examples of neutral responses include: (a) "Helped me find what I was looking for"; (b) "I have had minimal interaction with the library staff. This is simply because as of now I have felt as if I have had nothing to ask them. This doesn't mean I am opposed to doing so"; and (c) "Brief." The negative response was: "Usually tell me to put on my mask. Kind of attitude-y when helping with printing."

Of the 208 White students who provided responses to this open-ended question, 132 (63.4%) were positive, 51 (24.5%) were neutral, and 5 (2.4%) were negative. Examples of positive responses include: (a) "Met during orientation, thought they were very welcoming"; (b) "I have had a great deal of help from both the librarians and library staff when it came to my research paper. I was not familiar with the database, and they assisted me"; and (c) "I have gone to the librarians multiple times to get help with finding a reliable and scholarly article for a research paper as well as getting help with APA formatting." Examples of neutral responses include: (a) "Just asked a question and they would respond"; (b) "If I ever need help finding books, or locating different parts of the library, I will usually ask for help"; and (c) "Librarians have come in to my classes (virtually and in-person in years past) to show us how to access the databases for articles." Examples of negative responses include: (a) "I wish that I could say that I have had positive interactions with the library staff but I will be honest, I find the student staff kinder than the library staff. Some of the staff are kind but most don't reach out and when they do they come off as harsh when you don't understand. I had an issue with printing one time, and I had asked for some help and was just not treated with respect, she almost came off as irritated"; (b) "can get annoyed with basic questions"; (c) "awful", and (d) "It's been pretty limited. I've had a few experiences with the librarians and only one of the interactions was positive."

Interactions With Library Student Employees

Of the 31 Black students who provided responses to the open-ended survey question regarding their interactions with library student employees, 16 (51.6%) were positive, 6 (19.4%) were neutral, and 1 (3.2%) was negative. Examples of positive responses include: (a) "They're very efficient and professional"; (b) "Fun, easy to talk to and they're understanding"; and (c) "they are all nice and everyone knows me by now." Examples of neutral responses include: (a) "casual"; (b) "help with printing"; and (c) "brief". The one negative response was, "I had great interactions with all but 1 student employee."

Of the 91 Latina/o/e students who provided responses to this open-ended question, 53 (58.2%) were positive, and 20 (21.9%) were neutral, and 1 (1.0%) was negative. Examples of positive responses include: (a) "The library student employees are really nice as well and very respectful. They help a lot through nights of studying and in need of help or advice"; (b) "I'm a student employee myself, so they're my coworkers. I've never had any problems with them. I enjoy working with them"; and (c) "Interactions with library student employees are good, they know what they're talking about and help out as much as they can." Examples of neutral responses include: (a) "I have had minimal interaction with the library

student employees. This is simply because as of now I have felt as if I have had nothing to ask them. This doesn't mean I am opposed to doing so"; (b) "I mostly only talk to the student employees when I'm entering the library and I say hello, or if I need help from the desk with the printers"; and (c) "Fine." The one negative response was "Asked a student employee if a piece of tech that was on display was available, she rudely told me off for asking. I assume it wasn't available?"

Of the 244 White students who provided responses to this open-ended question, 124 (50.9%) were positive, 37 (15.2%) were neutral, and 2 (0.8%) were negative. Examples of positive responses include: (a) "They're usually down to earth and helpful"; (b) "This may just be because I am friends with most of the library student employees, but I do find that they are much more friendly, kind and overall more helpful. They never seem to judge me, and I hate to say it but I think it has something to do with the age gap"; and (c) "The student staff was always so helpful and nice! Whenever I needed help, they were always able to figure something out and assist me!" Examples of neutral responses include: (a) "I don't interact with them that much, but I would definitely try to find them, and ask for advice or information"; (b) "Usually I just need to ask for a pair of scissors"; and (c) "My interactions with student employees are usually brief but I usually have them book me a study room or a get help with printing." The negative responses were: (a) "Most of the time it has been pleasant and very short conversations, but one interaction was a little passive aggressive" and (b) "awkward."

Discussion

Our research sought to examine whether an undergraduate student's race influences their interactions and experience with librarians/library staff and student employees. To understand the quality of their experiences, we asked participants if they felt respected, had their information needs met, and felt a sense of belonging. We also explored if students had a preference to interact with librarians/library staff or library student employees.

Previous research has shown that issues of race influenced various aspects of students' experiences in academic libraries. Our analysis supports this in part. Black students reported more frequent interactions with librarians/library staff and student employees than Latina/o/e and White students did. The difference across races regarding the frequency of interactions with librarians/library staff and student employees was statistically significant. Although Black students also reported higher levels of agreement for feeling respected, having their information needs met, and feelings of belonging than their counterparts, the differences among races was not statistically significant. Black, Latina/o/e, and White students felt respected, had their information needs met, and felt a sense of belonging regardless of whom they interacted with. Below is an overview of themes identified through our data analysis.

Theme 1: Black Students' Interactions With Librarians/Library Staff and Student Employees Were More Frequent and Positive than Those of Latina/o/e and White Students

Black students reported that they often/very often interacted with librarians/library staff (25.8%) and student employees (38.7%) more than twice as often as their counterparts did. The frequency of the interactions was significant. This is consistent with Whitmire (2003), who found that students of colour engaged in more academic library use, including asking librarians for help, but conflicts with Elteto (2008), who found that students of colour did not access reference assistance when doing research.

Latina/o/e students reported that they often/very often interacted with librarians/library staff (12.1%) and student employees (13.3%) at a lower rate than Black students did. Long (2011) found that Latina/o/e

students often do not interact with librarians because they do not understand the assistance that librarians can provide in the research process and because of negative experiences in past interactions. When we asked open-ended questions about their experiences interacting with librarians/library staff and student employees, only two comments were negative. The lack of negative responses by Latina/o/e students, in addition to the many positive responses they gave, suggests that past negative interactions may not be the cause of their lower level of engagement with librarian/library staff or student employees. Increasing outreach initiatives to Latina/o/e students about library services warrants further research.

White students reported that they often/very often interacted with librarians/library staff (6.1%) and student employees (9.4%) at a lower rate than both Black and Latina/o/e students did. Our results are not consistent with the research done by Elteto et al. (2008), who found that White students are more likely to seek assistance from a reference librarian than students of colour. However, they do align with Whitmire (2003), who found that White students seek research assistance at a lower rate than students of colour.

All populations studied reported high levels of agreement that librarians/library staff and student employees treated them with respect, met their information needs, and provided them with a sense of belonging. However, Black students reported higher levels of agreement than Latina/o/e and White students did. While the differences in perception were not statistically significant, the gap between the perceptions of Black students and their counterparts deserves further attention. Why did Black students report higher levels of agreement? This is possibly because they reported more frequent interactions and these opportunities to engage with librarians/library staff and student employees resulted in increased positive feelings. Since the Black Lives Movement and the death of George Floyd in 2020, the library created a committee to increase our Diversity, Equity, Inclusiveness, and Belonging (DEIB) initiatives through training and advocacy. Initiatives included posting a public statement of support for Black Lives on the library website, participating in DEI training, diversifying the children's collection by identifying and filling gaps in the existing collection to include diverse representation in topics and authors, and reviewing library policies from an equity lens. These initiatives may have influenced Black students' perceptions of librarians/library staff and student employees.

Theme 2: Student Preferences for Whom They Interact With Is Based on the Information Needed

While previous research showed that students often consult with faculty rather than librarians when conducting research (Head & Eisenberg, 2009), we have not found literature about how students know who to ask for help in the library. In our research, students indicated that their decision whether to ask a librarian/library staff or a student employee depended on what they needed. Students interacted with student employees to book study rooms, for printing assistance, and to retrieve books. Students interacted with librarians/library staff when they needed research assistance and citation help. One student described going to student employees when they had "questions about library hours, and study rooms" and going to a librarian/library staff "to ask about certain books or databases needed for assignments." Similarly, a second student noted that "my interactions with student employees are usually brief but I usually have them book me a study room or get help with printing" and described going to librarians/library staff "to get help with finding a reliable and scholarly article for a research paper as well as getting help with APA formatting."

These findings are interesting. Our survey asked students to describe their experiences interacting with library/library staff and student employees, but we did not ask them how they knew who to ask for

assistance. Further examination should be done to identify how students know whom they should go to for help when in the library.

Theme 3: Library Interactions Affect Students' Feelings of Respect and Belonging

Interactions between students and librarians/library staff or student employees are often brief, such as retrieving a book on reserve, fixing an issue with the printer, or helping with software. Students who need help can go to the Research Help Desk for immediate assistance. These exchanges tend to last between 10-30 minutes. Students with more in-depth questions can schedule an appointment with a librarian. The individual consultations may last 30-60 minutes. While conversations and pleasantries often occur, these exchanges are largely transactional in nature. At our institution, librarians do not teach credited courses and do not serve as faculty advisors, so it can be more difficult to establish strong impactful relationships with students like a professor or academic advisor (Studdard, 2000; Twait & Hulseberg, 2020). This is why it was surprising that, across all races, over 52% of the respondents agreed or strongly agreed with the statements "Interacting with librarians and library staff increases my sense of belonging at Fitchburg State University" and "Interacting with student employees increases my sense of belonging at Fitchburg State University."

While the statistical results did not show a significant difference across race, the positive trend line suggests that all students felt respected and that there was an increased sense of belonging based on their interactions. According to Strayhorn (2019), sense of belonging is a student's feeling of connectedness and feeling of being cared about, accepted, respected, and valued by faculty, staff, and peers. When interacting with librarians/library staff and student employees, students highlighted their feelings of belonging by stating that their interactions were kind and respectful. One student stated, "Whenever I have interacted with library staff, they have always been kind, helpful and understanding." All students across races reported feeling respected by librarians/library staff and student employees. Furthermore, a Black student specifically commented on feeling respected and stated that librarians and library staff were "very respectful and kind people." A third student commented that librarians and library staff were "very pleasant and extremely helpful. All of my questions are usually answered and met with warm reception."

We underestimated the impact that librarians/library staff and student employee interactions had on students and learned that relatively minor exchanges had more of an impact on students than expected. Respondents often recognized the dedication that librarians/library staff and student employees have when working with college students. One student commented: "From the interactions I have had with librarians and library staff, everyone has been very helpful. They take pride in the library and are there to answer any questions you may have." Another student viewed the library as a respectable place by stating "I might have interacted with staff members, and if I haven't, I cannot imagine them acting in an unruly manner. Libraries are civil places."

While many respondents valued and appreciated the work of librarians/library staff and student employees, some respondents had negative experiences. One student commented that a librarian/library staff member was "kind of attitude-y when helping with printing" and another stated that they "can get annoyed with basic questions." Librarians/library staff and student employees need to be mindful of how their tone and actions may come across to students. A curt answer or an unapproachable appearance can have a significant impact on a student's experience using the library.

Recommendations

While our survey results showed that our student population had a favourable view of interactions with librarians/library staff and student employees, we recognize that continuous self-reflection and improvement needs to be embedded into our everyday practice. To meet the academic needs of a growing and diverse undergraduate student population at our institution, librarians must continue to create a warm and welcoming environment. Libraries must highlight that everyone in the library is available to help, no matter how insignificant a question may appear to be. In our results, Black and Latina/o/e students had a slight preference for interacting with student employees than librarians/library staff. Libraries can leverage their existing student employees by creating a formal peer mentoring program. Research by O'Kelly et al. (2015) found that both student employees and students who use the library benefit from peer-to-peer interactions. In addition, collaborations with faculty can increase students' use of the library. Whitmore (2006) found that when faculty members intentionally created assignments requiring the use of library resources or assistance from librarians, library use by Asian, African American, and White undergraduates increased. Strong collaborations between librarians and faculty in the development of library instruction and assignment design could provide opportunities for students to engage with librarians more frequently.

To increase student engagement and ensure that interactions with students are effective and meaningful, librarians/library staff and student employees should participate in professional development training, such as cultural sensitivity and customer service that identifies individual and institutional strengths and areas of improvement. To support a diverse student population, initiatives like examining implicit bias and personal cultural lenses can be provided to develop culturally inclusive practices and dismantle negative stereotypes held by librarians/library staff or student employees.

To build relationships with current students who use the library, librarians/library staff and student employees could engage students in conversation. Taking the time to answer students' questions fully and attempting to reduce the transactional nature of an exchange could further demonstrate our care and concern for their academic success. These interactions would show students that librarians/library staff and student employees are genuinely interested in them and the work they do in the library. When students know you care about them, they begin to care about what you can teach or offer them. The poet and historian Maya Angelou is credited for saying, "I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

Contributions, Limitations, and Future Areas of Study

This research contributes to the library literature in several ways. First, it attempts to answer the question Do students prefer to interact with librarians/library staff or student employees? We identified their preferences based on the frequency of interactions, quality of interactions in meeting their information need, and feelings of respect and belonging. Second, our research looked at whether any perceived differences were dependent on the race of the student.

While this research sheds some light on these areas, there were limitations with the study. We used a convenience sample rather than a random or controlled sample. A convenience sample often will not validate findings for the entire population of undergraduate library users. While the sample met the requirements for Fisher's exact test, the test may not have been sufficiently powered. When running the analysis, there were some cells that contained counts as low as zero, which may have impacted the ability to detect small differences between groups. A larger sample size or restructuring some of the survey

choices to be quantitative rather than qualitative could address these issues in the future. There also was a potential for bias in that students favouring the library may have been more likely to complete the survey than those who have not had positive library experiences. The survey was conducted in the spring 2022 and COVID-19 was still having a significant impact on students' academic experiences. Lastly, the survey was conducted at one institution. Addressing these limitations and conducting a follow-up study in a post-pandemic environment across multiple institutions may provide more evidence about students' preferences when deciding who to interact with and whether their preferences are dependent on their race.

Conclusion

Our research investigated students' preferences when interacting with librarians/library staff or student employees. Their preferences were identified based on the frequency of interactions, quality of interactions in meeting their information needs, and feelings of respect and belonging. The results of the analysis showed that Black students interacted with librarians/library staff and student employees at higher frequencies than Latina/o/e and White students. In addition, regardless of race, students felt respected, experienced a sense of belonging, and had their information needs met when interacting with both librarians/library staff and student employees. If students are treated with kindness and respect, they will view the library as a welcoming and civil place. Students will not only feel welcomed but will also recognize the expertise of librarians/library staff and student employees and actively seek their help.

Author Contributions

Connie Strittmatter: Conceptualization (equal), Data curation, Methodology (lead), Formal analysis (quantitative), Writing/original draft (equal), Writing-review-editing (equal) **Danette V. Day:** Conceptualization (equal), Methodology (supporting), Formal analysis (qualitative), Writing/original draft (equal), Writing-review-editing (equal)

References

- Baugess, C. K., Jallas, M. R., Smith, M. D., & Wertzberger, J. (2017). Peer research mentors at Gettysburg College. In E. Rinto, J. Watts, & R. Mitola (Eds.), *Peer-assisted learning in academic libraries* (pp. 135–146). ABC-CLIO. <https://cupola.gettysburg.edu/librarypubs/64>
- Bladek, M. (2019). Latino students and the academic library: A primer for action. *The Journal of Academic Librarianship*, 45(1), 50–57. <https://doi.org/10.1016/j.acalib.2018.12.001>
- Borrelli, S., Su, C., Selden, S., & Munip, L. (2019). Investigating first-generation students' perceptions of library personnel: A case study from the Penn State University Libraries. *Performance Measurement and Metrics*, 20(1), 27–36. <https://doi.org/10.1108/PMM-07-2018-0018>
- Duffin, K., & Corrigan, E. (2023). African American undergraduate students' perceived welcomeness at a midsized university library. *Evidence Based Library and Information Practice*, 18(3), 3–25. <https://doi.org/10.18438/ebliip30312>
- Elteto, S., Jackson, R. M., & Lim, A. (2008). Is the library a “welcoming space”? An urban academic library and diverse student experiences. *Libraries and the Academy*, 8(3), 325–337. <https://doi.org/10.1353/pla.0.0008>

- Farrell, R., & Badke, W. (2015). Situating information literacy in the disciplines: A practical and systematic approach for academic librarians. *Reference Services Review*, 43(2), 319–340.
<https://doi.org/10.1108/RSR-11-2014-0052>
- Folk, A. L., & Overbey, T. (2022). *Narratives of (dis)engagement : Exploring Black and African American students' experiences in libraries*. ALA Editions.
- Head, A. J., & Eisenberg, M. B. (2009). *Lessons learned: How college students seek information in the digital age*. Project Information Literacy Progress Report. University of Washington Information School.
<https://projectinfo.org/publications/information-seeking-habits/>
- Kiyama, J. M., Museus, S. D., & Vega, B. E. (2015). Cultivating campus environments to maximize success among Latino and Latina college students. *New Directions for Higher Education*, 2015(172), 29–38.
<https://doi.org/10.1002/he.20150>
- Long, D. (2011). Latino students' perceptions of the academic library. *Journal of Academic Librarianship*, 37(6), 504–511. <https://doi.org/10.1016/j.acalib.2011.07.007>
- Massey-Burzio, V. (1992). Reference encounters of a different kind: A symposium. *Journal of Academic Librarianship*, 18(5), 276–280.
- Mellon, C. A. (1986). Library anxiety: A grounded theory and its development. *College and Research Libraries*, 47(2), 160–165. <https://doi.org/10.5860/crl.47.02.160>
- Miller, S., & Murillo, N. (2011). Why don't students ask librarians for help?: Undergraduate help-seeking behavior in three academic libraries. In L. M. Duke & A. D. Asher (Eds.), *College libraries and student culture: What we now know* (pp. 53–55). American Library Association.
- National Center for Education Statistics. (n.d.) *Collecting race and ethnicity data from students and staff using the new categories*. U.S. Department of Education, Institute of Education Science.
<https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-collecting-data-for-reporting-purposes>
- O'Kelly, M., Garrison, J., Merry, B., & Torreano, J. (2015). Building a peer-learning service for students in an academic library. *portal: Libraries and the Academy*, 15(1), 163–182.
<http://doi.org/10.1353/pla.2015.0000>
- Office of Institutional Research and Planning. (2021). *Institutional factbook, 2021-2022*. Fitchburg State University.
- Robinson, C.M., & Reid, P. (2007). Do academic enquiry services scare students? *Reference Services Review*, 35(3), 405–424. <https://doi.org/10.1108/00907320710774283>
- Strayhorn, T. L. (2019). *College students' sense of belonging: A key to educational success for all students* (2nd ed.). Routledge.
- Stewart, B., Ju, B., & Kendrick, K. D. (2019). Racial climate and inclusiveness in academic libraries: Perceptions of welcomeness among black college students. *Library Quarterly*, 89(1), 16–33.
<https://doi.org/10.1086/700661>

- Studdard, P. (2000). Academic librarians as advisors. *College & Research Libraries News*, 61(9), 781–792.
<https://crln.acrl.org/index.php/crlnews/article/view/20998/25890>
- Twait, M., & Hulseberg, A. (2020). “In a different light”: Librarians as undergraduate student advisors. *College & Research Libraries News*, 81(4), 187.
<https://crln.acrl.org/index.php/crlnews/article/view/24381/32218>
- United States Census Bureau. (2021, August 12). *2020 census statistics highlight local population changes and nation’s racial and ethnic diversity* [Press release].
<https://www.census.gov/newsroom/press-releases/2021/population-changes-nations-diversity.html>
- Vinyard, M., Colleen, M., & Colvin, J. B. (2017). Why do students seek help in an age of DIY?: Using a qualitative approach to look beyond statistics. *Reference & User Services Quarterly*, 56(4), 257–267.
<https://journals.ala.org/index.php/rusq/article/view/6355>
- Whitmire, E. (1999). Racial differences in the academic library experiences of undergraduates. *Journal of Academic Librarianship*, 25(1), 33–37. [https://doi.org/10.1016/S0099-1333\(99\)80173-6](https://doi.org/10.1016/S0099-1333(99)80173-6)
- Whitmire, E. (2003). Cultural diversity and undergraduates’ academic library use. *Journal of Academic Librarianship*, 29(3), 148–161.
[https://doi.org/10.1016/S0099-1333\(03\)00019-3](https://doi.org/10.1016/S0099-1333(03)00019-3)
- Williams, L. L., & Quave, K. (2019). *Quantitative anthropology: A workbook*. Elsevier Science & Technology.

Appendix

Survey Instrument

NOTE: Questions 7-11 and part of question 12 were used in the analysis.

Student Use and Perception of Libraries

This survey is part of an ongoing research project by Librarian [name redacted] and [name redacted] about student use and perceptions of libraries. The research project is approved by the Fitchburg State University Institutional Review Board (IRB) as "exempt" for human subjects research.

This survey will take approximately 15 minutes to complete.

Confidentiality: This survey is anonymous. No personal identifiable information (PII) will be attached to your responses.

If you would like to be entered into a drawing for a \$100 Amazon gift card, you will be asked to provide your name and email at the end of the survey. This information will be separated from your survey responses to ensure your anonymity.

Participation in this research is voluntary and you are free to discontinue at any time. There are no risks for participating in this research. Benefits for engagement in this study could lead to the changes in the library to provide an environment that can better support students in their academic success.

Use of Results: The aggregate results of this survey may be shared with the Fitchburg State University community and potentially at professional conferences or within published research.

Contacting the Researcher or IRB: If you have questions about this survey please contact the Principal Investigators for this project, Connie Strittmatter at cstrittm@fitchburgstate.edu or Dr. Danette Day at dday@fitchburgstate.edu. You may also contact the Chairperson of the Fitchburg State University Institutional Review Board at humansubjects@fitchburgstate.edu

Past Library Use

In this section, you will be asked questions about your past library use either at your high school or public library.

- 1) List three words to describe what you think when you hear the word library, or how you feel about libraries.
- 2) How often did you visit libraries before you started college? (Daily, Weekly, Monthly, Once a semester, Once a year, Never)
- 3) In what ways did you use your high school or public library? (Likert Scale - Never Sometimes, Often, Very Often, Always)
 - Work on homework
 - Conduct research for an assignment

- Ask librarian for assistance
- Leisure Reading
- Hang out with my friends
- Attend programs or events

- 4) How would you describe your interactions with librarians prior to starting college? (Very negative, somewhat negative, neutral, somewhat positive, very positive)

Present Library Use

In this section, you will be asked questions about how you currently use the Fitchburg State University Library.

- 5) How often did you visit libraries before you started college? (Daily, Weekly, Monthly, Once a semester, Once a year, Never)
- 6) In what ways did you use your high school or public library? (Likert Scale - Never Sometimes, Often, Very Often, Always)
- Work on homework
 - Conduct research for an assignment
 - Ask librarian for assistance
 - Leisure Reading
 - Hang out with my friends
 - Attend programs or events
 - Printing
 - Study rooms
 - Quiet study space
 - Access databases, journals, and books remotely
- 7) How often do you interact with librarians or library staff? (Never, rarely, sometimes, often, very often, Not sure if I have interacted with a librarian or library staff)
- 8) How often do you interact with student employees in the library? (Never, rarely, sometimes, often, very often, Not sure if I have interacted with a librarian or library staff)
- 9) Please describe your interactions with librarians or library staff.
- 10) Please describe your interactions with library student employees.
- 11) Who do you prefer to interact with at the Library?
- Librarian/Library Staff

- Library Student Employees
- Depends on what I need

12) Please respond to the following prompts about your overall experience interacting with staff at the Fitchburg State University Library. (Strongly disagree, disagree, neither agree or disagree, agree, strongly agree)

- Librarians and library staff treat me with respect
- Library student employees treat me with respect
- Librarians and library staff provide me with the information I need.
- Library student employees provide me with the information I need.
- I feel comfortable asking for assistance when I am unsure how to proceed on an assignment.
- I am reluctant to ask for help at the library
- Interacting with librarians and library staff increases my sense of belonging at Fitchburg State University
- Interacting with library student employees increases my sense of belonging at Fitchburg State University

13) Please respond to the following prompts about the library climate and library resources at the Fitchburg State University Library. (Strongly disagree, disagree, neither agree or disagree, agree, strongly agree)

- The Library space has a positive atmosphere.
- The Library is a safe space.
- I feel like I have the skills to conduct research for my assignments.
- I wish there were more opportunities for me to develop my research skills.
- I fully take advantage of the services, collections and resources offered by the library.
- Having access to the library and library resources has increased my comfort level at Fitchburg State University
- The Library has services that I haven't taken advantage of
- The Library's resources (books, articles, etc.), services, and spaces reflect me and my interests.
- The Library's policy and procedures are fair and equitable to all students

14) Please explain how you use the library including the physical space and accessing online resources and service remotely.

15) Are there other spaces on or off campus that you are more comfortable using or are more convenient for you to use. What about those spaces feels more comfortable or convenient to you?

- 16) Are there services, spaces, or resources that the library doesn't currently or adequately provide that would better meet your needs? If so, please describe what the library could do better to meet your needs.

Library Experiences

In this section, you will be asked questions about whether you have experienced microaggressions or racism while in the Fitchburg State University Library. Microaggressions are indirect, subtle, or unintentional discrimination against members of a marginalized group.

- 17) What was the race or ethnicity of librarians or library staff that you have primarily interacted with at Fitchburg State University

- Alaskan Native or American Indian
- Asian or Asian American
- Black or African American
- Hawaiian Native or Pacific Islander
- Latino or Hispanic
- White
- I'm not sure the race of the person with whom I interacted.

- 18) Have you ever experienced microaggressions or explicit racism or discrimination while in the Fitchburg State University Library?

- Yes
- No
- Not sure

- 19) If you have experienced microaggressions or racism while in the Fitchburg State University Library and are comfortable sharing your experience, please do so below.

- 20) If the interaction was with a white librarian, staff, or student employee, do you think your interactions would have been different with a librarian of color?

- Yes
- No
- Not Sure

- 21) Why or Why not?

- 22) Is there anything about your experiences with the Fitchburg State University Library, your high school library or public library that you would like to share that hasn't already been asked? Please specify which library whether the university, high school or public library in your description.

Clubs, Organizations, & Sports Participation

- 23) Do you participate in any organizations, clubs, or sports at Fitchburg State University? Yes/No
- 24) If so, which organizations, clubs or sports do you participate in at Fitchburg State University?
- 25) Approximately how many hours a week, do you participate in organizations, clubs, or sports? (0-5 hours, 6-10 hours, 11-15 hours, 16-20 hours, More than 20 hours)
- 26) How often does participation in organizations, clubs, or sports interfere with your ability to complete your school work? (Never — Always)

Working while attending school

- 27) Do you work while attending school? Yes/No
- 28) Where do you work? (On-campus, Off-campus, Both on-campus and off-campus)
- 29) Approximately how many hours a week, do you participate in organizations, clubs, or sports? (0-5 hours, 6-10 hours, 11-15 hours, 16-20 hours, More than 20 hours)
- 30) How often does participation in organizations, clubs, or sports interfere with your ability to complete your school work? (Never — Always)

Demographic Information

- 31) Which of these best describes your current gender identity? (Check all that apply)
- Woman
 - Man
 - Transgender
 - Non-binary/genderqueer/gender non-conforming
 - Prefer not to answer
 - Other:
- 32) Race [check all that apply]
- Alaskan Native or American Indian
 - Asian American
 - Black or African American
 - Hawaiian native or Pacific Islander
 - White
 - Prefer not to answer
 - Other:

33) Are you of Hispanic, Latino, or Spanish origin?

- No
- Yes
- Prefer not to answer

34) What is your major?

- What year are you in?
- First Year
- Second Year
- Third year
- Fourth Year
- Graduate
- Other:

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