Title: College Students' Perceptions on Sense of Belonging and Inclusion at the Academic Library during COVID-19

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Abstract

This paper demonstrates how university students experienced and perceived inclusion in a public research university library context during COVID-19. Both quantitative (*n*=3,379) and qualitative data (*n*=575) from the 2021 student survey were examined to explore students' library experiences and their perceptions of inclusion. The quantitative data revealed that students using both the physical and online library had the greatest sense of belonging, whereas students who never used any library resources had the least sense of belonging. The qualitative data further revealed that when students used the in-person library space they felt a sense of belonging, as well as feeling accepted and valued; on the other hand, it was hard for them to judge inclusion when they had not been in the library due to COVID-19. This finding suggests how academic libraries need to prepare for the hybrid environment (in-person and online) so that students using online resources and services feel connected to the library.

Keywords: sense of belonging, inclusion, COVID-19, accommodation, strategic plan, student survey, academic library

Introduction

As a federally designated Minority-Serving Institution, the University of Illinois Chicago (UIC) welcomes students, staff and faculty from a variety of racial, ethnic, and class backgrounds, gender identities, sexual orientations and abilities to cultivate a diverse learning community. In an effort to promote and strengthen the University Library's role as "the hub of intellectual activity" on campus, the University Library developed a new strategic plan for FY 19-21 including three major goals, as follows (UIC University Library, n.d.):

1. Build seamless, comprehensive and consistent access to global collections, instruction and services, whether digital or physical.
2. Create and sustain an inclusive culture and a welcoming environment for all.
3. Expand integration of the Library into UIC faculty's and students' research life cycles.

To accomplish all three major goals, the University Library outlined the detailed activities with measurable outcomes. To meet the second goal, "create and sustain an inclusive culture and a welcoming environment for all," which is the focus of this paper, various activities at the organizational, departmental and individual level were specified. To create a welcoming environment for patrons who use the physical library spaces and interact with them in person or online, the University Library committed to train library employees, including student employees, to increase their cultural competency for all patrons' backgrounds by offering online curricula and in-person hands-on activities. To increase the accessibility to library resources and services online for all patrons, the University Library's Accessibility Committee collaborated with various stakeholders focusing on issues of physical access to library spaces and online resources and regularly evaluated library employees' competency regarding providing services to patrons with accessibility needs as addressed by the American with Disabilities Act. The University Library's Undergraduate Engagement Program focuses on enhancing undergraduate students' engagement in the library and has provided in-person programming such as relaxation stations (e.g., offering a massage chair), free coffee and snacks and a wall of encouragement (allowing students to express their emotions) during exam periods to help undergraduates reduce their anxiety and focus on studying within the library.

Unexpectedly, due to the COVID-19 pandemic last year, the University Library buildings had to close and later reopen to the UIC community. With the pandemic and social unrest across the country, the University Library's priorities shifted, focusing on the institutional community's safety by implementing new health safety guidelines and monitoring compliance. In spite of the requirement to take immediate action within a limited time, the University Library demonstrated that it valued students' voices by collecting their feedback through focus groups on how they wanted the University Library to implement the rules and policies within the library (Scoulas, Carrillo, & Naru, 2021a). Due to COVID-19, one drastic change was students' use of library space: the number of in-person visitors in Fall 2020 dropped to only one percent of the Fall 2019 visitors (pre-pandemic) (Scoulas, Carrillo, & Naru, 2021b). COVID-19 also affected the major library services such as circulation of library books and in-person library workshops. Most library services had to convert to online with limited in-person interaction with patrons. The assessment plan was also affected by COVID-19. Originally, the University Library planned to conduct biennial surveys in 2020 for students to better understand their needs and use the

findings to improve and measure the impact of the library's value on their academic success. Due to limited services and physical use, the plan was postponed to Spring 2021 and the survey questions were revised. The University Library determined to distribute the student biennial survey in Spring 2021 asking about experiences during the Fall 2020 semester.

This paper reports whether the University Library met the strategic plan to "Create and sustain an inclusive culture and a welcoming environment for all." It also aims to uncover how university students during the pandemic perceived their sense of belonging and inclusion in relation to the University Library as an institutional community and with respect to the library collections. In this paper, the sense of belonging within the library context can be conceptualized as students' perceptions of feeling valued and respected by library staff, and feeling accepted and a valued part of the university library through their access to and use of library spaces and collections, while their interactions can be affected by external environments (e.g., COVID-19), guided by Mahar, Cobigo and Stuart's five themes (2013). The findings will guide academic libraries to better understand why some students have a sense of belonging as part of the institutional community. Additionally, the findings can be used to further develop the University's strategic plan, determine future actions and measure their impact on students.

Literature Review

In the research literature, sense of belonging is defined and conceptualized in various ways. For example, Tovar and Simon (2010) define this as "an individual's sense of identification or positioning in relation to a group or to the college community, which may yield an effective response" (p. 200). In a classroom context, Goodenow (1993) defined sense of belonging as "students' sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class. More than simple perceived liking or warmth, it also involves support and respect for personal autonomy and for the student as an individual." (p.25).

However, the definitions of sense of belonging described above conceptualize one's feeling with another group or community and have some limitations of understanding how external factors or environment shape the individual's sense of belonging. Additionally, they emphasize individual's subjective feelings towards a group or community, but they overlook how the interactions between individuals and institutions are shaped or can be changed through institutional or community efforts to make them feel included or belonging.

It has been pointed out that the definition of sense of belonging was used inconsistently across disciplines in the higher education. Mahar et al. (2013) conducted a systematic review of 40 articles that covered the concept of sense of belonging across multiple disciplines and identified five overarching themes to conceptualize sense of belonging. The five themes include: 1) subjectivity, referring to the individual being valued, respected and fitting in; 2) groundedness, indicating situating the individual to a referenced group, such as classrooms or the campus community; 3) reciprocity, meaning individuals sharing similar feelings, experiences or interests beyond the physical or behavioral characteristics; 4) dynamism, referring to external factors such

as social and physical environments that affect their interactions; and 5) self-determination, indicating the individual's right to make decisions about belonging.

Why should universities care about students' sense of belonging? There are numerous examples of research which show that students' sense of belonging has an impact not only on their academic outcomes but also on their psychological well-being: students who have a sense of belonging are likely to remain in university, because they feel accepted and valued by their peers and universities, whereas students who lack a sense of belonging are likely to experience loneliness and depression. Empirical research confirmed the relationship between students' sense of belonging and academic outcomes, such as retention or persistence with study (e.g., Stout & Wright, 2016), academic motivation (e.g., Sánchez, Colón, & Esparza, 2005), academic engagement and achievement (e.g., Zumbrunn, McKim, Buhs, & Hawley, 2014) and academic self-efficacy (e.g., Holloway-Friesen, 2021); and psychological well-being, such as loneliness and depression (e.g., Fisher, Overholser, Ridley, Braden, & Rosoff, 2015; Walton & Cohen, 2011).

How do university students perceive their sense of belonging and inclusion in a university library context? Bodaghi and Zainab (2013) conducted interviews and focus groups to explore how visually impaired persons perceived and experienced sense of belonging through study carrels provided by a research university library to support their academic and social needs. The findings revealed that students perceived carrels as second homes where they could sit, feel safe and accepted, and considered carrels as a mechanism to feel a sense of belonging. In addition to feeling safe and accepted when using carrels, the university students also considered the carrels as social places where they could interact with others, including their peers. The authors concluded that "the carrels met their physical, academic, and social needs. In their second homes, these students felt safe and they believed their belongings were secure. They had privacy and experienced comfort" (Bodaghi & Zainab, 2013, p.50). Another study conducted by Griffen (2020) in a public library examined how young adults perceived a library space and its impact on their sense of belonging. The findings uncovered that young adults using the same library spaces felt belonging, independence and privacy, and library collections were important to young adults whose identity was connected to the library collections. Additionally, library staff and librarians were considered as having an important impact on patrons' sense of belonging. Bodaghi, Cheong, Zainab, and Riahikia (2017) interviewed visually impaired university students in Malaysia to understand how they perceived and experienced the support and behaviors of librarians. Bodaghi et al. found that participants considered librarians friendly and helpful because librarians helped them (e.g., finding books and answering questions) and the librarians' support contributed to "a feeling of being cared for, being included, and belonging to the library" (p.233). Conversely, the lack of librarians' support has a negative impact on students' attitudes towards the library and sense of belonging, such as students' being hesitant to seek help from the librarians. Librarians were also recognized as a "consult" because librarians spoke with students when they were dissatisfied with a situation or to discuss their needs and services. Students considered their consulting with librarians as being accepted and respected. At the same time, students suggested that librarians should have increased knowledge of disability awareness through various professional training for working with individuals with special needs because librarians' awareness of students' needs made them feel proud and welcomed in the library.

Based on the five themes from Mahar et al. (2013) regarding the concept of sense of belonging in the context of the academic libraries, a sense of belonging can be conceptualized as students' perceptions of feeling valued and respected by library staff and feeling accepted and a valued part of the university library. At the same time, the unexpected factor, the pandemic, made the university students more isolated and resulted in less in-person interactions with their peers, professors and academic advisors. The five themes identified by Mahar et al. (2013) may guide the current uncertain and fluid context in conceptualizing the sense of belonging of university students at a urban context research university. As such, the author proposed the following research questions and covered the findings in this article.

Research questions:

- How do students perceive sense of belonging, identity and representation in the collections in the UIC Library?
- Is students' library use associated with their perceptions of sense of belonging, identity and collections in the UIC Library?
- How do students perceive inclusion at their libraries?
- What are the current levels of accommodation, challenges or issues?

This paper is valuable to academic libraries because it reveals how university students perceive inclusion as part of the university community, in this case, the University Library, in their own words during the pandemic. Understanding how university students feel included as part of the university library and valued by library staff during the pandemic is critical to preparing for the hybrid environment and determining how the University Library reduces the gaps for students who feel a lack of being accepted or valued during this time.

Methods

Institutional Setting

UIC is a public research university consisting of 16 colleges, including health sciences colleges and Chicago's only public law school, and serves more than 31,000 students as of Spring 2021. The institution is well known as one of the most ethnically and culturally diverse universities in the United States. UIC is committed to "eliminating disparities in health, education, and economic opportunity," and "increasing access to education, employment, programs and services for all and maintaining a barrier-free environment for individuals with disabilities" (UIC, n.d.) The University Library consists of the main library, three regional health sciences libraries (Chicago, Peoria and Rockford), and a law library.

Survey instrument and data collection

This paper used data from the biennial student library experience survey that was conducted in Spring 2021 at UIC to examine the needs of university students, identify areas for improvement and decision making, and measure the impact of students' library use on their academic success. Five out of 13 questions were selected from the 2021 biennial students' library experience survey in this paper: a set of multiple choice questions related to students' perceptions on belonging, identity and representation in the collections at the library; frequency of library use (in-person

and online); comments about inclusion using one open-ended question; and two questions concerning accommodation due to disability. The survey was distributed to the entire UIC student body of 31,332 students between February and March 2021, and a total of 3,379 respondents completed the survey (response rate of 10.8%). For more information about the data collection process, please refer to Scoulas and De Groote's study (2021).

Sense of Belonging. The measure of sense of belonging used in the current paper includes students' level of agreement using a five-point Likert scale from strongly agree to strongly disagree with the following items:

- I feel like I belong at the UIC Library.
- I feel that all aspects of my identity are respected at the UIC Library.
- I feel that materials at the UIC Library reflect diverse cultural identities.

Frequency of Library Use. This question asks how often students visit the library in person and/or online from never (0) to daily (4). To examine how students' sense of belonging is associated with the types of library users, this set of questions was segmented into four groups: Group 1 (students who never visited the library in person nor used the online library); Group 2 (students who visited the library in person); Group 3 (students who used the online library); and Group 4 (students who visited the library in person and used the online library).

Inclusion. To measure how students perceive inclusion in the library, one open-ended question was used with the following item:
- What comments do you have about inclusion in the library?

Accommodation. To examine whether the accommodations for students with disabilities (if needed) were met, one multiple choice question and follow up open-ended question were used.
- If you required any accommodations due to a disability, were your needs met? 1) My needs were met; 2) My needs were not met; 3) I did not need any accommodations.
- Please tell us more about any issues you encountered with respect to accommodations.

The set of questions described above were new for the biennial student survey except for the frequency of library use and they were tested with several students to ensure the validity of the survey instrument. For more information about the procedures of survey development and full survey questions, please refer to Scoulas and De Groote's article (2021).

Data Analysis

Descriptive statistics for demographics, level of agreement on the sense of belonging and crosstabs between students' library use group and their perceptions of sense of belonging were conducted in SPSS 27. Among a total of 3,379 survey responses, there were 762 responses in the open-ended responses related to comments about inclusion. Any responses such as "no," "none," "nothing," "no comments," "N/A," "not that I can think of" and "not applicable" were excluded. As a result, a total of 575 responses remained for the final analysis. Open-ended responses (students' perceptions of inclusion and accommodations) were analyzed using NVivo 12. The author reviewed open-ended responses as a whole a couple of times and then began coding using thematic analysis, examining repeated patterns and topics of meaning

that appeared in the open-ended responses. Codes and themes were adjusted and revised several times in the process of reviewing. Codes and themes were reviewed by the Assessment Coordinator Advisory Committee and revised to address any unclear meanings. Final codes and themes are displayed in Table 2. Any comments related to issues and suggestions were separated and coded separately in order to share those findings with relevant stakeholders for improvement and decision-making.

Results

Participants

Table 1 displays descriptive statistics based on the demographics of the entire university population (N=31,332), survey respondents for all questions (*n*=3,379), and respondents who completed only the open-ended question related to the comments of inclusion (*n*=575). This information indicates that the degree of survey samples (all survey respondents and qualitative respondents) represents the university population. Overall, the ratio of all survey participants and qualitative respondents were similar as the university population with the exceptions of class and gender. Both the survey participants (57%) and qualitative respondents (61%) are from three colleges: Liberal Arts and Sciences, Engineering and Business Administration. More than 30% of survey respondents and the qualitative respondents were White, followed by Hispanic (21% for survey respondents and 27% for qualitative respondents) and Asian (20% for survey respondents and 16% for qualitative respondents), and this ratio of race was similar to the university population. The majority of the survey respondents (92%) and qualitative respondents (92%) were commuters, which is the same percentage as the university population (92%). Regarding class, the percentage of qualitative respondents (61%) was similar to the university population (63%); however, slightly fewer undergraduate students (53%) participated in the survey. More female students completed both the survey (66%) and open-ended question related to inclusion (64%) compared to the university population (a difference of 10%). As such, survey respondents for all questions and the open-ended response, respectively, represent the university population.

Table 1. Students' demographics: all survey respondents, respondents who answered "inclusion" in the open-ended question, and the institution's population.

College	All survey responses n (%) (*n*=3,379)	Qualitative Responses n (%) (*n*=575)	Population N (%) (N=31,332)
Liberal Arts & Sciences	1,089 (32.2%)	218 (37.9%)	10,277 (32.8%)
Engineering	517 (15.3%)	76 (13.2%)	5,125 (16.4%)
Business Administration	317 (9.4%)	58 (10.1%)	4,005 (12.8%)
College of Medicine	235 (7.0%)	23 (4.0%)	1,475 (4.7%)
Applied Health Sciences	178 (5.3%)	33 (5.7%)	2,009 (6.4%)
Nursing	167 (4.9%)	35 (6.1%)	1,451 (4.6%)

Architecture, Design,& the Arts	137 (4.1%)	32 (5.6%)	1,244 (4.0%)
Pharmacy	135 (4.0%)	13 (2.3%)	858 (2.7%)
Education	131 (3.9%)	26 (4.5%)	1,216 (3.9%)
Law School	109 (3.1%)	13 (2.3%)	992 (3.2%)
Dentistry	88 (2.6%)	10 (1.7%)	521 (1.7%)
School of Public Health	82 (2.4%)	9 (1.6%)	813 (2.6%)
Social Work	80 (2.4%)	11 (1.9%)	495 (1.6%)
Urban Planning & Public Affairs	74 (2.2%)	12 (2.1%)	485 (1.5%)
Graduate College & Extended Campus	40 (1.2%)	6 (1%)	365 (1.1%)
Class			
Undergrad	1,719 (53.0%)	348 (60.5%)	19,740 (63.0%)
Grad	1,483 (43.9%)	212 (36.9%)	10,559 (33.7%)
Others	105 (3.1%)	15 (2.6%)	1,033 (3.3%)
Race			
White	1,019 (32.8%)	173 (30.1%)	9,793 (31.3%)
Hispanic	714 (21.1%)	153 (26.6%)	8,136 (26.0%)
Asian	671 (19.9%)	93 (16.2%)	5,673 (18.1%)
Black/African American	233 (6.9%)	48 (8.3%)	2,485 (7.9%)
International	468 (13.9%)	74 (12.9%)	3,525 (11.3%)
Others	184 (5.4%)	34 (5.9%)	1,720 (5.5%)
Gender			
Female	2,224 (65.8%)	369 (64.2%)	17,238 (55.0%)
Male	1,151 (34.1%)	206 (35.8%)	14,055 (44.9%)
Residency			
Commuter	3,107 (92.0%)	526 (91.5%)	28,992 (92.5%)
Resident	184 (5.4%)	37 (6.4%)	1,259 (4.0%)
Online	88 (2.6%)	12 (2.1%)	1,081 (3.5%)
Pell Status or Transfer Student			
Pell Yes	823 (24.4%)	178 (31.0%)	9,494 (30.3%)
Transfer Yes	60 (1.8%)	9 (1.6%)	652 (2.1%)
First Generation			
Yes	492 (14.6%)	106 (18.4%)	6,250 (19.9%)

Sense of Belonging, Identity and Collection

To measure the outcomes of the University Library Strategic plan of "demonstrating cultural competence in all aspects of Library services, policies, facilities and programs," students were asked to rate the following three statements: 1) I feel like I belong at the UIC Library. 2) I feel that all aspects of my identity are respected at the UIC Library. 3) I feel that materials at the UIC Library reflect diverse cultural identities.

While most of the respondents rated "agree" and "strongly agree" when asked about their feelings at the library, 22% or more of students rated "neutral" in all three areas. Among the three statements in Figure 1, most agreed that their identity was respected at the UIC Library. Only 2.7% of respondents rated "disagree" and "strongly disagree" in relation to being asked if materials at the UIC Library reflected diverse cultural identities.

Students' Feeling at the Libraries

Statement	Disagree and Strongly disagree	Neutral	Agree and Strongly agree
I feel like I belong at the UIC Library (n=2,715)	5.9%	27.8%	66.3%
I feel that all aspects of my identity are respected at the UIC Library (n= 2,638)	3.2%	22.1%	74.8%
I feel that materials at the UIC Library reflect diverse cultural identities (n=2,565)	2.7%	26.0%	71.3%

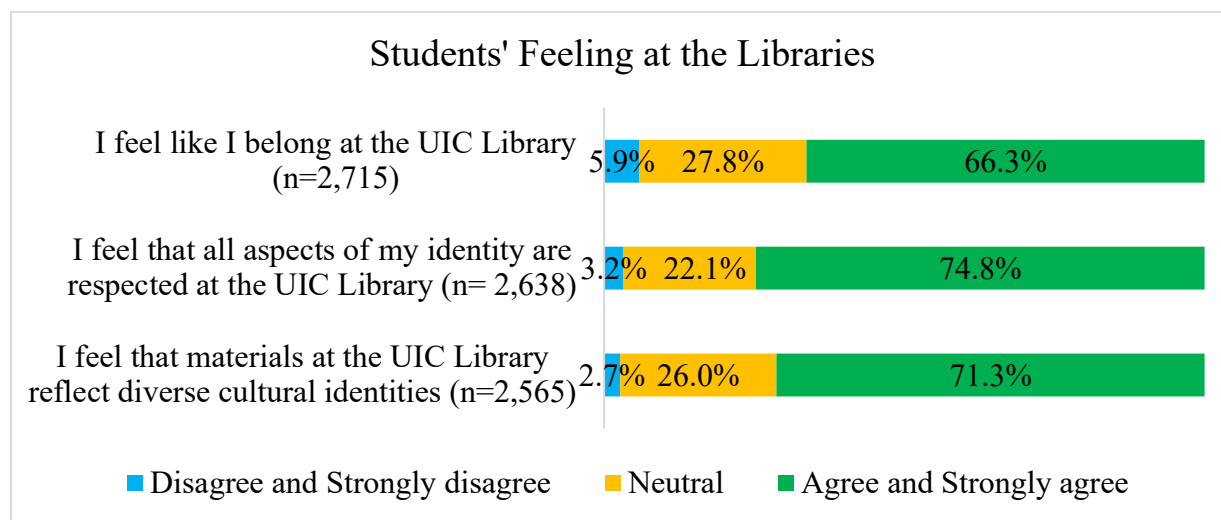■ Disagree and Strongly disagree   ■ Neutral   ■ Agree and Strongly agree

Figure 1. Students' feeling at the libraries: Belonging, identity and library collections

This response was further analyzed by race/ethnicity and library location. As shown in Figure 2, international and multi-race respondents were most likely to indicate that they feel that all aspects of their identity are respected at the UIC Library, whereas Black/African American respondents were the least likely to agree that library materials reflected diverse cultural identities. Among UIC libraries, students from the Library of the Health Sciences indicated the highest agreement in the area "I feel that all aspect of my identities are respected at the UIC Library," whereas students from the law school which recently merged with John Marshall Law School indicated the lowest agreement with the statement "I feel like I belong at the UIC Library."

Students Feeling at the Libraries by Race/Ethnicity

I feel like I belong at the UIC Library

Race/Ethnicity	Agree & Strongly agree	Neutral	Disagree & Strongly disagree
White	67%	27%	7%
Hispanic	63%	33%	5%
Asian	64%	29%	6%
Black/African American	69%	27%	4%
International	73%	23%	5%
Multi-Race	70%	24%	6%

I feel that all aspects of my identity are respected at the UIC Library

Race/Ethnicity	Agree & Strongly agree	Neutral	Disagree & Strongly disagree
White	75%	22%	3%
Hispanic	73%	24%	2%
Asian	74%	21%	5%
Black/African American	67%	29%	3%
International	80%	17%	2%
Multi-Race	81%	16%	3%

I feel that materials at the UIC Library reflect diverse cultural identities

Race/Ethnicity	Agree & Strongly agree	Neutral	Disagree & Strongly disagree
White	72%	26%	2%
Hispanic	74%	24%	3%
Asian	71%	25%	3%
Black/African American	60%	37%	3%
International	71%	26%	3%
Multi-Race	76%	21%	3%

■ Agree & Strongly agree ■ Neutral ■ Disagree & Strongly disagree
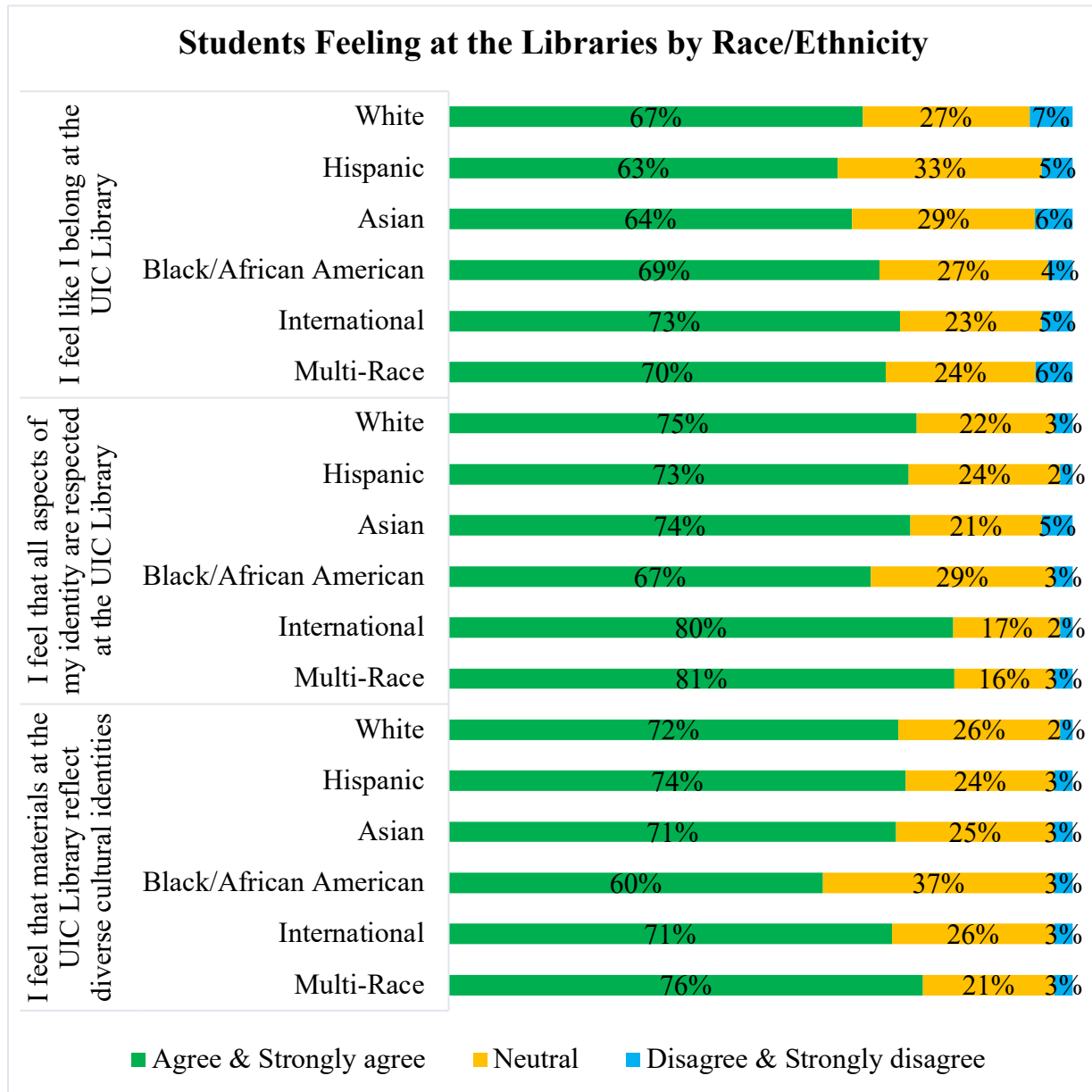
Figure 2. Students' feeling at the libraries: Belonging, identity and library collections by race/ethnicity

Students' Library Use and their Perceptions on Sense of Belonging, Identity and Collection

In response to the research question, "is students' library use associated with students' perceptions of sense of belonging, identities respected by their libraries and library materials reflected cultural identities?," students' library user groups were used: Group 1 (students who never visited the library in person nor used the online library); Group 2 (students who visited the library in person); Group 3 (students who used the online library); and Group 4 (students who

visited the library in person and used the online library). Figure 3 displays the percentage of agreement level on the three areas of students' perceptions by their library use. The findings showed that Group 4 (students who visited the library in person and used the online library) were the most likely to agree on a feeling of belonging, their identities were respected by their libraries, and that collections reflected their cultural identities, followed by Group 2 (students who visited the library in person). Group 1 (students who never visited the library in person or used the online library) were the least likely to agree on a feeling of belonging, their identities were respected by their libraries, and that collections reflected their cultural identities. This finding suggests that students who actively use both the physical library building and the online library are likely to feel a sense of belonging, their identities are respected by their libraries, and that collections reflected their cultural identities.
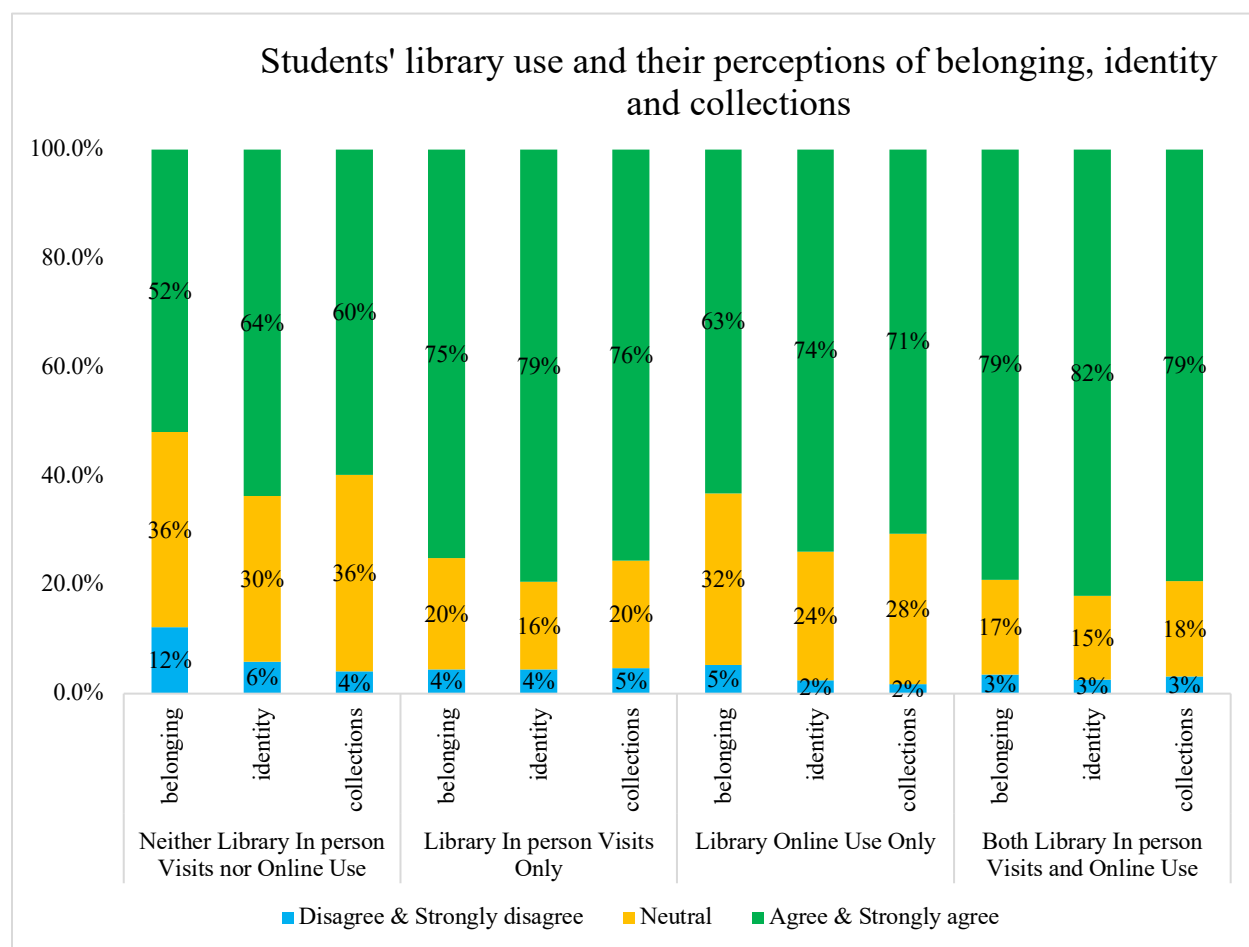

Figure 3. Students' library use and their perceptions of belonging, identity and library collections

Note: The level of agreement in the three areas (I feel like I belong at the UIC Library, I feel that all aspects of my identity are respected at the UIC Library, I feel that materials at the UIC Library reflect diverse cultural identities) were abbreviated as "belonging,", "identity," and "collection."

Students' Perceptions on Inclusion

Respondents were asked an open-ended question, "what comments do you have about inclusion in the library?" A total of 575 respondents provided further feedback on this question. Four overarching themes relating to students' perceptions of inclusion at the UIC libraries were identified from the thematic analysis. Students' direct quotations with their demographics, such as race/ethnicity, gender, and program or college, were included in order to provide better context for the perceptions of students from diverse backgrounds. However, in some cases, programs were replaced by the broader designation colleges to protect the participants' confidentiality.

Theme 1: Library is a welcoming and inclusive environment
First and foremost, a large number of the respondents commented that they felt welcomed, and the library provides an inclusive environment. For example, one White female junior who is an English major noted:

> *"I think the UIC Library is very welcoming and inclusive. They try to make sure all students feel at home there and I appreciate that greatly. Being a part of such a large campus can be daunting but knowing I have a place where I feel I belong is comforting."*

In addition to respondents feeling welcomed and included at their library, respondents also expressed other positive feelings towards the library such as "supportive," "comfortable," "friendly," "safe," "belonging," and "respected." For instance, one White male doctoral student who is from the College of Pharmacy noted: *"The UIC Library offers a safe and inclusive environment for all students."*

Due to COVID-19, some students thought they would not be allowed in the library buildings; however, they were able to enter library buildings, which enabled them to continue using the library space, and they felt welcomed. As an example, one Asian female who is a senior and major in Biological Sciences commented:

> *"The library is a very welcoming place. Especially last semester, I thought I wouldn't be able to access the library as often I could but I was able. I always need a quiet space to study."*

Among the 575 students who left their comments about inclusion, 71 respondents (12%) were freshman students. In spite of the fact that their first year experience was in the online environment and their in-person visits to the campus were limited, surprisingly, 55 respondents (77%) expressed that they felt included and comfortable. One Hispanic female freshman from the College of Liberal Arts and Sciences noted:

> *"I feel like there is plenty of inclusion at the UIC Library to where I feel comfortable to be there and feel like I belong there."*

Theme 2: COVID-19's impact on students' library experiences

Respondents consistently expressed their experiences in the library before COVID-19 because they did not visit the library in Fall 2020 due to COVID-19. When they visited the library prior to COVID-19, they felt respected and included in the library. Students' perceptions of inclusion were mainly focused on their library experiences using the library spaces. Below are the examples of students who shared their library experiences before COVID-19.

> *"I am currently a Senior year student at UIC, and past 3 year (before Pandemic) I use to spend most of the time studying at UIC library, it's a really quite place to study (fourth floor) and great place to collaborate too (first floor, commons ideas). I really miss being at library now since everything is online. But spending time at library will always be the most special time I spend on campus."(male, senior, International, Engineering)*

> *"Before Covid I would go to the library often and I never felt uncomfortable no matter what. There were many different people there and the librarians were always nice and helpful so I never felt out of place or lost."(female, sophomore, Hispanic, Engineering)*

> *"I found a prayer mat (I'm muslim) in one corner of the library, which really surprised me, and I liked. It was also relatively easy to find specific books at the library once I asked the front desk for help. The first and fourth floors are very welcoming in being comfortable places to work and meet friends. The online database has also made it easy to find relevant articles for class. But I don't use the library's services very often, online or in-person because of the nature of my major (female, senior, Asian, Architecture, Design and Sciences)."*

While some respondents shared their library experiences before the COVID-19 pandemic, others also expressed that it is hard for them to comment on or judge inclusion because they did not visit the library during the Fall 2020 semester. For example, a female freshman who is from the College of Liberal Arts and Science said: *"I feel as if I can't really say much due to the fact that I haven't visited the UIC Library in person."* However, due to the restrictions of the pandemic, some students felt "distant" from the library. For instance, a female Hispanic doctoral student who is from the College of Education explained how COVID-19 shaped her connection with the library:

> *"I very much felt a part of the library prior to Covid. After covid, the online shift has made my connection to UIC Library completely different and distant"*

Also, some students expressed their hesitancy to visit the library due to their concerns of COVID-19. Others stated they want to visit or use the libraries in Fall 2021.

Theme 3: Factors influencing inclusion and belonging I: Diverse collections and services
When expressing perspectives on inclusion, many respondents appreciated that the library provides diverse collections and services, such as online access materials and online help through Chat with a Librarian. Below are examples of quotes that describe how the library collections influence their perceptions of inclusion.

> *"I think the library holdings reflect the variety of concerns, identities, and research topics that the UIC community members have." (female, senior, Asian, anthropology)*

> *"I am honestly very surprised as to how inclusive the library is. I remember seeing book featured that represent marginalized groups, like LGBTQ+ and racial minorities. I felt seen and my identities were normalized. Very appreciative of all that." (male, senior, Asian, psychology)*

> *"I really love the UIC library, it has tremendous amounts of electronic materials and easy to use after asking for librarians help."(male, freshman, International, engineering)*

Some respondents found the online library services useful and made them feel included. For example:

> *I really appreciate the IM/Online chat research help service. They always get me what I need. (female, doctoral degree, International, engineering)*

> *Never been there in person but the online seemed very friendly and inclusive. (female, freshman, White, Liberal Art and Sciences)*

Theme 4: Factors influencing inclusion and belonging II: Library staff and librarians

Another important factor influencing students' sense of inclusion and belonging was library staff and librarians. In general, when they had questions, many students considered the library staff and librarians to be helpful in relation to their research or homework when they were in the library or via online chat. One Hispanic female junior student who is a finance major commented:

> *"As a student, I feel like the library is one of the few places where librarians try their best efforts to help students succeed by going out of their way to help and make sure we are okay."*

A White female doctoral student in history also expressed her genuine appreciation of the librarians as follows:

> *"As a group, the librarians are the most consistently kind, patient and helpful people on campus."*

Some respondents also acknowledged that their attitude towards the University Library had changed as a result of the librarians' instructions and workshops. One Asian female freshman student studying Psychology explained how her attitude towards the library had shifted:

> *"At first I assumed the rules and the environment to be strict and cold since I am a freshman and college is a new experience. But after having a librarian come in and explain the UIC library to my class and I felt more welcomed and inclined to use it. To me, the library is now an inviting place that can help me with my school-related needs."*

Library staff who ensured the library's safety during COVID-19 were also recognized as an important factor that influenced students' feeling welcomed and included. A Hispanic male sophomore student studying Architecture expressed his appreciation of the library staff:

> *"Very helpful people, I want there once to ask questions about my computer program key and they helped me understand and have access to the software. they are very neat and give people lots of space and room which was good because I was afraid of covid but the people at the UIC library made it a super safe environment"*

As shown above, while most of the respondents expressed that they felt included as a part of the library, some students commented that they do not have any issues with inclusion because they have not been in the library. Some students also responded that, while the library cares about inclusion, they do not feel included because they have not been in the library or they do not have any interaction with others, while some students who did not answer that question directly did say that they appreciated being asked this question. However, a small number of respondents did not see why the library should care about inclusion. For example, one Black/African American female doctoral student who is from the College of Education commented that: *"I do not view libraries as spaces needing to be inclusive as long as there is diverse media and literature."* Table 2, shown below, indicates the themes described above with examples of the codes used in the survey.

Table 2. Themes of inclusion derived from the open-ended responses

Themes	Examples of Code	*n*
Library is welcoming and inclusive environment	welcoming, supportive, inclusive, diverse, neutral, comfortable, friendly, safe, not feeling like an outsider, belonging, respect	153
	good, great, okay, positive, useful, helpful, adequate, appropriate	54
COVID-19's impact on students' library experiences	library experience before COVID-19	56
	hard to comment or judge because I haven't visited library	36
	COVID-19 impact on using library (challenges etc.)	28
	hope to visit the library soon	22
Factors influencing inclusion and belonging I: Diverse collections and services	collection and materials (good, various, diverse)	51
	online (website and chat)	24
Factors influencing inclusion and belonging II: Library staff and librarians	library, library staff and librarians, instructions, and workshops	55
Others	no issue or neutral	21
	not feeling included or no inclusion	8
	why does it matter if the library is inclusive	7
	haven't thought about it or interesting to be asked	5

Issues and Suggestions (n=118)

When commenting on inclusion, more than 100 students (21%) addressed various issues they experienced prior to and during the pandemic and also provided some suggestions. The issues

and suggestions are separated from the themes above because this allows the University Library to identify areas for improvement and decision making. Examples of codes were organized by categories and listed by frequencies: facilities, online access and website, collections, hours, staff, policies related to reservation systems and eating event services, communication and promotion, fees and tuition. Regarding facilities, respondents commented that a private room for those with children is needed, and about the slow elevator and outdated facilities. Some asked for more seating, suggesting that they may still think that the library is crowded during the COVID-19 pandemic. The second issue and suggestions were regarding online access and the library website, as students indicated that it was not easy to access and that it was hard to navigate the website even with a virtual tutorial. The third highest number of comments was about wanting more diverse books and collections related to minorities, health, history, and disability culture. Additionally, wanting longer library hours was also an issue. Only eight students commented that the Library/IT assessment (a per-semester fee all students pay) for library use is useless or wasted, that the library should reduce fees if students don't use the libraries and objected to paying the full tuition for printing privileges.

Accommodations for Disabilities

In alignment with the UIC Library's vision of "a world of equal access to information and resources where everyone is inspired to achieve their goals," the UIC libraries are committed to maximizing accessibility to all patrons. This new set of questions was added to identify whether the accommodations of students with disabilities (if needed) were met. As shown below in Figure 4, the majority of respondents (87%) across the libraries answered that they did not need any accommodations, followed by their needs were met (12%).
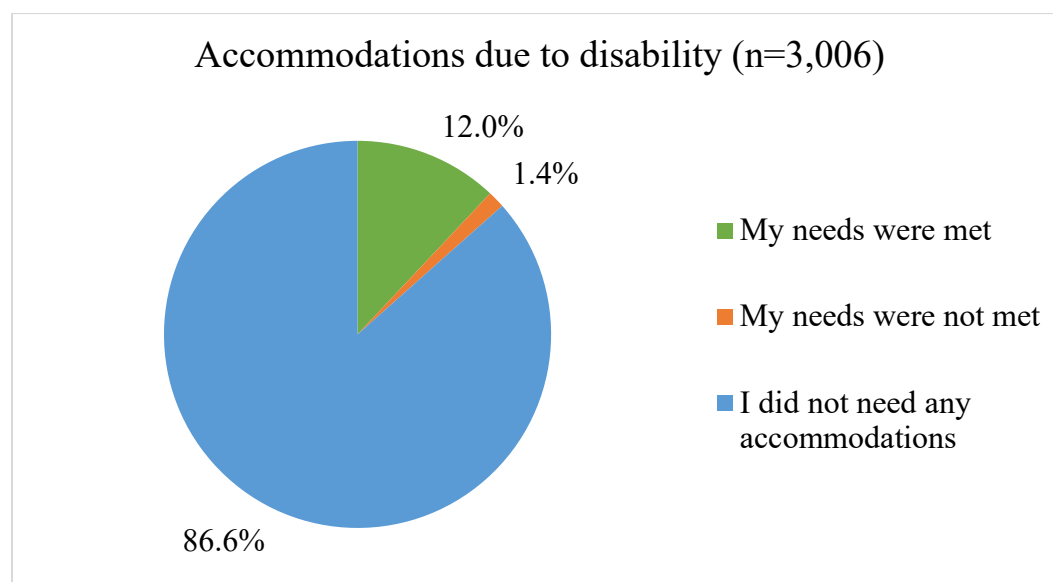

Figure 4. Accommodations due to disability

The 43 respondents whose needs were not met were asked to provide additional feedback, and 16 students responded. To better understand their needs, their responses were categorized by areas of need: 6 responses were related to facilities (e.g., a distraction-free room was needed, they

were unable to use the height-adjustable table, it was difficult to read signs in the elevator); 5 for services (e.g., hard to get answers through the online chat, receiving different answers from librarians, lack of discussion options for disabled students); and 3 for materials (e.g., physically accessing materials due to mobility issues, unable to convert print books to digital format due to COVID). Three of these issues occurred before the COVID pandemic, including difficulty finding seats or height-adjustable tables.

Discussion

In this paper, sense of belonging is defined as students' perceptions of feeling valued and respected by librarians, as well as feeling accepted and a valued part of the university library through their access to and use of library spaces and collections, while their interactions are influenced by external environments (e.g., COVID-19) in the library context, as guided by Mahar et al.'s five themes (2013). This paper explored and measured students' perceptions on their sense of belonging and inclusion at their libraries during the COVID-19 pandemic through the online survey consisting of both multiple choice and open-ended questions. This assessment was a critical step for the University Library because this information indicates not only whether or not the University Library met the needs of students during this critical time, but also identified any gaps that hinder students' use of the library via physical library access, online library use, or interacting with library staff and librarians. When students were asked to rate their level of agreement regarding their feeling of belonging, their identities respected, and the collections are representative of diverse cultural identities, most of the students answered "agree" or "strongly agree" in all three areas. Overall, students' identity being respected by the library was the highest and students' feeling of belonging was the least likely to agree in comparison with other aspects of belonging. Among library locations, students using the law library were the least likely to agree with the sense of belonging. Given that the law library is part of a law school that recently merged with the current institution, it is possible that the library experiences of the law school students mainly remain the same; however, they may experience a lack of library "community" as part of the larger, merged institution's community.

Students' sense of belonging was further analyzed by their library user groups. Interestingly, students who used both the physical and online library were the group who recorded the highest for the feeling of belonging, their identity respected, and the collections are representative of diverse cultural identities. This finding confirms that students felt belonging the most when they actively used both libraries (in-person and online). Moreover, students who only used the physical library are more likely to feel belonging than students who used only the online library. This finding implies that personal interaction with the physical library and staff has a greater impact than accessing library resources remotely via the library website. Not surprisingly, those who never visited the library or used the online library were the group that recorded the lowest sense of belonging compared to all of the other groups.

While the findings above confirm that students' having a sense of belonging is related to their type(s) of library use, it is not clear whether their library use led to a sense of belonging or whether students who already felt they belonged were more likely to use its resources. Students' open-ended responses provided further insight. It is apparent that COVID-19 significantly impacted students' sense of inclusion. While many students felt welcomed and included in the

library, their positive feelings occurred when they visited the library building or used the library spaces. This finding is supported by the previous study indicating that the library as a place contributed to students' feeling that it was a second home (e.g., Bodaghi & Zainab, 2013). However, the current findings revealed how external factors such as COVID-19 impacted their feeling of inclusion at their libraries. That is, some students expressed that it is hard to tell about their feeling of inclusion because they have not been in the library due to COVID-19. This finding implies that students' physical space use was an important factor that influenced students' feeling of inclusion and an external factor, in this case, COVID-19 was considered a significant hindrance to their feeling of inclusion. This finding can be explained by dynamism (e.g., social and physical environments affecting interactions), one of the themes identified by Mahar et al. (2013). COVID-19 hindered students visiting the library or using the library spaces due to safety concerns, which made students feel less connected or distant from the library. Also, students had little in-person interactions with library staff and librarians who usually were on the front line welcoming them and answering questions in the library, which resulted in their no longer feeling welcomed and included in the library when they were not using the library in-person. Due to COVID-19, most classes were transferred to the online learning environment which means students were not on campus and could no longer socialize and collaborate with their peers in library spaces; physical distancing requirements in the library also contributed to less student interaction.

While students commented that they have not visited the library so they could not comment about inclusion, they also stated that they used library resources a lot and appreciated the librarians who answered their questions through the online chat. This finding indicates that, in spite of limited in-person access to the library building, they were still connected to library resources via the library website and services such as the online chat and virtual library instructions, which contributed to students' feeling supported, valued, and respected. This is valuable information because in spite of an external factor such as COVID-19 hampering students' use of library space during the pandemic, students still feel respected and valued through librarians' online support behind the scenes. This finding was supported by previous studies indicating that librarians played a significant role in creating students' sense of belonging (Bodaghi et al., 2017; Griffen, 2020).

Another key finding through open-ended responses was that the university library provides diverse collections related to topics such as LGBTQ and race/ethnicity, which made them feel seen and appreciated. This finding was aligned with the findings of the study (Griffen, 2020) showing that library collections were important to young adults because they viewed their identity through the library collections including their race, culture and interests. In this study, respondents further suggested that they wanted more diverse books and collections related to minorities, health, history, and disability culture. Given that students' identity being reflected by library collections contributed to their sense of belonging (Griffen, 2020), this finding is critical to collection development for the University Library because the author's institution serves one of the most diverse student populations in the United States. Also, respondents' access to various library resources via the library website was a key factor that contributed to their feeling supported in the library. While many students commented positively about their experience using the library website to find online resources and services, such as the online chat, and felt included and supported, some students expressed that they had difficulty in accessing and

navigating the website to find resources. This information is valuable for the University Library to address the website usability issue and has been shared with the Library Accessibility Working Group and Web Development Coordinator for further investigation.

The results of whether the accommodations of students with disabilities (if needed) were met showed that the majority of respondents (86.6%) answered that they did not need any accommodations, and their needs were met (12%) when the respondents required accommodations. Only 1.4% (n=43) of respondents responded that their needs were not met when they required accommodations. Based on the sixteen respondents who provided further feedback, most of them were related to using facilities (accessing tables or spaces for special needs) and services (different responses from library staff when asking questions), and three students identified issues that they encountered pre-COVID. This finding is very useful for the University Library for many reasons. Identifying issues related to accommodations is extremely valuable for the University Library to prepare for the upcoming academic year in order to meet the University Library's goal of "maximizing accessibility to all patrons." Also, given that it is a challenge to target students with special needs and obtain their feedback, it is hard to measure and identify what concerns and issues students with disabilities have when using libraries. This information can be used as benchmarking data and set measurable outcomes for future strategic planning because it is difficult to know how we are doing and how much we should improve. In fact, this question was asked to students at the author's institution who only visited the library in-person during Fall 2020, indicating that 1% of respondents' needs were not met when they required accommodations; however, given that the previous data showed only students who visited the library, it is difficult to know whether the data represents the entire University population. For these reasons, the findings consisting of samples from all University populations (access to both the physical library and online library) are valuable and meaningful for decision-making and improvement.

Last, but not least, while only a few students questioned why the library cares about inclusion, one should take into account how the efforts libraries invest to promote the library's role and its use are integral to their sense of belonging and inclusion. Previous research has shown that when students feel included, accepted, valued and respected, they are likely to persist with their studies (e.g., Stout & Wright, 2016), increase academic engagement and academic achievement (e.g., Zumbrunn et al., 2014), and feel less loneliness (e.g., Fisher et al., 2015).

Implications and Conclusion

Exploring and measuring students' perceptions of their sense of belonging and inclusion at their libraries during the COVID-19 pandemic are more critical than ever for the University Library as it prepares to meet the needs of students and identified areas for future improvement. While there was limited access to print books and the hours of operation were shorter during the pandemic, the academic libraries served students' various needs from the physical library (e.g., using library spaces for coursework or homework, asking questions about where to find books or where to pick up books) to online resources (searching for journals and databases, requesting journals or books that are not available from the institution's library, asking questions via online chat services, and attending virtual instruction and workshops). As shown in the findings of the current study, in spite of a reduction in the use of library space due to the COVID-19 pandemic,

students still perceived the library as a space where students feel welcomed, included and accepted. At the same time, due to COVID-19, students' learning environment was dramatically transformed to online and they had to adapt to attending online classes, participating in discussions without in-person interactions, and finding ways to complete homework, coursework and research by relying primarily on online resources such as the library website.

The author shared students' feedback focusing on issues and suggestions with various stakeholders: The University Library's Leadership Team, the Undergraduate Engagement Program, the University Library's Accessibility Working Group, the Re-Engage working groups planning for Fall 2021, and the Collections Working Group. Given that the Library Accessibility Working Group includes representatives from the campus Disability Resource Center and the Disability Cultural Center, they would be our source to communicate directly with students with disabilities. Additionally, to better understand the specific needs of students according to library locations, the author conducted further data analysis and presented the findings to the regional locations (the health sciences libraries and law library) and discussed with them what they can prepare for each library location. This paper demonstrated how university students perceived their sense of belonging and inclusion during the pandemic and the findings revealed the areas for improving library resources and services.

Given that academic libraries are preparing for the post-pandemic period, the current findings can guide them on identifying future priorities (e.g., developing and promoting programming for both physical and online library users); also, academic libraries must consider how to make students feel included when they are using online resources. Some online library users may not be familiar with the physical library building(s). For that reason, it would be helpful to provide users with more visualizations of physical spaces and the buildings when accessing library resources via the library website; this way, they will feel connected to the library. Students from the law school are familiar with their law school library's physical building and website. Since the law library does not report to the University Librarian and Dean of Libraries, however, they may not be familiar with the University Library's homepage and the physical library. To make the law students feel included, it is important to provide them with University Library tours of both the physical library and the website.

Another suggestion for assisting online library users is to provide consistent, immediate and friendly responses to their questions submitted via email and online chat. The University Library provides online chat services, thereby offering longer hours to serve patrons anywhere in the world; this service was recognized as an essential library service for patrons during the pandemic, as supported by the current qualitative findings. If academic libraries already provide this service, their ongoing efforts should continue, including reviewing the chat transcripts, identifying areas where patrons encountered challenges, and offering regular training for reference librarians in order to assure quality service.

With respect to Black/African American students' library experiences, the evidence from the current paper demonstrated that they were the least likely to agree that the library materials reflected diverse cultural identities. This evidence proved the importance of collections that represent Black/African American history and culture. As academic libraries increasingly experience budget limitations, however, expanding their collections could be challenging. In spite of this challenge, academic libraries should share these findings with student leadership committees and recommend expanding collections representing the Black community. If academic libraries already have diverse collections, it is important to display them more prominently and facilitate access to them. Another suggestion that makes Black/African

Americans feel more included is to directly engage with the Black community through university student organizations and consider their feedback prior to implementing new programming and policies.

The author's University Library values students' voices; students appreciated the University Library reaching out to them to seek their feedback in response to practices such as implementing new health safety guidelines during the pandemic (Scoulas et al., 2021a). The author's University Library is also beginning to develop a strategic plan for upcoming years, and these findings will be used for developing plans of action as well as for benchmarking data to set measurable outcomes for the strategic plan. Other academic libraries can also benefit from these findings when developing a strategic plan so their commitment to improve students' library experiences is documented and their progress is tracked through ongoing assessment. Overall, implementing the various ideas and suggestions that develop from the findings of this study may take time to put into action. Most importantly, academic libraries' persistent commitment to create a welcoming environment for all patrons is the key.

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