THIS IS MY PLACE: THE ACADEMIC LIBRARY

AS A RETENTION RESOURCE

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Abstract

This dissertation project addressed the gulf between the persistence rates of students in underrepresented minority (URM) and non-URM communities. To this end, a multisite exploratory qualitative case study focused on the experiences of students in academic libraries was conducted. The project applied a sense of belonging as an interpretive framework based on prior research which relates belonging to improved academic success outcomes among URM students. Previously, libraries' capacity to support URM students' sense of belonging had not been systematically analyzed. The three articles that constitute this dissertation, a literature review and one article on each of the two sites, a university pseudonymously referred to as Southwestern University (SWU) and a community college referred to as Southwestern Community College (SWCC), described the interplay of institutional context and student characteristics in the dynamics of URM students' belonging. They each support the overarching finding that academic libraries are a retention resource by fostering URM students' sense of belonging.

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Introduction

This dissertation project addressed the societal problem that postsecondary inequities result in students in underrepresented minority (URM) communities not earning college degrees at the same rate as students in non-URM communities (de Brey et al., 2019). Despite decades of policy and practice reforms geared toward reducing these disparities, their persistence suggests that innovative approaches may be needed. In research on postsecondary inequities, scant attention has been given to academic libraries as an existing retention resource for students in URM communities. This project, an exploratory comparative qualitative case study, was developed with the aim of investigating this topic. This project's guiding research question was: How do URM students physically experience academic library space?

In this dissertation, the findings of the project are presented in three articles. These are a literature review and the two empirical papers, one on each of the exploratory qualitative case studies conducted at institutions pseudonymously referred to as Southwestern University (SWU) and Southwestern Community College (SWCC). Both institutions are majority-minority Hispanic Serving Institutions (HSI) and Asian American Native American Pacific Islander Serving Institutions (AANAPISI) (IPEDS, 2024; "List of Minority," 2022). Study participants reflect these demographics, with the majority of participants being from URM communities (See Table 4 and Table 5). In order to make the connection between library experiences and academic success outcomes, the project applied sense of belonging, which extensive research has linked to persistence among students in URM communities, as its interpretive framework (Hausmann et al., 2009, Hurtado & Carter, 1997).

Literature Review

The three articles applied the sense of belonging interpretive framework in different ways. The literature review, titled, “Equity in Academic Libraries: A Student-Focused Review,” examined how experiences in academic libraries may lead to or reduce the likelihood of students in URM communities developing a sense of belonging. It analyzed three aspects of belonging. Psychological sense of belonging, which develops from emotional connections among members of a community (Strayhorn, 2019); cultural belonging, which involves seeing oneself as a community member and one’s identities reflected in the physical and social environment (Museus et al., 2017; Scoulas, 2021); and spatial belonging, the experience of feeling connected to a place, depending on design, furnishings, and policies (Scannell & Gifford, 2017). A criterion for reviewed studies was that their data center the voices of students in URM communities. This review contributes recommendations, grounded in students’ experiences, to improve equity for those in URM communities by adopting transformative practices with respect to library design, collections, staffing, and communication.

Empirical Articles

The second and third articles described students’ experiences in the main libraries at SWU and SWCC. The first of these, titled, “‘A Similar Feeling to Home’: Diverse Students’ Experiences in Academic Libraries,” examined two aspects of belonging: psychological belonging, analyzed as a cognitive evaluation, which may lead to emotional connections to the community of library users, and cultural belonging, focused on how collectivist social learning environments and cultural familiarity may foster a sense of belonging (Museus et al., 2017; Strayhorn, 2019). This article contributes to the literature in the following ways. It conveys a communal experience of the library as a second home, distinct from the individual-focused experiences described in previous literature. This suggests how library experiences foster a sense

of belonging by providing collaborative learning opportunities. Such social learning experiences occured in the context of a facility that also provides opportunities to develop a spatial sense of belonging in places suitable for quiet reflection and synthesis. Together, the data demonstrated that quiet and social spaces, experienced as analogous to different rooms in one's home, provide a menagerie of study spaces to promote URM student success.

The third article, "Belonging in a Community College Library," applied belonging as spatial belonging, the ways in which spatial resources support students' academic and social well-being and may foster a sense of belonging (Antonsich, 2010; Scannell & Gifford, 2017). It contributes an analysis of how belonging is grounded in sensory experiences. Students carefully selected library places for customized study environments, described in terms of what they feel, see, and hear. For example, inclusion and inspiration, experienced through seeing other students focusing on schoolwork, grounds a sense of belonging in that place and to that community, which is studying together. This has implications for higher education design. It suggests how institutions can improve retention by attending to the sensory experiences of physical settings.

Positionality

Here I want to describe my positionality to acknowledge its influence on all aspects of this project, but especially on the 28 semi-structured photo elicitation interviews with student participants. I am a middle-aged White, cisgender, heterosexual man, who is the lead librarian at a community college library. Therefore, I am a privileged insider with perceived power and authority relative to study participants. Implicit biases, the role of stereotypes that may be unconscious, may have influenced how I asked questions and reacted to answers, and how participants responded to questions and to my non-verbal communication (Greenwald & Krieger, 2006). Second, participants' social desirability bias, a bias toward responding in way believed to

be socially acceptable, may have influenced participants to omit or minimize alienating experiences, such as microaggressions, that they may have experienced in library spaces (Bergen & Labonté, 2020).

While these biases cannot be eliminated, in all aspects of this project I have engaged in reflexivity to be self-aware of potential biases in the research design and to reduce them wherever possible (Mason-Bish, 2019). One decision based on this is the photo elicitation interview method, which mitigates biases in the following ways. Photographs taken based on the prompts in the photography protocol (see Appendix H) occurred prior to and independently from the interviews. The intention of this method is that the participant is the expert on the content of their photographs (Kortegast et al., 2019). The interview protocol (see Appendix E) is structured to focus attention and responses on the photographs, and therefore to elicit responses that convey emic perspectives on the experiences conveyed by the photos (Clark-Ibáñez, 2004).

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Equity in Academic Libraries: A Student-Focused Review

As higher education is facing increasing accountability for its whiteness, academic libraries are mobilizing for reform. Accordingly, this paper reviews the literature on academic libraries with an eye toward understanding their history and purpose on college campuses. Academic libraries have long participated in higher education's history of racist and exclusionary policies and practices in three basic categories (Alire & Stielow, 1995; De Jesus, 2014). Their physical buildings, for example, often reflect continuity with a Eurocentric aesthetic (Brook et al., 2015). They are frequently staffed with predominantly White professionals (Gibson et al., 2017). Lastly, the library collections themselves and the organization of library information have been shown to marginalize students in equity-seeking communities (Bocko et al., 2022; Morales et al., 2014). Galvanized by Black Lives Matter! (Pagowsky & Wallace, 2015) and reenergized by racial justice demands in higher education in the wake of George Floyd's murder (Frederick & Wolff-Eisenberg, 2021), momentum to address barriers to underrepresented minority (URM) students has consolidated as the Equity, Diversity, and Inclusion (EDI) movement. Calls by scholars and practitioners for a commitment to social justice (Morales et al., 2014; Gibson et al., 2017) and antiracism (Hudson, 2017; Jennings & Kinzer, 2022), has been joined by the major United States-based academic library professional organization, Association of College and Research Libraries (ACRL), centering EDI in its Core Organizational Values, Goals, and Objectives (ACRL, 2019).

To guide the emerging equity agenda, it is important to review and build on what prior studies reveal not only about the systemic barriers that are embedded in the architecture, staff, and collections of academic libraries, but also to better understand how URM students have used them as spaces of resistance and belonging. In this review, URM refers to student communities

whose representation in higher education is smaller than it is in the United States population. This includes not only racial and ethnic communities, such as Black or African American, Hispanic or Latinx, and Native American students, but also students with disabilities, with young children, and those in the LGBTQ+ community.

This article contributes to an emerging strand of equity-minded reviews published in library and information studies journals (Cruz, 2019; Matheson et al., 2020; Winberry & Bishop, 2021). Accordingly, this review addresses a generalist education audience and speaks directly to the broad utility of academic libraries to support the retention, progression, and completion goals of an increasingly diverse student body. Specifically, it focuses on how students experience academic libraries and the extent to which these experiences support or alienate a sense of belonging, which is associated with degree completion and academic success for URM students (Hausmann et al., 2007, 2009, Hurtado & Carter, 1997). Its guiding research question is how do students in URM communities experience academic libraries? Therefore, the goal of the review is to understand academic libraries from the point of view of URM students and to use this information to make recommendations for developing academic library spaces that foster equity.

Background and Framework

Historically, libraries have been conceptualized as repositories of knowledge. This central assumption is embedded in the majority of articles published on academic libraries, which Bennett (2009) organized into three paradigms. In overview, a reading-centered paradigm focuses on how knowledge is consumed by campus constituents; a book-centered paradigm focuses on how knowledge materials are organized and housed. In turn, a learning-centered paradigm focuses on the potential benefits of libraries to support student outcomes. The details of Bennett's heuristic are further expounded upon below.

Reading-Centered Paradigm

This paradigm focuses on the historical role of the reading room as the place where students and scholars could access research materials (Bennett, 2009; Kaser, 1984). When resource access was no longer physically located in reading rooms, their purpose became studying with others in a place with academic ambience (Antell & Engell, 2006; Crook & Mitchell, 2012; Foster, 2013). The literature suggests that working in such communal settings may motivate students and instill a connection to the community (Neurohr & Bailey, 2017). The legacy of the reading room includes the role of reference librarians. In the traditional reading room, a librarian mediates between the patron's research needs and library resources (Ford, 1979). Since the late 19th century, due to race and gender disparities in librarianship, this librarian role has generally been filled by White women, who historically have been tasked with creating a home-like atmosphere and conveying whiteness values, which promote Western cultural traditions as normative and superior (Brook et al., 2015; Garrison, 1972; Sloniowski, 2016). As a positive, this librarian role has afforded the opportunity to develop affective as well as academic connections, which can be significant for students' sense of belonging (Bodaghi et

al., 2016) and contributes to the student perception of being cared about in these spaces (Neurohr & Bailey, 2017). As a negative, it can be alienating to URM students due to perceived racism and bias toward whiteness-oriented research topics (Folk & Overbey, 2019; Lee, 2001).

Book-Centered Paradigm

Beginning in the late 19th century, increasing book production required the storage capabilities of enlarged libraries. Often multistory structures, which feature monumental design elements (Kaser, 1984), for students from historically marginalized communities such libraries may inhibit belonging, reinforcing an impression of the institution as exclusive and impersonal (Green, 2012; Long, 2011). As significant resources were expended on building ever larger libraries, inequities among higher education institutions manifested with respect to the relative size and grandeur of facilities (Banta et al., 1996; Liu, 2001). Specifically, libraries serving predominantly Latinx and African American students often have had inadequate, underfunded libraries (Brown, 2001; Olivas, 2005). In terms of the student experience, larger, better resourced libraries are more likely to provide quiet places hidden among book stacks or adjacent to windows where students have "favorite" places, to which they may develop emotional connections (May & Swabey, 2015, Scannell & Gifford, 2010). Such libraries also have the wherewithal to repurpose spaces formerly housing books for social learning purposes (Head, 2016; O'Kelly et al., 2017).

Learning-Centered Paradigm

As print materials have receded in importance and students have been increasingly tasked with working collaboratively on assignments, social learning facilitation has become a central role for academic libraries (Bennett, 2007; Jamieson, 2005). Studies suggest that students choose social learning locations for group projects and then move to quiet spaces to concentrate (Hunter

& Cox, 2014; Matthews et al., 2011). For this reason, academic libraries are now expected to support both quiet and social learning spaces (Blaylock et al., 2013; May & Swabey, 2015). How well they support both depends on their physical space and financial resources (Oliveira, 2018).

Due to the availability of scholarly content online and a concomitant reduction in the circulation of physical items, traditional views of how to measure a library's value to the institution, such as through collection size, have lost salience (Liu, 2001; Weiner, 2008). Librarians have developed new measures of value based on how library use contributes to student learning (Oakleaf, 2010). Specifically, they have sought to correlate student library use to proxies for learning outcomes (e.g., GPA, graduation rates) (Soria et al., 2013) and have investigated whether what students do in library spaces contributes to academic achievement and persistence (Massengale et al., 2016, Stemmer & Mahan, 2016). In this vein, it can be inferred from empirical research that library-based social learning may be connected to URM students' academic success through socio-academic integration, development of counterpaces, and experience of a sense of belonging (Andrade, 2018; Whitmire, 2006).

Ultimately, Bennett's (2009) heuristic provides an institutional perspective on libraries and their use. However, missing from this heuristic is not just a student viewpoint, but one that differentiates how URM students experience academic libraries relative to their non-URM peers. Accordingly, to fill this paradigmatic gap, this article draws on sense of belonging as an interpretive framework that foregrounds student experiences for critical analysis. Education scholars have reviewed sense of belonging in myriad postsecondary contexts from the experiences of international students to those of LGBTQ+ students (Chen & Zhao, 2019; Gano, 2023).

A Critical Lens on Library Experiences

A sense of belonging is useful to differentiate students' experiences of higher education along sociodemographic lines. This is important because URM students are not only more likely to experience alienation on campus, but also less likely to complete a degree. The framework debuted as a component of Maslow's (1943) hierarchy, in which the need to connect to others builds on safety and physical needs being met. A sense of belonging, as Baumeister and Leary (1995) describe, enables individuals to develop confidence to pursue their academic goals. In contrast, the stress of feeling disconnected may lead to leaving college. As explained below, three categories of sense of belonging are relevant in library contexts (a) psychological, (b) cultural, and (c) spatial.

Psychological Belonging

Applying Maslow's hierarchy to higher education, Strayhorn's (2019) definition of a sense of belonging highlights behavioral, cognitive, and affective aspects of students' experiences. He explains that it entails "a cognitive evaluation (i.e., 'I think these are my people') that typically leads to an affective response (i.e., consequently, one feels good) and oftentimes behavioral manifestations (i.e., does things like build personal connections or join clubs)" (p. 79). In other words, a psychological sense of belonging can be catalyzed and reinforced by both academic and social success. For example, sense of belonging and academic achievement are reciprocal insofar as good grades are an affirmation of belonging. Further, studying in the library for a test and then performing well on the test can fuel belonging on campus in general and an affinity for library spaces in particular (Broughton, 2019).

This affective response to academic success may include forming emotional connections to the community of library users (Chodock, 2020). In this way, library-based sense of belonging may align with Deil-Amen's (2011) finding that social and academic integration are fused when

academic settings have social components (Tinto, 2012a). Furthermore, as it is this combination of academic integration with a sense of belonging that Hausmann and colleagues (2007) found to be critical for persistence, a library-based sense of belonging may reduce attrition.

Cultural Belonging

A cultural perspective on sense of belonging is grounded in critiques of established higher education theories, which have been seen as ill-equipped to explain the experiences of an increasingly diverse student population (Guiffrida, 2006). For example, Tinto's (2012b) influential student departure theory, which assumes that students need to integrate socially and academically at their institutions to persist, has been criticized for implying that URM students must, as Hurtado and Carter (1997) state, "adopt the values" (p. 327) of a White student-dominated and Eurocentric culture. Museus and Maramba (2011) further suggest that to be successful may require students to deny their identities, a personal choice tantamount to "cultural suicide." Instead of requiring minoritized students to change, researchers suggest that higher education institutions transform themselves in order to equitably facilitate opportunities for students to experience a sense of belonging (Kuh & Love, 2000; Samura, 2016).

Central to Museus' (2014) Culturally Engaging Campus Environments (CECE) model is this shift to institutions' cultural responsibilities vis-à-vis student belonging. Testing this connection through surveying 870 students at an urban research university, Museus and colleagues (2018) found significant moderate to strong correlations (r=0.42 to r=0.67) between each indicator of cultural engagement in the CECE model and student sense of belonging, for White students and Students of Color (pp. 476-477). Among the CECE indicators statistically associated with sense of belonging are holistic support and culturally relevant knowledge, which are closely connected to academic libraries. In relation to this review, it can be inferred that

perception of their cultural environment may inform how academic libraries are experienced by URM students, along a spectrum from excluding citadels of non-URM culture to welcoming places where they feel at home or create counterspaces (Brook et al., 2015).

Spatial Belonging

Spatial belonging, the individual experience of feeling connected to a place, is informed by Antonsich's (2010) place-belongingness and Scannell and Gifford's (2010) place attachment frameworks. Spatial belonging may be connected to physical qualities, experienced as familiarity, comfort, or feeling at home, or affective qualities, including feeling cared about and emotional attachment. In terms of physical qualities, the importance of familiarity is emphasized in several studies. Hurtado and Carter (1997) found that Latinx students felt more connected if they maintained ties to their familiar cultural community, while Tachine and colleagues (2017) found that Native-focused "indigenous space" on campus provides a familiar experience that increases belonging (p. 798). Comfort is a key term in several studies. It is more often associated with physical comfort for non-URM students as opposed to comfort as an outgrowth of academic community relationships for URM students (Hoffman et al., 2002; Muñoz & Espino, 2017; Vaccaro & Newman, 2016). Feeling at home may be conveyed through spreading out study materials, taking off shoes, or having a meal (Mehta & Cox, 2021). In relation to spatial belonging's affective qualities, being cared about may include physical environments experienced as caring for students due to providing items they need (Neurohr & Bailey, 2017), or associating a place with being cared about by members of one's community, such as professors (Freeman et al., 2007; Hoffman et al., 2002) or fellow students (Cheng, 2004). Finally, emotional attachment resonates with favorite places, where students reflect and synthesize ideas, often

alone near windows or outside in a natural environment (Banning et al., 2010; Tennessen & Cimprich, 1995).

In academic libraries, research suggests that place belongingness may serve as a foundation, as microbelonging, for a deeper institutional connection (Brodsky et al., 2002). It can be inferred from Broughton's (2019) research that microbelonging occurs in academic study spaces. A student explains that "if you feel like you belong in a study space, it's easier to feel like you belong on campus as a whole because I guess the sense of belonging sort of carries over" (p. 9). Studies suggest that for minoritized students, especially, microbelonging requires authenticity (Vaccaro & Newman, 2016). Specifically, Sulé's (2016) study of the role of hip-hop focused places and Tachine and colleagues' (2017) study on Native American students' sense of belonging suggest that microbelonging in counterspaces, where students can be themselves, is a key step to feeling a sense of belonging in the entire institution.

Method

This review synthesizes empirical studies of academic libraries from a URM student viewpoint. It draws heavily on studies published in library and information science journals with the intention of introducing a mainstream higher education audience to findings that suggest academic libraries can improve student retention.

Sampling

To operationalize the empirical review of equity relevance, the inclusion criteria were empirical studies whose samples were URM student populations. Populations included are consonant with those described by Marquis and colleagues (2021) as postsecondary equity-seeking student communities, and those who may experience barriers to library usage, according to the American Library Association (2017, 2019). These included students with disabilities, with young children, in the LBGTQ+ community, and Latinx, African American/Black, Native American/Indigenous, and Muslim students who pray in libraries. Studies published between 2000 and 2021 are included, with the beginning date corresponding to the debut of a critical lens on academic libraries research. In 2000, Solórzano and colleagues (2000) published an article that described a microaggression targeting African American students, in an academic library.

Empirical Article Search

Literature searches were conducted in four library and information sciences databases: 1) Emerald Library, 2) Library and Information Science Abstracts (LISA), 3) Library Literature & Information Science Full Text, and 4) Library, Information Science and Technology Abstracts (LISTA), one general education database, 5) ERIC, and one general database, 6) Google Scholar. In each, searches were conducted with the terms “academic library” and “students,” to which were added eight categories of terms. The first seven correspond to specific equity-seeking

Table 1

Search Terms by Category

Equity-Seeking Population	**Search Terms**				
Latinx	Latinx	Latina	Latino	Hispanic	
African American	African American	Black students			
Native American	Native American	Indigenous	First Nation	aboriginal	
LGBTQ+	gay	lesbian	transgender	bisexual	queer
	pansexual	cisgender	LGBT*	LGBPQ	GLBT
Students with a disability	disability	disabled	visually impaired	hearing impaired	
Muslim students who pray in libraries	pray*	prayer room	meditation		
Student parents	parenting students	student parents	children		
Equity, diversity, and inclusion-related	students of color	BIPOC	minoritized	racialized	minorit*
	antiracis*	whiteness	privileged	neutrality	Micro-aggressions
	welcom*	counterspace	safe space	equity	diversity
	inclusive	social justice			

populations: Latinx, African American, Native American, LGBTQ+, students with a disability, Muslim students who pray in academic libraries, and student parents, while the eighth consists of EDI-related terms (See Table 1 for search terms by category).

Narrowing Criteria

Search results were filtered by reading the study abstracts to answer these five qualifying questions: 1) Is it a published empirical study? 2) Are students enrolled at a higher education institution the unit of analysis? 3) Does the study describe student experiences in one or more of

the equity-seeking communities included in this review? 4) Does the study describe student experiences in academic library spaces? 5) Is the equity context comparable to that of the United States? Regarding the last question, the answer varies depending on the equity-seeking student community. For example, while racism in the United States has features dissimilar to that of New Zealand, student parents' experiences in academic libraries may be roughly similar. The first sifting yielded a total of 86 studies. Each study was read in the second round, with 51 meeting all criteria. Most studies were found in multiple databases (See Table 2 for search results by information source).

Table 2

Search Results by Information Source

Information Source: Initial Results	1st Narrowing	Final Total
Emerald Library: 891 search results	24 studies	7 studies
Library Literature & Information Science, LISTA, & ERIC: 656 search results	46 studies	34 studies
LISA: 157 search results	17 studies	13 studies
Google Scholar: 4930 search results	46 studies	33 studies

Empirical Review in Depth

The 51 reviewed studies are organized into three frames by the nature of belonging inferred by the findings (See Table 3 for studies organized by belonging type). As experiencing a psychological sense of belonging generally involves finding one's community, this frame consists of articles discussing social learning interactions or barriers to such interactions. Cultural belonging, the focus of the second frame, includes validating or alienating experiences of physical collections and interactions with library staff. Last, the spatial belonging frame includes studies that describe how students experience favorite places or may be denied this opportunity due to physical, social, or policy-based barriers.

Psychological Sense of Belonging

Social learning and social interactions in academic libraries provide the opportunity for students to form a community in which they feel a sense of belonging (Strayhorn, 2019). Nine of the 21 studies in this category focus on a prerequisite for forming community, feeling welcomed in library spaces. Five studies describe how students engage in social learning and four suggest that students use academic libraries as counterspaces. This frame features Muslim students who engage in prayer in library spaces, as repurposing space suggests a sense of belonging (Samura, 2016). Finally, two studies describe students with children's exclusion from library social learning, inhibiting their opportunity to feel a sense of belonging.

Cultural Belonging

Over half of the reviewed studies, 27 out of 51, are connected to cultural belonging. Of these, 16 describe resources or social interactions that may inhibit experiencing a sense of belonging, while 11 describe resources or interactions that may promote developing a sense of

belonging. These studies suggest that the presence of culturally relevant knowledge, which may be conveyed through physical collections or aesthetics, is critical for students to feel that they will get their needs met in library spaces. Developing such physical content depends on sufficient financial resources and reflects disparities among institutions' ability to procure content demonstrating culturally relevant knowledge. Though interactions with librarians and library staff have become a less salient feature of library experiences (Yoo-Lee et al., 2013), it can be inferred that these experiences continue to convey to students the institution's racial climate and level of personal support for them and their communities.

Spatial Belonging

Of the 17 studies connected to spatial belonging, seven describe barriers to belonging in library spaces and 10 describe positive experiences connected to specific places. In five studies, libraries' imposing edifices and grand interiors may intimidate students, acting as a barrier to library usage; in two, policies and practices inside the library inhibit belonging. In contrast, five studies depict how libraries created specific spaces for students with children, thus facilitating belonging, and in five others, students find a welcome refuge in library spaces from their busy lives.

Equity Implications

The following section describes the equity implication of the reviewed studies. First, it critically reviews studies in each frame and describes them in relation to subthemes. Second, it offers building blocks for an equity-centered paradigm, augmenting Bennett's (2009) library paradigms. Based on this discussion, the paper closes with suggestions for future research.

Frame One: Psychological Sense of Belonging

The reviewed literature implies that individuals in specific equity-seeking communities

Table 3

Reviewed Literature by Belonging Type

Belonging Type	Subcategory	Citations
Psychological Sense of Belonging	Feeling Welcomed	Dabbour & Ballard, 2011; Elteto et al., 2008; Herrera, 2016**;** Jiao et al., 2004, 2006; Stewart et al., 2019; Stewart & Kendrick, 2019; Whitmire, 2003, 2004
	Social Learning	Asher et al., 2009; Fullmer & Fiedler, 2021; Green; 2012; Haras et al., 2008; Long, 2011
	Counterspaces	Andrade, 2018; Broughton, 2019; Kuh & Gonyea, 2003; Whitmire, 2006
	Prayer	Mross & Riehman-Murphy, 2021
	Exclusion	Barnes, 2016; Scott & Varner, 2020
Cultural Belonging	Hetero-normative/ Eurocentric Resources	Aase, 2017; Adkins & Hussey, 2006; Hays, 2020; Neurohr & Bailey, 2016; Schaller, 2011
	Safe Spaces	Mathson & Hancks, 2006; Schaller, 2011
	Culturally Relevant Content	Neurohr & Bailey, 2016; Scoulas, 2021; Stewart & Kendrick, 2019
	Micro-aggressions	Elteto et al., 2008; Long, 2011
	Neutrality/ Limited Interactions	Bodaghi et al., 2017; Bonnet & McAlexander, 2012; Folk & Overbey, 2019; Green; 2012; Haras et al., 2008; Lee, 2001 Lee, 2012; Long, 2011; Mehra & Braquet, 2011; Mulliken, 2017; Saar & Arthur-Okor, 2013; Saumure & Given, 2004; Yoo-Lee et al., 2013
	Holistic Support	Bodaghi & Zainab, 2013; Bodaghi et al., 2016; Lupien, 2007; McAulay, 2005; Melançon & Goebel, 2016; Scoulas, 2021
Spatial Belonging	Intimidation	Adkins & Hussey, 2006; Green; 2012; Lee, 2001; Long, 2011; Neurohr & Bailey, 2016
	Ghettoization	Pionke et al., 2019; Seale et al., 2010
	Space for Families	Barnes, 2017; Godfrey et al., 2017; Graff et al., 2019; Moore et al., 2020; Paustenbaugh & Belliston, 2018
	Favorite Places	Anderson, 2018; Andrade, 2018; Asher et al., 2009; Folk & Overbey, 2019; Regalado & Smale, 2015

critically reviews studies in each frame and describes them in relation to subthemes. Second, it offers building blocks for an equity-centered paradigm, augmenting Bennett's (2009) library paradigms. Based on this discussion, the paper closes with suggestions for future research.

Frame One: Psychological Sense of Belonging

The reviewed literature implies that individuals in specific equity-seeking communities who use spaces in academic libraries for social learning and community activities (Oliveira, 2018), may develop a sense of belonging. It can be inferred, for example, that African American and Latinx students perceive academic libraries as welcoming spaces where they engage in social and quiet study and form counterspaces (Fullmer & Fiedler, 2021; Whitmire, 2006). Concomitantly, Mross and Riehman-Murphy (2019, 2021) suggest that Muslim students repurpose underutilized spaces housing book collections for prayer and study.

Andrade's (2018) study of Latinx transfer students implies that proximity to cultural resources facilitates feeling comfortable and provides an opportunity to develop a sense of belonging. As Hays (2020) describes, however, when culturally relevant resources for the LGBTQ+ community are located away from the library, it may reinforce the perception, which Stewart and Kendrick (2019) document, that the library, though welcoming for academic purposes, is neutral regarding cultural relevance and personal support. Likewise, as Barnes (2016) and Scott and Varner (2020) describe, the absence of accessible on-campus childcare resources combined with library staff indifferent to student parents' needs (Keyes, 2017), may exclude them from the opportunity to engage in social learning, reducing opportunities to experience a sense of belonging.

Feeling Welcomed. The finding, across several studies focused on African American students, Latinx students, LGBTQ+ students, and Students of Color, that academic libraries are

perceived as welcoming (Stewart & Kendrick, 2019; Stewart et al., 2019; Whitmire, 2004) and comfortable (Andrade, 2018), suggests that they may be fertile ground for developing a sense of belonging. Support for this includes, using national-level data, Whitmire (2003) and Kuh and Gonyea's (2003) finding that Native American, Asian American, African American, and Latinx students use academic libraries to read or study at higher rates than White students. At the institutional level, Elteto and colleagues (2008) reconfirmed this finding in their study of the library use of White students and Students of Color at Portland State University. Additional support includes Jiao and colleagues' (2004, 2006) studies of graduate students at Predominantly White Institutions (PWI) and Historically Black Colleges and Universities (HBCUs), which found that African American students have lower levels of library anxiety than White students; Herrera (2016), who found that African American students use the print collections at the University of Mississippi at significantly higher rates that White students; and Dabbour and Ballard (2011), who found, based on a survey of California State University Northridge students, that Latinx students use the physical library for academic and social purposes at higher rates than White students.

Social Learning. Several studies suggest that social learning is an important aspect of minoritized students' library use (Asher et al., 2009; Fullmer & Fiedler, 2021; Haras et al., 2008). Long (2011) describes how several Latinx students, who were initially intimidated by their academic library, entered it for the first time because peers invited them to work on group projects. Regarding group study, Green (2012), drawing on an ethnographic study of Latinx students at Northeastern Illinois University, found that work with a "study buddy" and peer mentoring are preferred activities (pp. 101-102). Whitmire (2006) grappled with two contradictory findings in a study of African American students' library experiences at a

Midwestern university. Students ranked socializing as their least important reason to use the library and yet typically responded to why they used that particular library with "'more of a social environment, but I still get a lot of work done,' '…because it's where most of my friends go…,' and '…most people I know come here…'" (p. 65). A resolution is that students, in this study, considered library social interactions to be social learning, an extension of their academic work.

Counterspaces. Observations of student behavior, specifically that when African American students entered the library with mixed race groups they appeared to be focused exclusively on academic work, but when they entered with other African American students, they appeared to be together "for companionship" (p. 65), led Whitmire (2006) to infer that these African American students were engaged in creating a counterspace. By using this term, Whitmire suggests that, in the library, they created a sanctuary from microaggressions and marginalization (Case & Hunter, 2012; Grier-Reed, 2010; Solórzano et al., 2000). In a similar vein, Broughton's (2019) qualitative study of how undergraduates experience study spaces found that study spaces are chosen by minoritized students based on where they can "see someone who looks like me" (p. 4). Kuh and Gonyea (2003), reflecting on the higher library usage rates of Students of Color, speculate that the library serves an academic integration function akin to the social integration function of a student union. They found that it is a "safe haven, a place that supports and nurtures academic success in collaboration with peers of the same racial and ethnic background" (p. 267).

Andrade's (2018) study of Latinx transfer students, conducted at a Hispanic Serving Institution (HSI) California State University campus and a PWI University of California campus, describes the pivotal role that institutions can play in facilitating students' creation of academic

library counterspaces. Students were asked a series of questions about spaces on their respective campuses where they felt comfortable. Although there was no prompt to include library spaces, library locations were chosen for both social interactions and as quiet places. Several of those locations included Chicana/o and Latina/o centers housed in the libraries. One student commented on how these spaces facilitate typical library activities, stating "There is a Latina/o center at [the Cal State] where you get support, printers, etc. You feel comfortable…All the students that go there share the same goal as I do to get their goals done" (p. 356). Andrade's study suggests that for these students, collocated culturally supportive spaces have increased their comfort in academic libraries, mitigating the intimidation experienced by other Latinx students (Adkins & Hussey, 2006; Green, 2012, Long, 2011), and enabling the academic library to serve as a counterspace.

Muslim Students Praying in the Library. The use of academic libraries as a safe haven or counterspace may occur through students repurposing space to meet the needs of their community. Samura (2016) describes how students form community at specific places on campus, experiencing "belonging as a set of such spatial practices" (Samura, 2016, p. 134). An academic library example, consonant with Samura's research, is Muslim students repurposing quiet, hidden library areas to pray. Riehman-Murphy and Mross (2019, 2021) have investigated this phenomenon through studies of library professionals and students. In a national survey of library professionals (Riehman-Murphy & Mross, 2019), they found that nearly half of the respondents observed students engaging in prayer or other spiritual practices, with 63% of observations being of Muslim students. In their qualitative study of students, conducted through focus groups at four Pennsylvania State University campuses, Mross and Riehman-Murphy (2021) asked students about their practices and needs. Among the Muslim participants, they

found that Muslim women required a heightened level of privacy compared to their male coreligionists. The gendered nature of Muslim students' spatial practices suggests that emic perspectives are critical to more fully understanding Muslim students' library experiences. Partially as a response to the observation of Muslim student prayer, a recent trend in well-resourced libraries is the creation of non-denominational prayer rooms or general "reflection" spaces for everything from prayer to yoga (Bladek, 2021).

Exclusion. Unlike other equity-seeking student communities, which reviewed studies suggest feel welcomed and use libraries at relatively high rates, Barnes (2016) and Scott and Varner (2020) suggest that student parents may feel excluded from library use. Keyes' (2017) review of the 80 largest universities in the United States' policies concerning children indicates that most are neutral, which effectively ignores the needs of students with children, while several have a negative tone. For example, Florida Atlantic University's policy states, "we urge you not to bring your children into the library except briefly" (p. 322). Barnes (2016), in an interview-based qualitative study of student parents at the Unitec Institute of Technology, in New Zealand, documented how a comparable policy, "No children-in-the-library for extended periods of time" (p. 48) affected participants. They could not find a time when they had childcare to get in-person assistance from librarians, engage in group study sessions, or use the technology available in the library. Students reported failing assignments, one student stating, "I relied on the staff. It was a weak point and I couldn't access the help I needed. Consequently I ended up failing that paper" (p. 49). Scott and Varner (2020) conducted a comparable study in the United States. Of 18 women recruited for four focus groups, half were African American, one-third White, and one-sixth Latina. Often an intersectional identity, the participant demographics are similar to the distribution of United States higher education students who are parents by race and ethnicity

(Noll et al., 2017). Asked about their experiences in their academic library, participants felt that "the library as it currently exists feels off limits" (Scott & Varner, 2020, p. 607). Specific issues include the "expectations of quiet" (p. 608), which is unrealistic for infants and small children, and as one participant stated, may lead to her "being shamed or embarrassed for kids being kids" (p. 608). These studies suggest that most libraries maintain policies that exclude student parents from study opportunities, and thereby from feeling that they belong in library spaces.

Frame Two: Cultural Belonging

Reviewed studies imply that cultural factors connected to physical collections and interpersonal interactions influence the potential to feel a sense of belonging in library spaces. Regarding collections that may inhibit developing a sense of belonging, Stewart and Kendrick (2019) found that academic libraries are perceived by LGBTQ+ students as having a "heteronormative-centered collection" (p. 612), culturally disconnected from their identities. Likewise, Aase (2017) suggests that Native American and Indigenous Canadian students view library collections as culturally insensitive and historically inaccurate. On the contrary, Scoulas (2021) implies that collections reflecting diverse student communities may facilitate students developing a sense of belonging.

The reviewed literature implies that providing holistic support emphasizing relationship building may facilitate students developing a sense of belonging, while neutral interactions reinforcing previous racialized experiences may inhibit developing a sense of belonging (Bodaghi et al., 2016; Folk & Overbey, 2019; Melançon & Goebel, 2016). It can be inferred that a friendly non-neutral attitude and support to become independent learners are important for students with disabilities to have positive perceptions of academic libraries (Bodaghi et al., 2017; Mulliken, 2017; Saar & Arthur-Okor, 2013). For Native American and Indigenous Canadian

students, bridging the distance between Native students and academic libraries may require a focus on relationship building, which respects student agency (Melançon & Goebel, 2016). Conversely, Folk and Overbey's (2019) finding that Black and African American students report neutral, unsupportive interactions with White librarians is consonant with students' experiences in other equity-seeking communities (Green, 2012; Lee, 2001; Mulliken, 2017). Indeed, Students of Color may be predisposed to have low expectations of White librarians due to previous negative experiences (Bonnet & McAlexander, 2012).

Heteronormative and Eurocentric Resources. It can be inferred from the reviewed studies that for LGBTQ+, Latinx, and Native American students, a perceived absence of culturally relevant content may inhibit the development of a sense of belonging. Schaller's (2011) study of LGBTQ+ community library experiences at the University of North Carolina at Greensboro (UNCG) and Hays' (2020) study of places where students access LGBTQ+ resources at the College of Staten Island found that because students perceive the academic library as having only academic, course-related titles, they seek personally relevant materials elsewhere. Schaller (2011) found that LGBTQ+-oriented bookstores, staffed by community members, are sought for culturally responsive content, while Hays (2020) found that the campus LGBTQ Resource Center is considered a more comfortable, supportive place to access identity-related resources. Based on a study of Native American students' library use at Oklahoma State University, Neurohr and Bailey (2016) suggest that because these students believe that the academic library does not provide support for them, they do not seek materials from it. In Aase's (2017) study of Native American students' experiences interacting with a physical academic library collection at Fort Lewis College, in Durango, Colorado, one participant stated that the biases in the library organization system would cause a student to be "bottlenecked into

assuming a limited world view" (p. 153). Likewise, in Adkins and Hussey's (2006) study of Latinx students in a large Southwestern University, one student expresses a parallel sentiment, asserting that "most of the writing, most of the publications are usually relatively ethnocentric, you know, European-American culture based" (p. 476).

When engaging with the library collections, Loyer (2017) describes how Indigenous Canadian students may be traumatized by its genocide and stereotype-focused content. In Aase's (2017) study, they found that students, while offended by racist book titles, felt resigned to that being the norm. One student shared how the content causes ongoing harm, stating that "my culture is marked/joked about, as if my people still don't suffer from the consequences of the past today" (p. 151).

Safe Spaces. Rothbauer (2007) describes how libraries have historically been LGBTQ+ community safe spaces, where students could privately explore materials relevant to understanding their sexual identities. Although the ability to access materials in bookstores, at campus LGBTQ+ resource centers (Hays, 2020; Wexelbaum, 2018), and increasingly online (Stewart & Kendrick, 2019) has supplanted this role for many students, Schaller's (2011) study at UNCG suggests that the library area with the relevant print collection functioned as a safe space. Specifically, library staff noticed that "more books [are] scattered around the shelves or directly in the aisles, whereas elsewhere books are scattered more outside the shelves," indicating that shelving units are being used for privacy (p. 106). Mathson and Hancks' (2006) analysis of LGBTQ+ materials self-checkout at Central Michigan University, which found that students were more likely to use self-checkout for LGBTQ+-related materials, conveying that they were concerned about privacy, supports Schaller's finding.

However, more recent scholarship suggests that the academic library's safe space role has largely dissipated. The private access to information about sexuality afforded by the internet, according to Stewart and Kendrick's (2019) crowdsourced national survey of LGBTQ+ students, make it by far the first choice for college students. In fact, they found that the academic library is perceived by many students as an information barrier due to its "heteronormative-centered collection" (p. 612). Although only about one in twenty United States higher education institutions have LGBTQ+ resource centers, Wexelbaum (2018) suggests that for many students on those campuses, they have replaced the library as a safe space to explore topics related to sexuality and gender. As Hays (2020) concludes, "Students are more likely to use the Library collection for academic reasons directly related to their classes, but students are more likely to use the LGBTQ Resource Center's Library in all other areas" (p. 124).

Culturally Relevant Content. Studies suggest that culturally relevant collections, artwork and displays may signal to students the library's commitment to their communities. According to Museus and colleagues (2017), such cultural responsiveness is predictive of developing a sense of belonging. In Scoulas' (2021) survey of University of Illinois Chicago students, minoritized groups agreed that the library's physical collections reflect diverse cultural identities; however, the percentage that agreed was lower for African American students (60%) than other groups (Asian, 71%, Hispanic, 74%) (p. 5). This may reflect a less positive perception of the library's racial climate (Stewart et al., 2019) as African American students were less likely to agree that their identities are respected at the library, 67%, compared to Asian students, 74% and Hispanic students, 73% (Scoulas, 2021, p. 5).

In terms of aesthetics, in Neurohr and Bailey's (2016) photo elicitation interviews with Native American students, the pictures on library walls depicting Native American cultures,

especially the participating students' tribes, became a focal point of the interviews. Just having a bulletin board displaying notices of Native American campus events was important to one student as it expressed that the library values her. Likewise, in Stewart and Kendrick's (2019) study, participants consider their academic libraries welcoming due to factors such as recognizably LGBTQ+ staff, visible outreach materials and event promotion. This is consistent with Vaccaro and Newman's (2017) study of sense of belonging among LGBTQ+ university students, which found that the presence of advertising for LGBTQ+ events around campus contributed to students feeling like they belong at the university.

Interactions with Library Staff. It can be inferred from research on student library usage, that higher education students have limited interactions with library staff and librarians (Stewart et al., 2019; Yoo-Lee et al., 2013) and do not know what services public services librarians and library staff provide (Wu & Lanclos, 2011). Green (2012), Lee (2012), and Neurohr and Bailey (2016) also found this to be the case for Latinx and Native American students. In Lee's (2012) study of a racially diverse group of Los Angeles-area community college students, when asked about what services his library provides, a Latino student responded, "I will not say I'm aware of any. What services do they provide" (p. 75)? In some cases, however, minoritized students' library interactions are perceived to be impacted by their membership in a minoritized community and may adversely influence their perception of the library's racial and cultural climate. Findings in reviewed studies suggest that students perceive interactions with library staff as microaggressions, as reflective of a neutral, transactional attitude, or as providing holistic support.

Microaggressions. In some cases, students perceive that librarians and library staff create a negative or hostile climate through microaggressions or insensitivity. In Elteto and colleague's

(2008) study of Students of Color's views of the academic library climate at Portland State University, the researchers note that "several students of color offered comments such as 'sometimes the staff's facial expressions do not seem "welcoming"'" (p. 333). This is similar to an incident depicted in Solórzano and colleague's (2000) study on campus racial climate. Students recall that, during finals, when library staff saw African American students studying, "it's like…they've never seen Black people before in their lives, or they've never seen black people study before" (p. 68). Another microaggression, described by a Latina student, is connected to having an accent. She describes how "library staff and students at the circulation desk spoke loudly to her when her accent made her difficult to understand." She felt embarrassed because she believed they had assumed she could not communicate in English (Long, 2011, p. 509).

In contrast, Stewart and colleagues' (2019) study based on surveying 160 African American students at non-HBCU's found that incidents with library staff had no significant impact on students' overall perceptions of academic libraries as welcoming. They did find, however, that a small number of respondents experienced microaggressions from other students in the library. Their analysis of these incidents is connected to the significant relationship they found between student perceptions of library welcomeness and campus racism (r=.426) (p. 27). From this, they infer that the mores of the students using the library determines its racial climate, not actions directly connected to librarians or library staff. As they state, "if students felt their campus was rife with racism, they also perceived that the library is less welcoming" (p. 29). Consonantly, Fullmer and Fiedler (2021), in their mixed methods study of Latinx students at the University of Nevada, Las Vegas imply that an inclusive institutional climate contributes to these

students' sense of belonging, with students conflating the library and the university in their perceptions of racial climate.

Neutrality. In the reviewed literature, more common than negative or positive interactions with librarians and library staff is a perception that librarians have a narrow, transactional approach to responding to information requests (Green, 2012; Haras et al., 2008). This approach, characteristic of a set of practices termed neutrality, entails library staff not making personal or organizational investments in equity-seeking communities (Gibson et al., 2017). Instead, they reproduce, in library interactions, inequities that marginalized students' experience in academia (Mehra & Braquet, 2011).

Studies on Black and African American student communities, for example, suggest that librarian interactions are experienced differently based on the librarian's race (Bonnet & McAlexander, 2012; Folk & Overbey, 2019). Black and African American students interviewed by Folk and Overbey (2019) at a Midwestern PWI describe a gulf between their experiences of Librarians of Color's affect, described as empathetic, and that of White librarians, described as neutral. Indeed, such racialized library experiences may predispose African American students to prefer interacting with Librarians of Color. In Bonnet and McAlexander's (2012) approachability survey, they found that African American students at a Midwestern university exhibited a "strong in-group preference" (p. 283) for approaching African American librarians over those who are Asian or White.

Similarly, Haras and colleague's (2008) study of first generation Latinx students at California State University, Los Angeles describes how Latinx students experience a shift from community-focused, personal, public library interactions to impersonal public school interactions, which Green (2012) suggests continues in higher education contexts. Lee's (2001)

study of six Aboriginal Canadian undergraduate, graduate, and doctoral students' library experiences implies how this perception affects students. One student states, "[Librarians] provide an important function. But they don't have the same perspective as I do. They are helpful to the extent that they can be. I don't fault them for it-my research topic isn't generally well-known so I can live with that" (p. 276). Perceiving that there is a limited extent to how much librarians should be expected to help takes on a different light in the context of participating students' recommendation for developing an "Aboriginal Resource Center" (p. 280) and for hiring more Aboriginal librarians and library staff. These recommendations convey that they want the institution to support their research. They imply that hiring people who are culturally familiar with their community will serve to accomplish this goal. It can be inferred that the quoted student expects current librarians, ensconced in a Eurocentric academic library and institution, to consider their research interests marginal.

Research suggests that neutrality may have a negative impact on students with disabilities (Bodaghi et al., 2017; Mulliken, 2017; Saar & Arthur-Okor, 2013). Saar and Arthur-Okor (2013), in their mixed methods study of hearing-impaired students' library experiences at Lamar University, in Texas, describe how while the library provides American Sign Language (ASL) interpreters for these students, due to inadequate outreach and inconsistent hours, most are either unaware of this service or frustrated by failed attempts to use it. One student describes how they "ran over to the library and it's like 'they're available tomorrow, in the morning.' Ok, fine. So then I went over there. 'Oh they're not here, they'll be here in the afternoon.' It's like 'what?!' And so, it's always the wrong time" (p. 443). Mulliken (2017), in a qualitative study of blind library users, found that similar frustrations may occur when a library provides assistive technology, but staff have insufficient training to assist the students using it.

Neutral Library Instruction. Studies suggest that there is a gulf in comfort, self-efficacy, and research skills between non-URM students who have had information literacy instruction and minoritized students who have had little to none, and that instruction that does not take into account students' needs can be unhelpful or lead to frustration or even trauma (Green, 2012; Loyer, 2017). Library instruction programs, emphasizing electronic resources to complete assignments, may omit orienting students to physical spaces, and to the role of library staff (Aase, 2017; Long, 2011). A Latino student, in Long's (2011) study, states that after an instruction session, "he left uncertain about the role of the library staff" and later was frustrated when, after online resources proved inadequate and he did not know where to go for help (p. 509). For students with disabilities, if the instructional content and delivery is not customized, they may not benefit from it (Chodock & Dolinger, 2009; Mulliken, 2017). A blind student Mulliken (2017) interviewed recalled information literacy sessions she attended, stating, "The trainings ended up not being too useful for me because they would say 'Well click on this and go to the top' and they wouldn't articulate which link it would be…So I ended up learning it myself" (p. 121).

Holistic Support. Bodaghi and Zainab (2013) and Bodaghi and colleagues (2016) depict the critical role librarian empathy has for visually impaired students' sense of belonging in a Malaysian academic library. McAulay (2005) in an interview-based study, found that staff who reduce barriers to navigating through library spaces have a positive impact on students with disabilities. Other studies suggest that visually impaired students are grateful for librarians' assistance but would prefer to use technologies that would reduce their need for help (Mulliken, 2017; Saumure & Given, 2004). Special circumstances, such as the pandemic, may heighten students' appreciation for the affective dimension of interactions with librarians. For example, in

Scoulas' (2021) survey text responses, a Latina student states that she "feel[s] like librarians try their best efforts to help students succeed by going out of their way to help and make sure that we are okay" (p. 6).

Lupien's (2007) study of Canadian LGBTQ+ students' library experiences implies that friendly, "non-judgmental" (p. 142) interactions increase student comfort. This, however, does not replace deeper knowledge about LGBTQ+-related topics, which 76% (p. 143) of survey respondents said would increase their willingness to ask for help. Indeed, cultural competence may be critical for students to feel that librarians understand their needs. In Melançon and Goebel's (2016) study of Indigenous Canadian students at the University of Alberta, librarians developed expertise, then communicated their support to students through culturally sensitive emails and one-on-one meetings. Subsequently, 80% of survey respondents agreed that this had positively impacted their appraisal of "the library as a comfortable and supportive place of learning" (p. 192). In this vein, Loyer (2017) draws on indigenous perspectives to advocate for librarians caring holistically about students' "emotional, physical, and spiritual health" (p. 153) in their research instruction.

Frame Three: Spatial Belonging

The reviewed studies imply that equity-seeking student groups vary in their experiences of spatial belonging depending on design, facilities, policies, and staffing. For Native American and Latinx students, barriers to spatial belonging include the intimidation of large, Eurocentric monumental library structures, non-supportive interactions with culturally unfamiliar librarians and library staff, and insufficient instruction on the use of physical library space and resources (Green, 2012; Lee, 2001; Long, 2011; Neurohr & Bailey, 2016). In addition, student parents and students with disabilities may be limited to particular spaces or may feel unwelcome in libraries

(Seale et al., 2010; Scott & Varner, 2020). On the other hand, studies imply that for student parents with concurrent childcare and students with ASD, physically separated study carrels may provide a quiet respite and a location for place belongingness (Anderson, 2018; Chodock, 2020; Regalado & Smale, 2015). In addition, studies of family-friendly library spaces imply that parenting students may develop a spatial sense of belonging in those spaces designed to address their needs (Barnes, 2017; Godfrey et al., 2017; Graff et al., 2019; Moore et al., 2020).

Intimidation. For students from non-URM backgrounds, large, monumental libraries may convey that they are members of the university community (Temple, 2009), while for students from marginalized backgrounds, they may convey exclusion from that community. In Neurohr and Bailey's (2016) study of Native American students' library use at the University of Oklahoma, a participant states, "When I think of a[n academic] library I think of something very institutional and educational, something that can be a bit intimidating especially for someone of a minority. You think, 'Oh well, I don't really belong here'" (p. 65). As this statement illustrates, for many Latinx and Native American students, academic libraries' size, complexity, and impersonal atmosphere can be intimidating. "Fear," "confusion," and being "overwhelmed" are words used to describe initial academic library experiences (Lee, 2001, p. 271; Long, 2011, p. 508). This perception may extend to library aesthetics, with displays, artwork, and interior designs conveying Eurocentrism (Brook et al., 2015). This is contrasted, for many Latinx students, with positive experiences they have had at smaller, community focused public libraries. Those are perceived as intimate, friendly places to connect to their neighborhood, see familiar faces, seek help from Spanish speaking staff, and access Spanish language books and magazines (Adkins & Hussey, 2006; Green, 2012; Long, 2011).

Ghettoization. In the case of students with disabilities, there is a history of paternalistic ghettoization. Academic libraries in the United States, in adherence with federal laws, are required to provide equal access to students with physical and learning disabilities (Americans with Disabilities Act Assembly, 2006). In response to this mandate, many have assistive technology for students who require it (Samson, 2011). Researching which services are provided at eight university libraries in the Rocky Mountain region, Samson (2011) found that seven of the eight provide assistive technology. Of these, four provide this technology in a separate room, three requiring permission to use the room. Seale and colleagues (2010) termed this separation of students for use of assistive technology, "ghettoization." In this study, a library worker in a focus group describes the dynamic this way, "Only the students with the password can 'get on,' but if you think about it, people are looking at you knowing that you have special technology. It makes you reluctant to use them. They think 'Why should you get it – just because you are dyslexic?'" (p. 455). As Seale and colleagues (2010) described, students in this focus group had mixed views on whether being secluded in a special room involved being stigmatized or if it facilitated community building. Despite the potential benefit of having a separate room for assistive technology, Samson (2011) recommends that all modifications for students with disabilities, whether software or special furniture, be installed on all devices or, if that is not feasible, distributed evenly throughout the library. Hill's (2021) analysis of Australian, Canadian, and United States' national library organization policies concerning individuals with disabilities found that only the Australian Library and Information Association (2019) recognizes this problem, stating, "supportive services, areas, and equipment which are separate can create feelings of difference and exclusion."

In addition to the physical location of assistive technology, students with disabilities may be separated from other students. Pionke and colleagues (2019), based on a qualitative study of students with autism spectrum disorder (ASD) at Eastern Illinois University, found that some students did not like being required to sit together with their cohort in a designated area. One student stated, “I have to work around people that I don’t like and that is just kind of inherently not fun” (p. 225).

Space for Families. Most studies concerned with student parents’ experiences in academic libraries assess the impact of established family-friendly spaces (Barnes, 2017; Godfrey et al., 2017; Graff et al., 2019; Moore et al., 2020). However, such spaces are rare. Out of the 80 libraries at the largest research universities whose policies Keyes (2017) examined, eight took active measures to provide spaces so that students who are parents could bring their children with them. While many of these libraries potentially have space to create facilities for student parents, under-resourced libraries generally do not. For example, Moore and colleagues (2020) advise large institutions to create a room, with at least 450 square feet, with multiple types of furniture, open and closed areas for different types of play, and access to technology. Indicative of the capabilities of well-resourced libraries, Paustenbaugh and Belliston (2018) describe how, at Brigham Young University, they asked focus group participants to “visualize a space the size of one half of a basketball court” (p. 3) to help design an over 3000 square feet family friendly space.

Favorite Places. Places to study alone or quietly are singled out as students’ favorite library places in several studies. Research suggests that this is the case for many Latinx and African American students, Students of Color, and students with ASD. Asher and colleagues (2009), surveyed Generation 1.5 students, a predominately Latinx group, at California State

University, Bakersfield and found that tied for the highest rated library use was “find a place to study alone” (p. 265). Concerning Black and African American students, Folk and Overbey (2019) found that, “many noted that they liked how quiet the libraries were, a quality that other campus spaces did not offer, as well as comfortable seating options” (p. 380). Regalado and Smale (2015) note that for students in the CUNY system, a federally designated Minority Serving Institution (MSI), quiet solo study is the most popular option. A quote from a student in Bronx Community College suggests why this is the case. They state, “Because school is quiet, while I have family at home. So, you know, everyone’s watching TV, there are kids running around, so I really need the quiet” (p. 905). Similar reasons for using library quiet spaces are conveyed by Long (2011), finding that Latinx students describe using the library as a “shelter” to get away from the distractions of their living situations (p. 509) and Andrade (2018), who summarizes Latinx transfer student reasons for quiet library study as “to escape…and rest” (p. 360). In Anderson’s (2018) qualitative study of students with ASD’s online communication, they found students seek quiet, independent study in the library as a way to “get away” or “hide out” from social and sensory challenges of being a college student, to the point where several students said that the library is like a “second home” (p. 651).

Recommendations: Towards an Equity-Centered Paradigm for Academic Libraries

The following design, policy, and practice recommendations, based on this review's findings, constitute an equity-centered paradigm for academic library spaces. Building on Bennett's (2009) heuristic of reading, book, and learning-focused paradigms, this paradigm integrates an approach to academic libraries' role in higher education institutions grounded in the experiences of students in equity-seeking communities. The reviewed studies suggest that the difference between cultural exclusion and a sense of belonging experienced in academic libraries may be connected to the cultural relevance of library design, physical and cultural resources, staff cultural familiarity, and interpersonal communication practices.

Participatory Library Design

Through using a participatory design process, as detailed by Young and Brownotter (2018), equity-seeking communities would contribute as equals with library staff when developing or renovating physical library spaces. The reviewed studies suggest that a "scholarly gravitas" ethos based in White, male, able-bodied, heterosexual students' experiences and expectations continues to be the norm (Brook et al., 2015; Foster, 2013, Moreau, 2016). Equity-seeking students who do not conform to this norm are sequestered in separate spaces and may feel ostracized (Godfrey et al., 2017; Scott & Varner, 2020, Seale et al., 2010). Including such students in library design may lead to the development of libraries that are culturally responsive, inclusive, and accessible to these communities.

Information Justice

By applying Mathiesen's (2015) informational justice framework to develop physical collections, library contents may better reflect and serve an increasingly diverse community of library users. Students in equity-seeking communities describe experiencing Eurocentric, racist

collections that present a barrier to use, both in organization and content (Aase, 2017; Adkins & Hussey, 2006; Stewart & Kendrick, 2019). Mathiesen's (2015) approach addresses these issues by removing organizational barriers to accessing information and ensuring that equity-seeking communities have opportunities to contribute to library collections culturally relevant content that depicts their communities more accurately.

Collocation of Cultural Resources

A component of this paradigm is that culturally responsive holistic support resources be located in or adjacent to academic libraries. Andrade's (2018) study of Latinx transfer students suggests that such collocation supports students being comfortable and by extension, developing a sense of belonging. While academic libraries have collocated technological and tutoring-related resources for decades (MacWhinnie, 2003; Oliveira, 2018), collocating cultural resources has been less prevalent (Love, 2007). In partnering with equity-seeking community organizations, academic libraries should be mindful of and address power disparities, which may prevent these groups from fully articulating their perspective on the placement and use of cultural resources, during planning and implementation (Bang et al., 2016).

Culturally Familiar Workforce

This is based on the principle that libraries should develop workforces reflecting the communities they serve. Following Brook and colleagues' (2015) roadmap for antiracist hiring practices, changes to all phases of training, hiring, and career advancement are warranted to achieve this goal. Culturally familiar librarians and library staff are perceived as more supportive and attuned to the needs of students in URM communities (Folk & Overbey, 2019; Lee, 2001). Moreover, the presence of culturally familiar individuals on college campuses is strongly correlated (r=.61) to a sense of belonging (Museus et al., 2017, p. 206).

Social Justice in Interpersonal Interactions

Singh and colleagues' (2020) social justice competencies for counseling provides a framework for librarians and library staff to commit to antiracism, decolonization, and social justice in interactions with students. This framework would replace neutrality, which may be experienced as marginalizing, racially charged, or indifferent to student needs (Elteto et al., 2008; Lee, 2001; Saar & Arthur-Okor, 2013). For the predominantly White library workforce, cultural competence training may be superficial and insufficient to address the cultural and racial gulf between themselves and more diverse student communities (Brook et al., 2015; Overall, 2009). Instead, Melançon and Goebel's (2016) description of a deep, sustained learning process, which engages with the community being served, is a model that may be adapted to the needs of the specific library community.

Conclusion

The reviewed studies suggest that the equity gap between the library experiences of students in URM communities and those in ORM communities may be bridged by changes in policies, practices, and design. Forefronting student-focused research in equity-seeking communities amplifies student voices, grounding a detailed assessment of library services from an equity perspective. This, in turn, provides guidance for transformational change to address the needs of an increasingly diverse higher education student community.

Future Research

Future research could describe how students experience libraries that have implemented equity-focused changes such as those suggested in this review. In addition, it could focus on the experiences of students in specific equity-seeking groups in order to develop nuanced and targeted recommendations responsive to each community's needs. Finally, this sense of

belonging-based approach could be applied to other aspects of students' higher education experiences, such as residential services, athletics, and student life.

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"A Similar Feeling to Home": Diverse Students' Experiences in an Academic Library

Higher education graduation rates are cause for concern as underrepresented minority (URM) students do not earn college degrees at the same rate as their non-URM peers, raising equity questions about social and cultural biases embedded in postsecondary institutions (Cahalan et al., 2022). The increasing diversity of college students nationwide adds urgency to the problem. Without effective reforms, the college completion gap is likely to widen. To address these challenges, higher education researchers have focused on finding supports to improve the retention of students in URM communities. The research to improve remediation, for example, has grown significantly over the last two decades. Another strand of scholarship highlights and critiques the deficit thinking about students that undergirds program and policy development. This literature argues the need to value the knowledge assets of diverse students.

Yet beyond the purview of higher education policy journals, information studies suggests that academic libraries are an underutilized resource. In particular, the library's physical space affords students with opportunities for communal study, reflection, collaboration, and social learning (Choy & Goh, 2016; Grayton, 2008), each of which are shown to increase a sense of belonging and student success. A limitation of this work, however, is that the impacts of libraries on students does not consider the library's institutional context (Brook et al., 2015; De Jesus, 2014). Accordingly, the present study fills a gap in the literature on student experiences of academic libraries.

The paper's empiricism focuses explicitly on how students experience the physical spaces of an academic library at an institution referred to pseudonymously as Southwestern University (SWU), in this paper. SWU is an urban Minority Serving Institution (MSI) in the American Southwest. The question that drives this inquiry is: "How do students physically

experience academic library space?" To answer this question, the paper employs sense of belonging as an interpretive framework.

The paper proceeds as follows. This section has suggested that research in the field of information sciences can offer a fresh perspective on academic libraries as a potential retention resource. In the next section, it reviews the research on academic library use with an eye toward understanding the social impacts of the library's physical environment. The review also explains the cultural and spatial dimensions of a sense of belonging. The third section identifies the study's research design and methods. The fourth section presents data that describe how students experience the library's physical space. The paper closes with a discussion of the data's policy, practice, and future research implications.

Literature Review

The literature informing this study suggests that student experiences of academic libraries vary based on where they choose to study and the sense of belonging that the chosen physical space cultivates. Sense of belonging depends on the intersection of factors including the physical environment and the student's background. For example, does the student choose a space that affords quiet, individual study, communal study, or social learning (Bennett, 2009; Oliveira, 2018)? And is the student from an URM or a non-URM community (Bonnet & McAlexander, 2012; Mulliken, 2017)? In addition, many typical academic library experiences have been associated with developing a sense of belonging (Broughton, 2019; Museus et al., 2017; Strayhorn, 2008).

Conventional Library Spaces

What follows is a review of the literature on library use organized to reflect the designated purposes of conventional library spaces. A key finding of the review is that, across these different spaces, the research demonstrates that students from URM communities experience library spaces differently than students with non-URM backgrounds.

In general, prior findings suggest that students experience library aesthetics as indicative of a welcoming home-like atmosphere (Mehta & Cox, 2021; Temple, 2009). Library research that focuses on diverse populations offers additional nuance. Students of Color, for example, feel welcomed and comfortable in academic library spaces and use them at higher rates than White students (Elteto et al., 2008; Whitmire, 2003). Studies also suggest that social learning is an important aspect of library use by Latinx students (Fullmer & Fiedler, 2021; Haras et al., 2008).

This welcoming feeling, however, is not without caveats. For many Latinx and Native American students, academic libraries' size, complexity, and impersonal atmosphere can be

intimidating. “Fear,” “confusion,” and being “overwhelmed” are words used to describe initial academic library experiences (Lee, 2001, p. 271; Long, 2011, p. 508). Students with disabilities or with young children may have distinct, negative library experiences. Seale and colleagues (2010), in a qualitative study which describes students use of library housed assistive technology and Pionke and colleagues’ (2019) research on students with autism spectrum disorder’s library use suggest spatial segregation may be experienced as patronizing or “ghettoization” (Seale et al., 2010, p. 455). Barnes (2016) and Scott and Varner’s (2020) studies of students with young children found that students feel excluded, which has a negative impact on their ability to complete academic work.

Reading Rooms

Reading rooms are historically spaces where library patrons can access and read physical items (Bennett, 2009). These rooms are often large, open spaces where talking is discouraged (Grayton, 2008). Prior studies of reading rooms emphasize their use as communal study spaces where students study independently among peers (Antell & Engel, 2006). Studies of library use at predominantly white institutions (PWI) suggest that students who study in reading rooms feel a sense of camaraderie with the other people in the room that offsets the isolation one might feel if alone. For example, based on observing students in a reading room-type space, Crook and Mitchell (2012) suggest that students prefer to see others where they are not close enough to socialize, inferring that there is an “importance of simply ‘being there’ as participants in a studying community” (p. 136). Likewise, Neurohr and Bailey (2017), in a qualitative study of first-generation students, found that observing peers’ study behaviors in communal academic library spaces provides motivation to complete academic work. How students choose communal study spaces may have a racialized component, as suggested by Broughton’s (2019) finding that

minoritized students' study spaces are chosen in consideration of where they can "see someone who looks like me" (p. 4).

Book Collections

In sections with physical book collections, libraries often place comfortable seating for independent study between shelving units (Bennett, 2009). These areas provide places for quiet focus, where students can reflect and synthesize ideas (Savin-Baden, 2008). Such spaces may be important for improving student academic achievement, as suggested by Stemmer and Mahan's (2016) quantitative study at a PWI university. Moreover, the relative privacy of hidden places between shelving units afford students an opportunity to create a home-like atmosphere, indicated in libraries by spreading out possessions, leaving valuables unattended, or eating a meal (Dunne, 2016; Mehta & Cox, 2021). For students in URM communities especially, these quiet places may become favorite places that provide a calm retreat away from family and work responsibilities (Andrade, 2018; Regalado & Smale, 2015). In addition, Schaller (2011) describes how spaces between shelving units may serve as LGBTQ+ community safe spaces, where students can privately and safely explore materials relevant to understanding their identities.

Windows

Access to windows stands out as a frequent element in students' preferred study locations. This resonates with Felsten (2009) and Ko and colleagues (2020) finding that views of natural landscapes improve focus and attention. The literature suggests that the natural light and fresh air afforded by access to windows are among the characteristics of students' favorite places (Briden & George, 2013; Neurohr & Bailey, 2017). Moreover, Cox (2018) and Banning and

colleagues (2010) found that natural landscape views and proximity to sunlight reduce stress and boost students' mood.

Repurposed Spaces

The transition to online resources, which has involved removing books from sections of libraries, has provided the opportunity to repurpose spaces for social learning (Fallin, 2016; Nitecki & Simpson, 2016; O'Kelly et al., 2017). Collaboration occurring in these areas has been associated with Latinx students, including Long's (2011) description of students working on group projects and Green's (2012) observation of peer mentoring. A feature of these spaces, which Bersani and colleagues (2013) describe, is that students like the flexibility to customize their study environment. Their aesthetic, as Head (2016) found, is often that of a campus living room, but with plenty of places for students to plug in their devices (Bailin, 2011). Another trend has been to collocate services in these areas. Often known as learning commons, they may include technical and media resources, or may be identity-focused, such as Latina/o Resource Centers in some California public university libraries (Andrade, 2018; Oliveira, 2018).

Group Study Rooms

Group study rooms facilitate social learning and community building through the privacy and focus enabled by closing the door (Chodock, 2020; May & Swabey, 2015). Applegate (2009) found that one reason students prefer these rooms is that they can listen to their study group without having to hear other students' conversations. For those who need a quiet environment, Neurohr and Bailey (2017) found that individual students will use these rooms as places with less distractions. As suggested by the ability to focus in these spaces, Massengale and colleagues (2016) and Stemmer and Mahan (2016) found that use of these rooms is associated with improved academic success outcomes.

Coffee Shops

Coffee shops provide students fuel for studying and space where there is a warmth that may be absent in more sterile library areas (Waxman et al., 2007). Through them, libraries have integrated environments that appeal to students who prefer to study amidst background noise and activity (Banning et al., 2010). Hunter and Cox's (2014) mixed methods study on library-housed coffee shops found that students use these spaces to engage in informal learning and socializing. Similarly, Deng and colleagues' (2019) quantitative study suggests that students prefer them for casual conversations, taking breaks, and relaxing. To reinforce the feeling of going somewhere different while staying within a library, making the coffee shop area distinct aesthetically and physically is an aspect Mehta and Cox (2021) suggest is important in order to feel, as one student stated, "like I'm having a break" (p. 16).

MSI Academic Libraries

While there is a growing body of studies on how students from URM communities experience academic libraries, the literature remains thin. Among this scholarship, several studies have been conducted at Minority Serving Institution (MSI) libraries. Regalado and Smale's (2015) qualitative study of urban community colleges and four year institutions provides an emic perspective on libraries' role as a quiet refuge in commuter students' lives. Scoulas' (2021) quantitative study on student perceptions of an MSI university library elucidates the relationship between sense of belonging and library collections. Last, Fullmer and Fiedler's (2021) mixed methods study of an MSI university library forefronts Latinx students' experiences, suggesting the complexity of the roles of the library in URM students' lives. This study builds on these studies through offering additional findings on student experiences at an

MSI. It contributes a holistic description of how university academic library spaces support URM students' academic success.

Conceptual Framework

Sense of Belonging is a conceptual framework that assumes that when students, especially those from URM communities, feel welcomed, comfortable and connected to campus communities and places, they are more likely to achieve academically and persist. (Museus, 2014; Strayhorn, 2019). This study uses this framework to explore the cultural and spatial dimensions of academic libraries (Antonsich, 2010; Scoulas, 2021). The framework differentiates two types of belonging: psychological and cultural, which are explained for their relevance to the present paper below.

Psychological Sense of Belonging

A psychological sense of belonging is associated with emotions that either contribute to or hinder developing a college-going identity (Hurtado & Carter, 1997). This study applies Strayhorn's (2019) higher education-based sense of belonging definition, which focuses on its cognitive, affective, and behavioral aspects. Strayhorn states that a sense of belonging is "a cognitive evaluation (i.e., 'I think these are my people') that typically leads to an affective response (i.e., consequently, one feels good) and oftentimes behavioral manifestations (i.e., does things like build personal connections or join clubs)" (p. 79). This study hypothesizes that students make the cognitive determination that they belong while in library spaces based on experiences of academic-related accomplishments (e.g., completing an assignment, performing well on a test), that affective responses take the form of identification with library spaces and emotional connection to the community of library users, and behavioral manifestations may include becoming a regular library user who engages in studying in physical library spaces.

Cultural Belonging

Cultural belonging refers to the role that campus environments have in fostering student sense of belonging. An emphasis on cultural aspects of a sense of belonging stems from critiques of Tinto's (2012) student departure theory that contend that it fails to account for diverse students' higher education experiences (Guiffrida, 2006; Tierney, 1992). Specifically, these critiques suggest that Tinto's theory requires URM students to conform to Eurocentric institutional norms to be successful (Museus & Maramba, 2011; Samura, 2016a). With the Culturally Engaging Campus Environments (CECE) model, Museus (2014) presents a framework for how institutions can support academic and social integration, partially relieving URM students of additional effort. Drawing from the CECE model, this study includes two of its nine indicators, collectivist cultural orientations, which is "characterized by teamwork and pursuit of mutual success" ("The CECE model," 2017) and cultural familiarity, defined as students' "opportunities to physically connect with faculty, staff, and peers with whom they share common backgrounds" (Museus, 2014, p. 210). Both have strong statistically significant correlations with sense of belonging (Museus et al., 2017).

Spatial Sense of Belonging. Spatial belonging consists of emotional connections to specific places, which are often associated with familiarity, home-like qualities, and comfort (Antonsich, 2010; Scannell & Gifford, 2010). Familiarity is emphasized by Hurtado and Carter (1997), who note that Latinx students feel more at home when they maintain ties to their cultural community. For Native American students, Tachine and colleagues (2017) found that community spaces on college campuses foster a sense of belonging through supportive familiar experiences. In libraries, Scoulas (2021) suggests that students may experience familiarity through seeing their identities represented in library materials. The literature suggests that

comfort may be physical comfort for students with non-URM backgrounds and academic community relationship-focused for students from URM communities (Muñoz & Espino, 2017; Vaccaro & Newman, 2016).

Collectivism. From the literature it can be inferred that academic libraries' physical spaces foster a sense of belonging through collectivism supported in social learning environments. This is salient at MSI academic libraries as collectivism, perceiving oneself primarily to be part of a community, is prevalent in URM student communities (Triandis et. al., 1988). In addition to the CECE model's association of collectivism with a sense of belonging (Museus et al., 2017), Hoffman and colleagues' (2002) study of first-year students and Kember and Leung's (2004) study of part-time students suggest that developing supportive, academic-focused, student networks contribute to developing a sense of belonging. Moreover, activities of these networks, such as Latinx students discussing assignments (Hurtado & Carter, 1997) and studying with a diverse group of students for African American men (Strayhorn, 2008), Filipino students (Maramba & Museus, 2013), Latinx students (Johnson et al., 2007), and among both non-URM and URM students (Locks et al., 2008) has been associated with developing a sense of belonging.

Cultural Familiarity. Another way academic libraries' physical spaces foster sense of belonging is through cultural familiarity, providing communal spaces, which may be used as counterspaces and safe spaces, where students can be among people with similar identities. Based on observing that Black students who entered the library with mixed race groups appeared to be focused on academic work, but when entering with Black students appeared to be together "for companionship" (Whitmire, 2006, p. 65), Whitmire (2006) inferred that they were engaged in creating a counterspace. Furthermore, Kuh and Gonyea (2003), based on national survey data,

speculate that an academic library serves as a “safe haven" supporting “collaboration with peers of the same racial and ethnic background” (p. 267).

Methods

This exploratory qualitative case study focuses on the academic library experiences of students at an urban research university (Bryman, 2012). Qualitative case study, a tradition used to systematically analyze and describe one or more bounded cases with defined characteristics, was chosen in order to holistically describe students' experiences. Academic libraries were chosen due to their capacity to facilitate research, study, and informal learning, which are all connected to academic success. This distinguishes them from other campus spaces in their potential to improve persistence and graduation rates (Soria et al., 2013, 2017).

Site

SWU Library was chosen as a site for this case study because while physical libraries have a documented relationship with developing a sense of belonging (Ahn & Davis, 2020; Scoulas, 2021), scant attention has been given to how experiences in their physical spaces may foster this result. Moreover, SWU, as a majority-minority Hispanic Serving Institution (HSI), and Asian American Native American Pacific Islander Serving Institution (AANAPISI), provides a laboratory to better understand the dynamics of developing a sense of belonging in highly diverse universities (List, n.d.).

SWU Library is a campus symbol of the institution's focus on research and learning. At over 300,000 square feet, when built it eclipsed the size of an iconic campus sports facility to suggest the preeminence of learning over non-academic pursuits. Upon entering the library there is a 110 foot, five floor atrium, with skylights at the top, diffusing light to the angular glass and metal of the library spaces surrounding a central plaza with computer desks. To the left is the café, which is busy with students talking and studying together. The smell of its coffee drinks rise through the atrium to every floor.

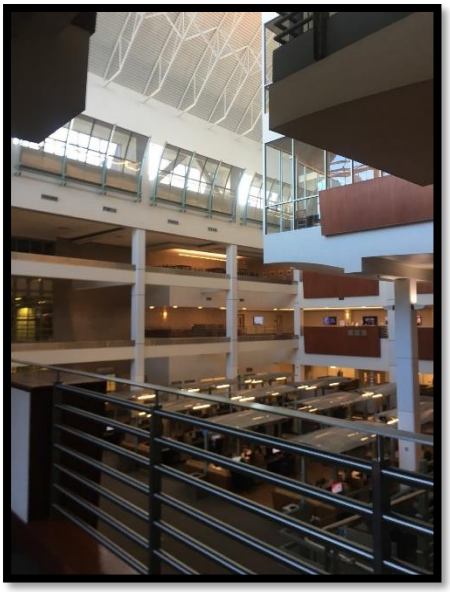

Figure 1: *Atrium*

As a popular place to study and socialize, as students become frequent library users, they find their favorite spots. For some, it is a quick stop to print something or check email on the first floor. Others use social learning spaces, featuring wooden tables, couches, or diner-like booths, on the second and fifth floors. These also include group study rooms or collaborative learning sections where they frequently meet with their classmates to prepare for a test or complete an assignment. For students who need quiet, the silent sections of the third and fourth floors are where they have the built-in desk, table, or study carrel, that is their go-to place to get their work done.

Sample

Participant recruitment was undertaken through criterion sampling via a demographic survey deployed through a flier (see Appendix A). This was initially posted in library spaces, but due to the pandemic environment, had very few responses. After two weeks, it was deployed

through SWU's online news and advertisement service for students. This was more successful. Both methods were augmented by snowball sampling from existing participants (Bryman, 2012).

Several survey questions served as eligibility criteria for participation. To establish familiarity with the spaces and institution, these included being a regular library user who is at least part-time and at least in their second semester (Antonsich, 2010). Due to the library being shuttered for five months including over half of the spring 2020 semester, regular library use had to have begun pre-pandemic, i.e., in the fall 2019 or before. Finally, participation was limited to undergraduate students and due to legal requirements, the minimum age for participation was 18 (See Appendix F). Beyond minimal participation criteria, ranges for all of the qualifying questions were recorded, including age, frequency of library use, and number of semesters completed. Additional questions concerning race and ethnicity, gender, gender identity and sexual orientation, and parental, first-generation college student, and disability statuses were included, as indicated by studies suggesting that students with different life experiences experience academic libraries differently (Folk & Overbey, 2019; Seale et al., 2010) (See Appendix G). Despite the challenges of recruiting in the pandemic environment, 11 undergraduate students participated in the study at this site. This was a highly diverse group, 73% of whom are Students of Color and 73% first-generation college students (See Table 4).

Data Collection

Data collection for this study occurred during the fall of 2020 after a delay of five months while the site was shuttered due to the pandemic. Modifications made based on pandemic circumstances include that participants were required to have been regular library users for a full semester before the pandemic and interview questions focused on pre-pandemic instead of

current experiences. Last, interviews were conducted via Zoom instead of in-person, as initially planned.

Table 4

Participant Demographics

Pseudonym	Gender	Age	Race/Ethnicity	1st gen.	library use
Angela	Female	18-24	Hawaiian/Pacific Islander & Asian/Asian American	Yes	2+/day
Camila	Female	18-24	Hawaiian/Pacific Islander & Asian/Asian American	No	2+/day
Devin	Male	25-29	White/European	Yes	1-3/week
Emma	Female	18-24	Asian/Asian American & White/European	No	3+/week
Frank	Male	18-24	Latinx/Hispanic	Yes	2+/day
Gabriela	Female	18-24	Latinx/Hispanic	Yes	3+/week
Lauren	Female	18-24	White/European	No	3+/week
Liliana	Female	18-24	Latinx/Hispanic	Yes	1-3/week
Mariah	Female	18-24	Asian/Asian American	Yes	2+/day
S	Female	18-24	White/European	Yes	2+/day
Sierra	Female	18-24	Latinx/Hispanic	Yes	3+/week

In order to develop a holistic picture of student experiences and a broad understanding of the site, data from many sources have been collected in a primary and a triangulation dataset (Stake, 2008). Three types of data constitute the primary data set: naturalistic observations conducted over four hours, 56 participant-generated reflexive photographs, and 11 45-minute to one-hour semi-structured interviews.

The triangulation dataset consisted of five one-hour informant interviews with librarians, library staff, and administrators with direct interactions with students or space assessment and planning responsibilities; 267 space planning-related internal documents, newspaper and magazine articles about the site, and publicly available sources, such as webpages. During the five-month SWU shutdown, the triangulation dataset was collected and coded. It provided inductive codes, such as "safety" and "sleep policy" that were later supported by the content of the participant interviews. Primary dataset collection commenced once the sites reopened post-shutdown in August 2020 and was completed in December 2020.

Observations

Three weeks into the semester, timed so as to give students an opportunity to return to campus after the pandemic-caused disruption, four hours of unobtrusive observations were conducted at each site. The two protocols utilized were grand tour observations (see Appendix C) for general observations of the people, things, and activities in the spaces (Spradley, 1980) and seating sweeps (see Appendix D), modeled on Given and Leckie's (2003) application of this technique to library spaces. The observations focused on actions indicative of a sense of belonging, including appearing to feel comfortable, making a home-like environment, and seeking help in ways that may reflect community membership (Andrade, 2018; Bodaghi et al., 2016; Mehta & Cox, 2021).

Images

Reflexive photography, introduced to participants after completion of the informed consent and a demographic survey, provided a way to communicate personally significant experiences of and in library spaces in the context of the photo-elicitation interviews (Clark-Ibáñez, 2004; Harper, 1986) (see Appendix H). Drawing on Pearsall and colleagues' (2015)

finding that visual methods may indicate belonging locations, this study's photography prompts integrated sense of belonging-related experiences, such as feeling cared about and feeling supported (Andrade, 2018; Bodaghi et al., 2016; Mehta & Cox, 2021; Whitmire, 2006). Participants were asked to take five pictures of places in SWU Library connected to one or more of these prompts: 1) places you like to go when you have free time, 2) places you feel cared about, 3) places you feel supported, 4) places you feel comfortable, 5) places you feel at home, 6) places where you can be yourself, and 7) favorite places. A total of 56 photographs were taken by SWU participants.

Photo-Elicitation Interviews

The goal of this interview method is to use participant generated photographs as a vehicle to give participants the opportunity to express what library experiences have been meaningful to them. In other words, the data used in this dissertation project is what the participants said about the photographs in their interviews, not an analysis of the photographs' visual content (Kortegast et al., 2019; Lapenta, 2011).

For the interviews, a "main branches of a tree" protocol, with the branches corresponding to the reflexive photography categories (Rubin & Rubin, 2012), was employed, with questions modified from Wang (1999) and Harper's (2012) photovoice and photo elicitation interview protocols (see Appendix E). Participant-generated visual content dictated each interview's flow and particular topics. Specifically, most sections of the interview began with, "Are any of pictures of places in the SWU Library where you feel…" followed by 1) comfortable, 2) cared about, 3) supported, 4) at home, and 5) you can be yourself. After this initial question, follow-up questions asked the participant to discuss the photograph in detail, including its relation to the specific category of feeling. This culminated in asking the participant to identify and discuss any

patterns that they or the interviewer noticed during the interview, and finally to reflect on whether any of the photographs relate to a sense of belonging or community.

Data Analysis

Data collection and data analysis occurred concurrently, applying the constant comparative method (Glaser, 1965). In vivo codes, generated from all data as they were gathered and analyzed, were integrated with previously compiled deductive codes to develop a flexible code structure (Bradley et al., 2007; Ryan & Bernard, 2003; Saldaña, 2016). Conceptual deductive codes, including "at homeness," "restorative places," and "conduciveness to study" helped organize data patterns when parallels to published studies were noted (Antell & Engell, 2006; Banning et al., 2010; Mehta & Cox, 2021). Analytic memos, written throughout data collection and analysis, reflect the progression from code clusters to themes (Saldaña, 2016; Yin, 2018).

Code clusters conglomerated related code patterns. The most significant clusters for this study, which were used for data presentation, "diversity/everything you need" (293 coded sections), and "supportive/caring/welcoming/open," (180 coded sections) constitute the majority of the 693 coded sections. The first of these code clusters, "diversity/everything you need," includes codes for individual library floors and sections of the floors. By analyzing how participants discussed these locations, it became clear that homelike imagery was a common element in describing their experiences. Moreover, the experiences in different locations were connected to different types of homelike experiences. This insight was critical to the emergence of the concept of SWU library as rooms in one's home. In addition, the second cluster, "supportive/caring/welcoming/open," included affective experiences, such as being cared about and communal experiences such as eating and drinking, related to feeling at home (Mehta &

Cox, 2021). Connecting these experiences to library locations provided additional support for the theme of the library as home.

Trustworthiness

This study employed several practices to improve trustworthiness (Tierney & Clemens, 2011). Member checking, consisting of providing interviewees transcripts for verification, was conducted for all primary and triangulation dataset participants (Hamilton & Corbett-Whittier, 2013). At that time, they were also given the opportunity to choose their pseudonyms. Coding software, MAXQDA, facilitated quantifying code instants, which aided in deciphering patterns. The previously described triangulation dataset was used to compare findings and patterns with those of the primary dataset. Lastly, I engaged in reflexivity to maintain awareness of his positionality and potential implicit biases as a cisgender, White, heterosexual academic librarian with perceived and actual power relative to student participants (Massoud, 2022). See this dissertation's introduction for more information on positionality.

Limitations

There are several significant limitations to this case study. The first is inherent in the criteria for participation, which was augmented by the pandemic environment in which data was collected. Specifically, participants had to be both frequent physical library users, pre-pandemic and, connected enough to SWU Library, at the height of the pandemic, to consent to participate in this study. While this intentionally excluded anyone who was not a frequent library user, it begs the question, which is beyond the scope of this study, of which student communities may have felt excluded, unwelcomed, or unsafe in SWU Library, and therefore would not become frequent users. Second, according to IPEDS data (n.d.), 9% of SWU students identify as Black or African American. However, of the 11 participants in the study, none identified as Black or

African American. We cannot know why there were no participants from this community and also why there were no participants who identified as members of the LGBTQ+ community. Their voices are absent from the data, which represents a limitation in this study. Third, this study was designed to elicit from participants their experiences related to a sense of belonging. That is, it was not designed to elicit experiences related to alienation. It is therefore unsurprising that the data was predominately about positive experiences. The result of these decisions is that the voices of students who may have felt alienated by prior library experiences or unwelcomed in SWU Library, were not represented in the data.

Data Presentation

At SWU, students feel at home in their Library. It is a place of conversations, with a kitchen to fuel up, a bedroom for rest, and a desk in the bedroom to get stuff done. Some students find home-like settings are those with ambient background noise and a variety of collaborative spaces that evoke family rooms. Comforts of home, such as drinking coffee and sharing meals, are part of students' experiences in library spaces. When they need to focus, students find bedroom-like spaces with quiet, privacy, and views of nature and the city.

In the House: "Where I Can Be Comfortable"

Various experiences in the library evoke home. These include the familiar sights upon entering the space and hearing background noise, which reminds students of family gatherings, is another. For some, enclosed spaces provide warm, comfortable environments like home.

Library memories: "Familiar feeling." The experience of entering the library evokes memories for Devin and Gabriela. Before entering, Devin "would always lock [his bike] up like in the same exact spot," reminding him of the "very familiar feeling going up to the library." Near the entrance, Gabriela "check[s] the bulletin boards" in the same way as her mother checked "for activities to take me when I was a child."

Sound level: "My house is never quiet." Hearing background noise feels like home for Frank, Angela, and Devin. Frank shares, "even if the house is quiet, you still hear the television in the background. You still hear the fans in the background. You might hear some kids playing in the front street. My house is never quiet." That's why, in the library, "ambient sound is so feeling natural for me in the sense that I feel at home. Because other people are still making noise, so when I make noise, it feels okay for me to do it." Like Frank, Angela "grew up in a household [with] non-stop noise all day." She states, "Having no noise to me is kind of weird. I

can't study. I can't do anything." In the library, "We want to be in an area that everyone's talking, but you can't really hear what they're saying…we'll talk casually, but we're not going to have a full conversation. We're just going to have some background noise while we do the assignment." Devin concurs, stating, "I get my work done better hearing the ambient conversations of other people working around me, and especially when meeting up with people for collaborative group projects."

Open areas: "Sitting down everywhere and talking." SWU Library's open areas provide spaces for many groups to socialize and study. Where students are "sitting down everywhere and talking," "it feels okay" for Sierra to talk openly. Reflecting on an open area with large tables on the second floor, Gabriela describes how "these spaces hold really cool memories for me, in regards to my college experience." It's a space "where I could just be myself because it was 25% studying time and 75% socializing with friends." The fifth floor has an open area, with panoramic window views and abundant natural light, where many students engage in social learning. Mariah prefers to study there because, as she describes, "You see at the top how the light kind of shines through? It gives me more like a naturalistic feeling. It's more bright compared to any other floor." Angela and Camila, both from the same Pacific Island describe how the fifth floor has become like their second home. Camila relates, "Home for me is where I can be comfortable with the people I'm with, where I feel safe and I can be who I am…Fifth floor is like at home, because my friends are in there and we all came from the same place, and we all go through the same stuff." Angela connects this to its social atmosphere, "I just love the fifth floor, because everyone's so casual and they're not so uptight about being quiet or acting a certain way."

Figure 2: *Window View*

Group study spaces: "My group." Enclosed areas facilitate casual interaction, providing a place to work together and get to know each other. As Lauren describes, "the group rooms are a little more isolated from the rest of the library. When you're in them, you know, hey, this is my group that we're with…You have that privacy to study what you guys need to study and go over." Liliana prefers a smaller room, which is for "people who are social, but people who want to be in a closed, safe environment." There she studies alone or with a friend. For S, a space that facilitates interacting with classmates is "the most important part for having people feel like they belong or that they're a part of the community." In an isolated nook, SWU Library provides Mariah "a safe spot to study," which "makes [her] kind of feel like home." In a den-like section, Emma describes how "we're all kind of close together and doing our own thing" in "a nice homey environment."

The Kitchen: "The Smells Just Waft Up Through the Whole Library"

The Coffee Shop near the entrance and spaces with diner-like furniture arrangements encourage students to eat and drink while studying. The smell of coffee permeates the library. Some students gather drinks, bringing them to their meeting places to provide fuel for study

Figure 3: *Coffee Shop*

sessions. Others study in the Coffee Shop, reviewing their work with a sweet beverage in hand. Throughout the library, students eat and drink together while studying or taking a break.

Refueling: "Make sure that our coffee isn't cold." The Coffee Shop serves as a launching off point for group or individual studying. Angela coordinates getting the drinks while a friend helps keep a prized spot. She recalls, "I'd make them sit at the table, make sure all our stuff is there. I'm going to tell them, 'Okay, I'm going to go to The Coffee Shop on the first floor just to make sure that our coffee isn't cold. Sit here, wait for me and I'll go downstairs and buy it for both of us and come back up.'" Frank would get supplies with a classmate, "if we're doing a group project before starting the library, we just go there and then meet someone up after we got our coffee, and then go to whatever the floor is that we're going to." Though Lauren would bring her snacks with her, she would go there with her group, "I do have friends who like to go to Coffee Shop after class and sometimes if I'm with them and I know we're going to study after, I'll be like, 'Okay, I guess I'll get something from Coffee Shop since we're here.'"

The Coffee Shop: "Kind of like the best." The Coffee Shop is also a space where students gather and refuel. As Devin recalls, "I had one class that was real early in the morning. Before quizzes, me and three or four other people would meet in the Coffee Shop. There I always remember being half asleep, getting a cup of coffee there, meeting for that study group." For Mariah, who would study there alone, going there is "a steady for me and it just relaxes me with sweet drinks, especially when it's like during fall semester when it starts to get cold. Imagining like hot chocolate, especially, studying is kind of like the best."

Dining in: "Like I was in a Starbucks." Devin describes how café smells "waft up through the whole library" from its central atrium, traveling to the many spaces designed for social gathering. Reflecting on an area overlooking the café, Liliana recalls, "with Coffee Shop being right there, I felt like I was in a Starbucks." In a second floor area that accommodates larger groups, Sierra states, "we'll come here [and] have lunch because there's bigger tables." In a place where students sit close together on couches, Emma states, "I definitely eat in this area and I see other people eating their lunch while they are watching their video for lecture or whatever." Gabriela has a private spot for a coffee break. She states, "if I'm not working or on the weekends…I'm able to access…that space and…there's also a Keurig in there, so I can make myself a cup of coffee." Not all study participants like to eat and drink in the library. S sometimes drinks with friends, explaining, "I probably wouldn't bring food, because I'm afraid of making a mess, but a drink would be doable." While Camila does not "really eat in the library." Instead of food, talking with friends who "came from the same place…is making me feel at home and less homesick."

My Room: "Like I'm at Home Except Without My Mom"

Students go to specific library spaces, which call to mind bedrooms, when they need to concentrate. For some, what is critical is how they can configure the space to accomplish their goals. For others, privacy is a key consideration. Feeling safe, natural light, and views of the urban landscape set these spaces apart.

Personal study space: "It's less judgmental…it's more private." Devin describes how students who do not have space to themselves in their residence hall or apartment may seek it in the library. He reflects, "You don't have much privacy there…you just really want to shut yourself away in a little room." In their own way, students seek "a little room." S looks for privacy "way in the back in the quiet study…It's almost like dead silence…because usually not a lot of people go in there, and you get that very kind of focused and motivated atmosphere." Lauren likes a place where no one is looking at her because "it's less judgmental…behind all the

Figure 4: *A Quiet Study Area*

book stacks…[and] it's more private." In a quiet area, Angela appreciates that "everyone's there to study so no one's watching me." While there, she will sit on a small footstool, "play the music in my ears and maybe do a little dance while I'm finding my book." Liliana connects her private space to her bedroom: "My room has been my place where I've kind of just closed the door and no one really comes in…So, this is the same way…no one's going to go into a room if there's someone in there." Gabriela takes advantage of the privacy and security of her job's workspace, "I'm able to access that and study in that space and be fine leaving my things there because it's locked."

Figure 5: *Library Desk*

Setting up: "The way I normally would do at home." Lauren's optimal study area lets her spread out. She needs "a table length area of space, so I can still put everything out the way I normally would do at home." Likewise, for Emma, it's about setting everything up to "settle in

wherever I choose to be." To do this, "I'll have everything plugged in and my notebooks out writing" and "my computer setup, everything." Sierra looks for a work area like her home study space. She has "a desk at home that looks almost like this, the shelf on top and the desk. I have that, and when I come here, I almost feel like I'm at home except without my mom being there to tell me things."

Safety: "I might take off my shoes, but I don't think I would nap." SWU students have a range of perspectives on how safe they feel in the library. Gabriela suggests her actions to mitigate risks when she states, "if I'm not working or on the weekends, I have…a locked office with a card…I'm able to access…and be fine leaving my things there because it's locked." Lauren explains how she decides what to leave unattended, stating, "I'll leave my backpack and things there, because I feel like when it's all together, people are less likely to take it, but when you leave your laptop there, just out there with no one near it, it's kind of like an open invitation to go for it." Mariah feels safe in a quiet area, stating, "I would just leave my stuff there and just go get whatever." Sierra, however, would only leave items unattended if she found someone to ask, "Hey, can you watch my stuff for me?"

The level of perceived safety influences willingness to take a nap. Students like Lauren are not comfortable napping there. She states, "I might take off my shoes, but I don't think I would nap." While Mariah likes to "relax and unwind," from past experience she says, "I know the librarians…[will] say you can't take a nap here." While there is a policy against sleeping in the library, Frank describes how determined students will find a way, including using sound proofed podcasting rooms for this unintended purpose. As for himself, he takes naps wherever he feels "most comfy."

Windows: "When I see the nature, I feel at home." Many private study spots are near windows, which provide a view of the natural world and to places where they hope to be after they graduate. For Lauren, the view out the window reminds her of her home study space. She states, "My desk has a window right in front and it just opens up to a lot of trees, lot of landscape, lot of scenery, so after I'm studying, I could look up and I just see it all right there and right in this picture, too." The greenery reminds Angela of her Pacific Island home. She recalls, "When I take a picture of the campus, my friends are like, 'Where are the cactuses?' and I'm like, 'No, look at the nature'…when I see the nature, I feel at home." S appreciates the sunlight, reflecting, "I really enjoy how tall the ceiling is, the very big windows and…the abundance of natural light. It gives it to me like a very kind of refreshing feeling." After online meetings or studying, Liliana feels restored when for "like 10 minutes I can just stand there and just look out the window." Likewise, Camila uses a window view to rest her eyes. She states, "that's like a background for me, and it's way better than staring at your screen for hours and the wall."

Thinking about the past affects students differently. A memory of a mass shooting causes Sierra to retreat from windows, "Sometimes if I'm standing by the window or sitting by the window, I feel very exposed and it causes me some anxiety." So, she'll go to an enclosed space, "even though I'm looking out and that's really nice, I'll…feel safer to be around the walls." Thinking about life after graduating, the downtown view, Frank says, "kind of motivates you, what you're looking to in the future." For Devin, "Seeing [downtown] kind of anchors me that makes me feel like if I if I could choose, I would have an office in some high-rise where I'm doing my work." Seeing the city, for Liliana, gives her pride at being part of something greater than herself. She states, "It feels kind of like that same Southwest City friendship like the overall like welcomeness family."

Discussion: Library as Home

For study participants, the library's diversity of furnishings, room sizes, and sound levels evoke rooms of a house. The data suggests that two additional site qualities undergird this association. The first is students' comfort level with noisier, social environments. SWU participants are frequent library users who may have time for socializing and collaboration due to being predominantly full-time students with few family and work obligations (U.S. Department of Education, 2022). Moreover, the popularity of social learning accords with May and Swabey's (2015) finding that students more readily engage in social study when quiet study is also supported. The second is SWU Library's size and complexity, which is typical of well-resourced, research university libraries (Bok, 2013). Its variety of spaces facilitates students' experience of it as many distinct home-like "learning atmospheres" (Cox, 2018, p. 1088).

While scholars have described home-like settings, such as academic library coffee or tea shops (Deng et al., 2019; Hunter & Cox, 2014) and Head (2016) documented that librarians, architects, and consultants describe academic libraries as a "campus living room" (p. 9), Mehta and Cox' (2021) study applying Seamon's (2015) "homeness" framework is the only one to provide an in-depth examination of the connections between academic libraries and feeling at home. In their study, it can be inferred that they make two assumptions about feeling at home, which this study challenges. These are that students feel a home-like sense of safety and relaxation in an academic library and that feeling at home is an individual, rather than a collective, experience.

Unlike Mehta and Cox's (2021) study, most participants do not feel safe in SWU Library because of the possibility of property theft. While leaving items unattended is considered by Mehta and Cox (2021) to be a homeness indicator, due to being a public urban campus with

frequent property theft, SWU students generally leave items of only limited value unattended and for higher value items, only when safeguarded by a peer. One way to experience relaxation, according to their study, is through sleeping. SWU participants, however, state that they cannot relax in this way because of a no sleeping policy. If they fall asleep, as Mariah recalls, "I know the librarians…[will] say you can't take a nap here."

In line with Mehta and Cox's (2021) study, we note several individual-focused indicators of feeling at home. These include having favorite places, which are often described in relation to bedroom-like spaces and feeling safe. Consistent with Briden and George (2013) and Cox's (2018) scholarship, such places are often near windows. Participants describe these as connecting them to hometown cityscapes and backyard-like natural environments. Specifically, looking out the window onto the downtown skyline, Devin imagines having "an office in some high-rise" after graduating and Lauren connects her view to her home desk where she can see "a lot of trees…[a] lot of scenery." In addition, participants connect solo aspects of feeling at home to retreat and safety. For Liliana, an isolated group study room, where the door can be closed, represents a safe environment that recalls her bedroom, while Mariah considers a hidden nook as a "safe spot to study."

Another area where this study's findings differ from Mehta and Cox's (2021) study is in the group practices that characterize experiencing the library as home. Key aspects are group appropriation of favorite places and drinking and eating with one's community. Group favorite places occur in many social study settings. Den-like areas provide a cozy shared informal environment where, as Emma states, "we're all kind of close together and doing our own thing." Reflecting on their go-to place, Camila states, "Fifth floor is like at home, because my friends are in there and we all came from the same place." The conviviality of the location where

participants study is established through ambient noise, views of trees and grass, and the regenerative quality of drinking coffee together. For Frank, this type of environment reminds him of growing up, with "kids playing in the front street." Camila associates it with her friends who together "go through the same stuff." Angela describes how coffee contributes to the atmosphere, "I'd make them sit at the table… I'm going to go to The Coffee Shop… just to make sure that our coffee isn't cold." Likewise, Devin recalls the kitchen-like group experience of "being half asleep, getting a cup of coffee there, meeting for that study group."

Home and Sense of Belonging

Comparable to the individual and group aspects of feeling at home, spaces that support quiet and social study are both key for developing a sense of belonging. Indeed, the range of space characteristics in which students find their people in academic libraries mirrors the diversity of the resultant communities (May & Swabey, 2015). In this way, the interplay of groups and spaces for student community formation is consistent with Samura's (2016a, 2016b) contention that belonging may be experienced through group spatial practices.

Regarding quiet spaces, it can be inferred from Ahn and Davis' (2020) research that those students who value quiet, study-focused activities over social aspects of college life may be more likely to develop a sense of belonging in libraries. To this finding we add the association of quiet, individual study with spatial belonging. Places to reflect or connect to the outside world, near windows or hidden in interior locations, are favorite places where students create learning environments that may serve as their second homes on campus (Antonsich, 2010; Mehta & Cox, 2021).

In connection to social spaces, places that foster collectivism, and provide opportunities to experience cultural familiarity facilitate belonging. In particular, study rooms provide

environments for collaboration and group cohesion. As Lauren states, they are “a little more isolated from the rest of the library” which facilitates identifying with the “group that we’re with” and leads its members to feel, as S states, “that they’re a part of the community.” Concomitantly, open social learning areas, especially on SWU Library’s second and fifth floors, foster community especially for students with collectivist cultural backgrounds. In this connection, Frank describes the association of cultural familiarity with sound levels as “ambient sound is so feeling natural for me in the sense that I feel at home.”

Future Research

Additional studies with different student demographics, institution types, and library characteristics would provide a more complete understanding of both how students experience physical library spaces and ways in which spatial characteristics are connected with developing a sense of belonging. While Museus and colleagues (2017) have provided statistical validation of the CECE model, similar quantitative work needs to be done on place belongingness and, building on Scoulas (2021), sense of belonging dynamics in academic libraries. Finally, how students, especially from URM communities, experience online academic environments, particularly online libraries, and sense of belonging in those environments, would be a fruitful area of future inquiry.

Conclusions and Recommendations

This study suggests that students experience academic library physical spaces as fostering a home-like community. Study participants, such as Angela, describe her awareness of a community that silently accompanies her while she does her work but does not judge her, stating “everyone’s there to study so no one’s watching me.” Analyzed through the lens of this study’s conceptual framework, experiences in both quiet and social study-focused areas are linked to

developing a sense of belonging to the library community and by extension to the campus community (Broughton, 2019). Therefore, we assert that the physical spaces in academic libraries may be undervalued assets for the achievement of institutional student success outcomes.

On this basis, we recommend stemming a trend DeFrain and colleagues (2022) describe, of neglecting quiet, individual, and communal study spaces. The reason is not to disproportionately invest in quiet over social spaces. Rather, it is because both are complementary aspects of how students develop a sense of belonging through experiences in academic libraries. Spaces to look out of a window, settle in for deep study, and to experience solitude, are necessary to reflect and synthesize (Choy & Goh, 2016; Savin-Baden, 2008). In these spaces, individuals develop personal connections to the library that may deepen their identities as college students (Scannell & Gifford, 2010).

Without detracting from such quiet spaces, as suggested by Fullmer and Fiedler (2021) and Whitmire (2006) with respect to Latinx and Black students' library practices, and by Samura (2016a, 2016b) and Tachine and colleagues (2017) in relation to Asian and Native American students' campus practices, this study reaffirms social learning-oriented library spaces' critical role as locations that foster URM students' sense of belonging. In this study, we have described specific qualities of social study library spaces connected to cultural belonging and feeling at home. Key features include ample spaces for quiet study, which facilitates students with collectivist cultural backgrounds' feeling comfortable studying in environments with ambient noise (Blaylock et al., 2013; May & Swabey, 2015) and open and closed group seating areas which encourage larger groups to form and engage socially while working together (Applegate, 2009; Head, 2016). In such places, students develop emotional connections and form

communities, whether they are together based on a shared identity or are classmates collaborating on an assignment. Moreover, in situations where student communities are experiencing oppression, such library-based second homes may serve as safe havens or counterspaces (Kuh & Gonyea, 2003; Solórzano et al., 2000; Whitmire, 2006).

In closing, while some students may exclusively use quiet or social study areas, most move between spaces in ways analogous to moving through the rooms of one's house (Yoo-Lee et al., 2013). Indeed, academic libraries serve as students' second home. Library spaces are not merely what is left behind when the books have been removed. Instead, they are places where a diverse group of students find their social and academic communities. Certainly, by fostering URM students' sense of belonging, they play a critical role in student success for the increasingly diverse students at all types of higher education institutions.

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Belonging in a Community College Library

This paper bridges information studies and higher education research--two otherwise separate fields of literature--to argue that academic libraries may be an untapped equity resource. Accordingly, the study asks, “How do a diverse group of students experience an academic library?” The answer to such a question can be useful to inform the development of campus-based retention, persistence, and completion initiatives that are sensitive to attainment outcomes that stratify along sociodemographic lines (de Brey et al., 2019). After all, despite more than two decades of research to address postsecondary inequity, the gulf in graduation rates has in some cases widened (Griffin et al., 2022; Hobson et al., 2023).

The present study introduces a line of equity-minded inquiry within the field of library and information science. For example, this literature finds that academic libraries organically create and sustain community belonging (Soria et al., 2017; Scoulas, 2021; Whitmire, 2006). Meanwhile, the academic affairs literature in higher education finds that diverse students experience higher degrees of alienation on college campuses than their white, middle class peers (Berger, 1997; Hurtado & Carter, 1997). In turn, a sense of belonging that derives from participation in academic communities can offset the fallout of social isolation on retention. In these studies, a sense of belonging is shown to support academic student achievement and persistence (Hausmann et al., 2007; Hoffman, et al., 2002; Johnson et al., 2007).

The paper proceeds in the following way. This section has introduced the conceptualization of academic libraries as a retention resource. The next section reviews and bridges research on academic libraries and sense of belonging. The third section explains the study’s methods and research design. The fourth section presents data that demonstrate how

students use the library on an urban community college campus. The final section discusses the implications of the data for higher education practice, policy, and future research.

Literature Review

To support the conceptualization of the library as a retention resource, prior studies of academic libraries suggest library use supports academic and social wellbeing.

Academic Well-Being

The study is guided by research that demonstrates academic libraries directly foster study and research-related activities. Academic library use is positively associated with student success outcomes, including GPA, persistence, and graduation rates (Soria et al., 2013, 2014, 2017). These findings differentiate libraries from other campus facilities such as student unions and cultural centers (Ahn & Davis, 2020; Barrett, 2016; Tachine et al., 2017), which are shown to only indirectly promote academic outcomes.

Academic Work

Libraries support the different types of assignments that students must complete for coursework. Many curricula demand students engage in solo and group work. The library is good for both as seating caters to different styles of study. Couches, for example, are shown to support activities such as reading a book, whereas straight backed chairs, in contrast, are arguably conducive to writing. The latter aligns with the traditional scholarly image of quiet, solitary engagement. Antell and Engell (2006) describe this as "conduciveness to scholarship" and Foster (2013) as "scholarly gravitas." Meanwhile, group rooms are available to support collaboration where students need to talk while working (Bennett, 2011; Massengale et al., 2016). Moreover, the heightened ability to work together to accomplish academic goals through closing a door, may contribute to their usage's association with increase in grade point averages (GPA) (Massengale et al., 2016; Stemmer & Mahan, 2016).

Stress Reduction

One reason that the library may support academic achievement is that it is shown to reduce stress. Students who work alone near windows report that the setting helps them reduce their stress (Banning et al, 2010; Scannell & Gifford, 2010). Cox (2018) describes how views to the outside world improve students' mood and focus. This is consistent with scholarship that suggests that views of nature and sunlight experienced through windows reduce stress, decrease depressed mood, and improve well-being (An et al., 2016; Esch et al., 2019; Largo-Wight et al., 2011).

Stress relief is important given studies suggest that libraries provide a reprieve from stressful home situations for URM students. Long (2011) notes that Latinx students describe using the library as a "shelter" (p. 509) to get away from distractions of their living situations and Andrade (2018) suggests that a benefit of quiet library study is "to escape…and rest" (p. 360). Reflecting this sentiment, a participant in Regalado and Smale's (2015) study of commuter students explains that they come to the library "because there's too many distractions at home" (p. 908).

Social Well-Being

In addition to the academic benefits of library use, libraries foster social well-being. Research finds that students feel welcomed in the building itself. They use these spaces to find refuge from academic and personal stressors (Andrade, 2018; Regalado & Smale, 2015). Libraries' welcome extends to social elements, which Stewart and colleagues (2019) describe as the "library theater" (p. 29). There, students study, research, and socialize in an inclusive environment (Demas, 2005). The data suggests that URM students, especially, feel welcomed (Stewart et al., 2019) and comfortable (Andrade, 2018) in academic libraries, using them at higher rates than non-URM students (Dabbour & Ballard, 2011; Elteto et al., 2008; Whitmire,

2003). Reflecting on this disproportionate library usage, Kuh and Gonyea (2003) suggest that the academic library functions as a "safe haven" (p. 267) for students in URM communities.

Community Membership

Studies also describe the library as an inclusive space. Spending time in academic libraries can foster a feeling of membership in an academic community (Vaccaro et al., 2015). Crook and Mitchell (2012), based on an observational study of undergraduates, characterized why students choose such places as the "importance of simply 'being there' as participants in a studying community" (p. 136). Studies suggest that library patrons experience visual fellowship, which is theorized to motivate them to work harder (Neurohr & Bailey, 2017).

Sense of Belonging

This study uses psychological sense of belonging theory (Baumeister & Leary, 1995; Strayhorn, 2019) as an interpretive framework. Sense of belonging originated in Maslow's (1943) hierarchy, slotted above physiological and safety needs. Within the pyramid, it serves as a foundation, with love, for self-esteem and self-actualization. The central role of sense of belonging in Maslow's hierarchy implies its importance for students. Sense of belonging, for example, is shown to offset alienation, which may lead to dropping out (Baumeister & Leary, 1995). This finding is particularly relevant in the context of URM students who are shown to experience higher levels of alienation in postsecondary settings than their non-URM peers. Ultimately, a sense of belonging leads to positive emotions, such as increased confidence in being able to accomplish goals (Strayhorn, 2019).

Because sense of belonging is an indicator of academic success among URM students, the framework is well-suited to gauge whether academic libraries foster retention (Hausmann et al., 2009, Johnson et al., 2007; Locks et al., 2008). Research over several decades, beginning

with Hurtado and Carter's (1997) groundbreaking study of Latinx students, have described the dynamics of how college students develop a sense of belonging. The body of scholarship describes how a sense of belonging relates to social interactions and experiences in physical spaces. Below, I review this literature, highlighting connections of academic libraries.

Social Emotional Belonging

Previous scholarship suggests that students generally develop a sense of belonging through social engagement. This has been associated with both academic and non-academic aspects of students' experiences (Ahn & Davis, 2020; Gillen-O'Neel, 2021). For URM students, research indicates that interacting with a diverse group of students is linked to a sense of belonging (Johnson et al., 2007; Maestas et al, 2007; Strayhorn, 2008a, 2008c). A body of scholarship highlights the role of peers with whom the student has a close connection and may be of the same race or ethnicity, as critical to college adjustment and developing a sense of belonging (Broughton, 2019; Hoffman et al., 2002; Muñoz & Espino, 2017). Finally, several studies link studying and academic integration to a sense of belonging (Hausmann et al., 2007; Hurtado & Carter, 1997; Strayhorn, 2008c).

Physical Belonging

Individuals and groups feel a sense of belonging in specific places based on the characteristics of that space and the community who uses it (Scannell & Gifford, 2010, 2017). Samura (2016b) describes how belonging is a spatial practice in which students seek out places where they can be with people like themselves. A second factor are the actions afforded by that place. Broughton (2019) describes the importance, for college students, of finding spaces where they can concentrate. There, they feel a sense of belonging because they can achieve the academic goals that define their school-going identity (Bodaghi & Zainab, 2013). In this vein,

Vaccaro and colleagues (2015) describe the importance for students with disabilities of studying among their peers. For them, belonging is experienced by "being seen as a legitimate student" (p. 679). Finally, Antonsich (2010) and Scannell and Gifford (2010, 2017) suggest that a sense of belonging may be related to one's emotional connection to physical spaces.

In turning to methods, the literature provides ample support to suggest that libraries may be a campus resource that has untapped academic and social value with which to address long standing postsecondary inequities. To recap, libraries are spatial resources that are flexible to support a variety of students' everyday study needs and preferences, which vary based not only on one's chosen field, but also one's social circumstances, including geographic proximity to campus. Importantly, in addition to providing students with physical spaces in which to complete their work, libraries can potentially furnish students with a sense of belonging that is arguably as important as the conventional academic accommodations that the library provides.

Methods

Exploratory case study methodology is a qualitative research approach that is used to understand a phenomenon in depth. It is often used when there is little existing research on a topic, or when the researcher wants to gain a deeper understanding of a complex issue. As with the present study that focuses on a community college library, exploratory case studies are typically based on a single case, which supports description that is distinguished by depth as opposed to scope. To underwrite the trustworthiness of the description, the researcher typically collects data from a variety of sources, such as interviews, observations, and documents. This technique not only allows for triangulation of thematic findings, but also supports thick description to provide an emic viewpoint on the target of inquiry, which for this study is belonging (Geertz, 2008).

Figure 6: *Exterior View of Library*

Site

To understand the library's value as a retention resource, Southwest Community College (SWCC, a pseudonym) was chosen because of the diversity of its student population. SWCC is

an urban institution and a majority-minority MSI, which is federally designated as a Hispanic Serving Institution (HSI) and an Asian American Native American Pacific Islander Serving Institution (AANAPISI) ("List of Minority," 2022).

The choice to focus on a single case was also strategic to consider the range of participant viewpoints on a consistent set of spatial resources (see Figure 2.2 for an overview of the library's interior resources). Accordingly, the study is bounded by the interior of the library. In terms of the building's exterior, the library stands out on the campus because of its distinctive modern architecture (see Figure 2.1). In contrast to the neighboring buildings, the library's wall of windows is its distinguishing characteristic, creating a fishbowl that invites two-way curiosity. While pedestrians can look inside, library patrons can also see what is happening outside.

The 24,000 square foot library is one of 15 buildings on a 76 acre campus that is lush with trees and desert landscaping. From the outside, the building is distinguished by a wall of glass windows bordered by trees, which faces the center of campus. On the inside, the library is a single floor with high ceilings, which makes the space feel much bigger than it actually is. The modern architecture is reflected in the furniture choices, which have a variety of textures and designs that match the library's color palette and are configured so as to not appear crowded.

The high ceiling and open design allow one to see students studying, using computers, and talking to each other at all of the different seating options, from the entrance. The wall of windows feels open instead of overwhelming and beckons students to the quiet areas in the back. It has a lounge area; in the center, small group rooms, couches, and carrels; and in the back, an atrium with tables and additional carrels. Prior literature suggests that this variety of seating options affords a range of student study preferences and social interactions (Massengale et al., 2016; Mehta & Cox, 2021; Regalado & Smale, 2015).

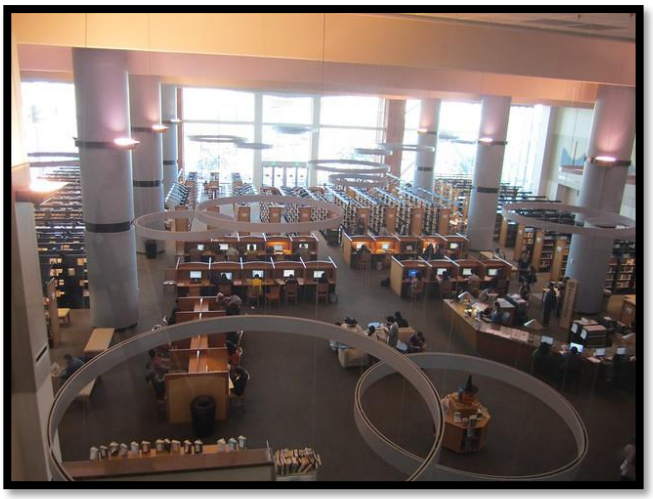

Figure 7: *Interior of Library*

Sample

Within the bounded context of the SWCC campus, the primary selection criterion for sampling was students who use the physical library as a place of study one or more times a week. The sample was composed of 17 participants, who ranged in age from 18-24 to 50-59 (see Table 5 for participant demographics). Most participants were enrolled part-time, which is typical of SWCC. To recruit participants, flyers were posted in the library and disseminated by faculty who promoted participation to their students. Flyers were also handed to students by staff at the SWCC's multicultural education center.

Data Collection

Consistent with exploratory case study methods, the study relies on multiple sources of data: interviews, observations, and documents, which included photographs. This paper relies primarily on interview data (N=17), collected using a method known as photo-elicitation (Clark-Ibáñez, 2004; Harper, 1986), which incorporates photographs into research interviews (Harper, 2002) (see Appendix E). In this study, a pre-interview protocol asked students to take

Table 5

Participant Demographics

Pseudonym	Gender	Age	Race/Ethnicity	1st Generation Student
Abril	Female	18-24	White/European	Yes
Alexa	Female	18-24	Latinx/Hispanic & White/European	No
Amelia	Female	25-29	Latinx/Hispanic	Yes
Ariana	Female	25-29	White/European	Yes
Bianca	Female	18-24	Latinx/Hispanic	Yes
Isaac	Male	25-29	Black/African American	Yes
Jenny	Female	30-39	Asian/Asian American	Yes
Kebra	Male	30-39	Black/African American	No
Makayla	Female	30-39	Black/African American & White/European	No
Mariam	Female	40-49	Black/African American & Ethiopian	Yes
Menelik	Male	30-39	Black/African American	Yes
Michaela	Female	18-24	Latinx/Hispanic	Yes
Mike	Male	50-59	White/European	Yes
Pearl	Female	18-24	Asian/Asian American	Yes
Sandra	Female	18-24	Latinx/Hispanic	Yes
Shirong	Male	25-29	Asian/Asian American	Yes
Toby	Male	18-24	Latinx/Hispanic	No

photographs of library spaces that were important to them (see Appendix H). Given that the study is designed to capture experiences of a physical location, photo-elicitation was useful because it enabled the researcher to see the library through the visual lens of each participant, which helped personalize the interview (Kortegast et al., 2019; Lapenta, 2011). The actual interview was guided by a semi-structured protocol informed by Harper's (2012) photo-elicitation and Wang's (1999) photovoice protocols. Looking at the photographs prompted authentic discussion of the physical resources depicted in each image. To support inquiry on belonging, participants were also asked to describe their personal connection to and use of the physical space depicted in each image (Pearsall et al., 2015). Note that the photographs

themselves were collected and used to: (a) triangulate thematic findings from the interviews, and (b) support "thick description" as the vehicle for data presentation.[1] Four hours of participant observations (see Appendix C and Appendix D) and 80 documents were collected and also used for triangulation of descriptive findings.

Data Analysis

Once data collection began, data analysis occurred concurrently, applying the constant comparative method (Glaser, 1965). Inductive codes were developed line-by-line from transcripts using qualitative coding software, MAXQDA, which supports quantitative analysis of code frequency and aids in recognizing patterns (Anfara et al., 2002). Deductive codes, which were informed by the literature, were also applied line by line to the transcripts (Bradley et al., 2007). To develop categories from the codes, inductive and deductive codes were adjoined (Ryan & Bernard, 2003). For example, a transcript excerpt that described "stay[ing in one spot] for a long time" was adjoined with a different transcript excerpt that was deductively coded as, "favorite place." Using an iterative process, both excerpts were eventually categorized as "conducive to studying" (Saldaña, 2016). The themes of work and respite emerged from the use of discourse analysis to consider the codes in the physical resource context of seating options.

Trustworthiness

The research focuses on library use by participants who used the library one or more days per week. Consistent with the tradition of self-reflexivity, because data collection occurred during COVID, social distancing protocols influenced the study in several ways. While the photo-elicitation interviews asked participants to reflect on pre-pandemic experiences, that some library areas were inaccessible and virtual education limited student use of the library as an in-

[1] An analysis of the images is beyond the analytic scope of this paper.

person resource, may have influenced responses. At the same time, most study participants continued to use the library during the pandemic, suggesting that with social distancing in place, the library represented a potentially safe space for normative study. As such, while the quantity of students using the library may have decreased during COVID, it is reasonable to assume that those who continued to study in the library during the pandemic did not necessarily need to fundamentally alter their personal use.

In addition to the triangulation of data sources described above, several approaches were taken to increase the trustworthiness of this study (Tierney & Clemens, 2011). To address implicit bias, I engaged in reflexivity, maintaining awareness and acknowledging my positionality as a cisgender, heterosexual white male academic librarian (Massoud, 2022). Informants were library staff and administrators who had significant interactions with students using library physical spaces and/or are involved in space planning and assessment. Like the participant interviews, each interview was transcribed and informants were given the opportunity to verify the accuracy of transcriptions. To address credibility, member checking was conducted through providing all participants interview transcripts to check for accuracy (Hamilton & Corbett-Whittier, 2013). At that time, they were asked if they would like to choose their pseudonym.

Welcome to the Library

This section describes library life from a student viewpoint. Participants described the library as a welcome solution to the problem that their actual homes were not conducive to studying. Makayla, for example, used the library because, in it, she experienced "less distractions than when I'm at home." Isaac used the library as critical to his academic success: "If I do my work at home, it's so much easier to get distracted and procrastinate." Similarly, even though Sandra was enrolled in "all online classes," she came to campus to use the library "just so I can focus better away from home because… I get distracted easily." For Mariam, although she has a long commute, she decided that "I'd rather go to the library, because when you're at work or when you're at home, there are a lot of distractions." In contrast, "In the library… it's a kind of serious area." Amelia attributes the difference to how she feels at home compared to the library as "it's not that it's distracting. It's just…I'm not in the mood because I'm in my house."

As a haven from real life distractions, the library offered an academic service without which participants believed they did not have the resources to succeed in school. Welcome was tacit in the way Michaela, a first generation recent high school graduate, recounted her first impression of the library:

> I was like, "Oh my God. Where do I want to sit?" because every single space in that library looks so comfortable for me to be actually able to sit down, and I say comfortable in the sense that this is a space that I can work in, I can focus.

Mariam, also a first generation student, but in her 40s with children at home, also felt welcomed because there was room for everyone to claim "a little space to study on your own [or] if you like different environments, different views…different locations to study, different settings." Both women expressed appreciation for the variety of options where students are "actually able to sit

down." In what follows, data are organized to highlight the ways in which four categories of seating—tables, carrels, chairs, and couches—accommodated a multitude of studying preferences and everyday needs. In preview, across the four seating categories, the themes of work and leisure recur.

Carrels

High-sided wooden study carrels offered privacy in an otherwise open space with windows. Sandra studied in the carrels because she liked the privacy of being "kind of blocked-offish." Describing the ambiance of studying in a carrel with her headphones on, she says "I feel like I'm in tune with myself, since I can't see…anything around me." Although she prefers not to see, Sandra nonetheless enjoys the company of her library peers from "different majors, different backgrounds, different everything," noting that "the library has a sense of belonging academically." Another advantage of the carrels was that, because they were close to the windows, if needed, Sandra could orient herself to "where the trees are." Different carrels

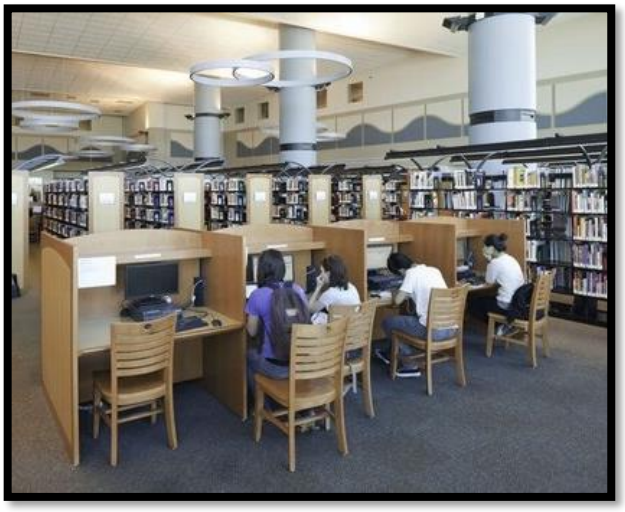

Figure 8: *Students Sitting at Study Carrels*

offered different atmospheric choices with regard to lighting and sound. Isaac, for instance, preferred to study in a carrel where he could "see the sky." When he felt "disconnected" the carrel's "view of the green trees and…the sky reminds me that I'm not in a computer or a simulation. I'm still on earth." Isaac, a first generation student with career aspirations to work in an office, used the library strategically: "You kind of have to model other people's successes if you yourself don't have those type of character traits."

Mariam, in contrast, who worked full-time during the day, studied in the carrels at night because they offered a "secluded" place to do "serious work." Amelia, a first generation, Latina student in her late 20s, studied in the carrels because she liked to "just do all the assignments" in one sitting. She especially liked that each carrel had its own light, which was useful when "let's just say I want to use a light and the person next to me doesn't. I don't want to distract them. So that kind of like helps." Amelia also liked the fact that the carrels are near the windows, "I just look up when I just want to take like a break. It's nice to look outside."

Others chose their carrels for an academic purpose. Mike, for example, a first generation student in his 50s, was so earnest about school that he studied in a carrel "right in front of [the reference desk] just in case [he] would have a question." The carrels also came with a nearby window, which Mike preferred as opposed to "look[ing] at the four walls." Similar to Mike, Menelik, who was in his 30s, appreciated that the carrels were near windows because "when you study intensive you refresh yourself, something like walking outside. The green areas, the light make you feel something." He favored a corner carrel "because you can't disturb people like passing by."

Another advantage of the carrels was that many came equipped with a desktop computer, which appealed to pragmatists. For example, although Alexa owned her own laptop, she

frequently used a desktop in a carrel, which enabled her to study "without any distractions from my Mac, where messages pop up and stuff." Kebra also studied in a carrel because "without the computer, I can't be a student." Explaining why he comes to the library, Kebra described that "when you see people are studying…that also gives you energy to study." Bianca, a traditional age Latina student, needed two carrels because she preferred the camaraderie of working side-by-side with a friend: "She would do her classes, and then I would do my classes, but we'd make sure we get everything done." Studying in companionship was important to Bianca, who believed that in "just the library, itself, that you know that you're not the only one there to study." Similarly, in her carrel, Alexa described "knowing that I'm not alone in this library… that there's other people also working on projects or studying hard for other tests, too." Although Mariam studied by herself in the carrels, she believed that "if I reach out, there's support there. There's a resource there." In the library, Mariam "fe[lt] cared about," and "welcome[d] and that is a lot for me."

Tables

Tables provided less privacy than the carrels, but their hard, upright chairs still appealed to serious studiers. Whereas the desktop space in a carrel was confined, tables gave students more space. Michaela, for example, generally sat at a table so she could "literally hav[e]… everything spread out… my pens, my highlighters, my textbook, other papers. I literally have it all spread out." For Michaela, the tables have changed her experience on campus. Outside the library, she felt "looked at because of the way I dress, and I thought all these students are here for their own education." At the library, she knows that no one is "going to have time to be looking at me and making comments about me, so I feel like being at the library has really made me more comfortable." Michaela also felt that because of the windows, studying at a table

Figure 9: *Library Tables*

"makes being at school all day not so miserable." If she gets to her spot at the corner table "early enough," then she can "face looking outward …[and] get some sun on [her] bones."

Pearl also preferred the storage premium of a table: "I have my laptop and a piece of paper to…jot down notes…And then the materials, sometimes my phone…needs to be charged" so "I also have the charger next to me, just in case." Like Michaela, Pearl appreciated her fellow table studiers: "They don't judge you. They seem like they accept you for who you are." From her table, Michaela too used the windows to enjoy passive breaks. She recalled sighting "a bird and her baby… in the bushes" while coincidentally doing her Biology homework.

Toby studied alone but used the table's community space to facilitate interaction with those who cared to join him. He explained, "I just usually spread [things] around my area. So, in case somebody came up to me and asked me if this seat's taken, I could allow the other person to" sit there. Others, such as Arianna, were less inclined to spread out, but still preferred studying

at a table because it offered enough "space to have…a big cup of coffee…Got to stay awake somehow." Ariana, a first generation student in her 20s, also liked studying at a table because she remained visible to others who might "see me right there and be like, 'Oh, she's in the library. It's time to go socialize. Let's go.'" For Ariana, the library's social network was academically motivating: "I've got to outsmart everybody else. I've got to work harder to get to where I got to get in life…I'm like 'You're studying. I've got to study harder.'"

The tables were also close to the windows, which meant that even while working, Ariana could "appreciate the way they designed the campus… [with] landscape stuff." Menelik worked at a table, but traveled comparatively light, "I have my book and my exercise pencil with my bag. And sometimes I hold like a juice." Makayla, who was in her 30s, would come early to secure her favorite corner table by a window, which "ma[de] being at school all day not so miserable."

Small Group Rooms

Small group rooms offered a version of table and chairs, but with the ability to close the door. The seating etiquette in the group study rooms, according to Amelia, was "overly comfortable [with] feet on top of the chair." Yet whereas many students found the armchairs and couches were not conducive to studying, the group study rooms were flex spaces in which studying and breaking were seamlessly entwined. With the privacy afforded by a closed door, group room studiers were not beholden to the same noise considerations of those seated in public access spaces. As Amelia explains**,** "You kind of forget that you're even in the library because you're talking to someone, you're just doing your work with someone." For other participants in the sample, the emphasis was also on schoolwork. Menelik described the ratio of academics to socializing in his study group room as "almost 95% …academic but almost 5% …social." Ariana

described the group study rooms as a place where "we can brainstorm together and get things done… tackle problems." Sandra notes that she and her colleagues often migrate to the library's group study rooms after class:

> It was convenient for all of us because we would have classes like early in the morning, or our labs would be right after our lecture. So, we would meet in between, there, and then we would study."

Figure 10: *Small Group Room*

Kebra also found the small group rooms helpful because, in them "with my classmates, with my friends," he was inevitably exposed to "some kind of conversation or… some kind of clarification… [which] has a lot, a lot, a lot helped me out for studying." Shirong, an Asian American man in his late 20s, similarly found that the library's group study room provided a

mutually convenient place to “meet classmates” when there is a “group project that I need to do.” He added that “even though we talk like something, but really our major stuff we want to focus is on is studying.”

In addition to the academic benefits of group study rooms, the privacy of closed door interactions allowed for more intimate conversations than what was possible in the library’s open spaces. Shirong described that “with a couple friends, we can just sit there together and just talk.…about general stuff, like school stuff, like a professor, like a class.” Menelik also appreciated the group study room environment where “you know each other like friends so you can explain what you feel and you can study like freely.” Alexa elaborated that, in the group study rooms, she can:

> Socialize with people that know what I was going through and like the stress we were all having… Where we could…be there for each other and help each other when we needed to… I feel like teams are supposed to support each other and…I was definitely feeling support of my fellow classmates.

Small group rooms also offered access to technology and teaching equipment that was not available in the open spaces. Shirong explained, “We plug into our laptop and…do the projectors and…Sometimes we can just quiz each other, just write something on the whiteboard.” Similarly, Jenny, a first generation student in her 30s, also found the whiteboard was helpful “to do an assignment together, laying out points.”

Loungers

Armchairs and couches were two types of loungers, which Mike described as “cushioned seats [where] it’s just comfy over there.” The plushness of an armchair, for example, offered a

blended experience that was part work and part retreat. For this reason, Pearl preferred to study in an armchair because it provided her "own space [to be] …an independent studier [in a]… homey environment." She explained that being in the library was a reminder: "A little motivation for myself, like saying, 'hey, people are studying, you should be studying, too." She preferred an armchair next to a window "because it's hard on my eyes when I focus on one particular area for so long…I like to change the scenery…[and] see all the grass." Yet because the armchairs had only small swivel tables, students had to be organizationally creative with their belongings. When she wasn't in a side-by-side carrel studying with a friend, Bianca opted for an armchair near a window because "if it was cold, like during the fall, you would feel the warmness of the sun [which] was really, really comfortable." In contrast to the deskspace of carrels and tables, Bianca noted that the loungers posed minor storage challenges: "My stuff would go on the floor. And then everything that I was going to study with would be on top."

Figure 11: *Library Couches*

In addition to supporting schoolwork, the armchairs were popular study break destinations. For example, although Ariana preferred to study at a table, she used the armchairs when "I feel…sometimes…worn down and the chairs for me just bring me like comfort because I could just sit in something that's not so hard." In particular, her "absolute favorite place" was an armchair next to the chargers. The draw was not only the convenience of charging an electronic device, but also the benefit of sitting where "I can relax and I can just recharge myself." Similarly, Alexa used the armchairs because "it's all cushion, which just makes me feel more relaxed, less stressed out." Alexa described that the windows enhanced the relaxed feeling because it "didn't feel like [she] was in a building." Michaela too described how the softness of the armchair "makes me feel cared about [as if I'm] at home." She also used the lounge as a "prime people-watching location… because there's just a lot going on [there]." Bianca too found the armchairs were versatile for studying or "just listening to music and sitting there."

Like the armchairs, couches were comfortable, but came outfitted with ancillary resources. Jenny, for example, studied on a couch not just because "it's comfortable," but because a couch afforded access to "that little lamp area that's in that corner [and] these little table things because you can put your laptop on there. …[while] on the seat … you can either put your bag … or books you're referencing." For Jenny, another benefit of a couch was that she could see others working: "They're here, they're putting in the time, the effort. And I shouldn't make any excuses."

The majority of participants used the couches for respite. Explaining that "in the sofas I'm not really too into my homework," Amelia preferred to study in a carrel, but took breaks on a couch to "just kind of literally just relax." Sitting on a couch, Amelia could listen to "chirping" and "see a bird pop up and just kind of take a glimpse at it." Shirong too used the couches to lie

down “in the sunlight” to rest. Kebra liked “taking off my shoes, and taking some time for myself” on a couch, which sometimes meant napping. Mariam sat on a couch because it afforded the opportunity to “get rest in between reading a book.” Abril was a bit of a wallflower, preferring to watch library life from a comfortable distance. Although she did not physically sit on the couches, from a nearby table she watched, noting “it’s nice to have just a visual break.” In particular, she observed how the couches brought people together, inventing romantic stories based on what she saw. For example, she hoped “a little couple exchanging, perhaps phone numbers or information” might be the beginning of “a blossoming friendship between two people.”

Work and Leisure

The data are consistent with prior research that suggests the library supports academic success. In this study, many students used the library as a quiet space to get away from distractions of work and home (Harrop & Turpin, 2013; Regalado & Smale, 2015). By being able to close the door, study rooms afforded students the opportunity to communicate without worrying about disturbing others (Applegate, 2009). For mental breaks, some looked at the world outside through a window, others watched the people inside (Cox, 2018). In terms of seating, student perceptions of the library also reflect findings that suggest carrels, tables, and small group rooms are more conducive to serious work than loungers (Antell & Engel, 2006; DeFrain et al., 2022). Yet while the literature describes a hierarchy of library resources in terms of their academic benefits, across the four seating categories of data presentation, the themes of work and leisure intermingle, suggesting a more nuanced account of the direct support that libraries are shown to provide (Soria et al., 2013, 2014, 2017).

In this study, each of the library's seating options—including loungers—supported not only mental and physical exertion, but also mental and physical respite. The data demonstrate how the themes of work and leisure are mutually interdependent across all four seating categories. Participants personalized their library use to create a home base from which to access work and leisure resources during their stays. Yet prior findings focus on the "conduciveness to scholarship" of carrels and tables (Antell & Engell, 2006), which may overlook the holistic support that the collective use of all four seating options imply. In other words, every seating option supported a library version of work/life balance. Ultimately, the seating resources enabled students to adapt their library use to satisfy various homework styles and preferences. According to the data, library use is an iterative process that alternates between labor and respite. Some students practiced this respite with their eyes, never leaving their seat. Across the sample, the physical migration patterns of participants demonstrate a cyclical process of mental exertion and sensory respite. As Melenik pointed out, "when you study intensive you refresh yourself."

Welcome to My Place

In what follows, I emphasize the ways in which belongingness was associated with physical experiences pertinent to feeling, seeing, and hearing the context. Sensory perception was a subtext across the dataset. A comparison to Strayhorn's (2019) description of a sense of belonging as "a cognitive evaluation (i.e., 'I think these are my people')" (p. 79) illustrates how this approach differs from previous research. Foundational for Strayhorn are interpersonal connections that lead to identification with a specific group to which an individual feels a sense of belonging. In this study, prior to the cognitive evaluation of belonging, students felt its antecedents in their personalized study environments, saw them as cues of inclusion and campus

connection, and heard them as peer support. In other words, the foundation was sensory experiences, not interpersonal connections. As the physical context was more salient than the characteristics of the community, the content of this evaluation would be "I think this is my place" rather than "I think these are my people" (Strayhorn, 2019, p.79). Thus, students' sense of belonging was to the library, both to its spaces and to the community dwelling there.

While on the micro level, students' sensory experiences determined the unique characteristics of the place where they experienced belonging, they shared a feeling of belonging through being supported and cared about. These experiences align with Hoffman and colleagues (2002) and Cheng's (2004) finding that when an institution communicates care it may nurture a reciprocal response, including a sense of belonging. Mariam and Pearl's experiences epitomized this. Mariam described how in the library, she "fe[lt] cared about," and "welcome[d] and that is a lot for me." It comforted her to know that "if I reach[ed] out, there's support there." Pearl described how the people and the space helped her, stating that from the people she felt "if you need help, we're always there for you. And they don't judge you. They seem like they accept you of who you are." For her, the space had an analogous openness. As she stated, whether "you need to have a little space to study on your own [or] if you like different environments, different views…different locations to study, different settings," the library had your place.

Within this supportive context, when students described their individual sense of belonging, their sensory experiences took center stage. For example, Michaela described how sitting in her soft chair was a "homey environment" that "ma[de her] feel cared about." Her sense of belonging emerged from this experience, felt as care, which occurred in that particular chair (Antonsich, 2010). In prior research, care has also been associated with sense of belonging, but through individuals, such as faculty, caring about students (Freeman et al., 2007). Sandra's

experiences in a study carrel further illustrate this point. Its visual barrier facilitated an internal focus, leading to reflection on her study materials. This enabled her to be "in tune with [her]self." The carrel's hard wooden chair and high-sides facilitated reflection, which, in turn, fostered belonging in that place. This can be contrasted with De Beer's (2023) study of a teacher training program in which student reflection and cohort-focused sense of belonging are described as in tandem, without a sensory pathway from reflection to belonging.

Another sensory pathway is how students experienced belonging through visual perception. In quiet areas, an open furniture layout provided the opportunity to observe each other (Cox, 2018; Gayton, 2008). In alignment with Crook and Mitchell's (2012) findings, students experienced connection, acceptance, and inspiration based on their visual perceptions of their peers. Sandra connected her visual experience to developing an empathic understanding, stating "because we are doing the same thing…they might be feeling the same way." This resonates with Vaccaro and colleagues' (2015) description of a student with a disability who felt a sense of belonging as a college student "when she studied in the library…and knew that other people around her were studying too" (p. 679). The visual element of learning together may also have a socializing role. Isaac described his intentional development of study practices through "model[ling] other people's successes" which he had observed (Weidman, 1989). As he and others replicated observed actions, they participated in a practice community, experiencing belonging as engagement with others in study practices (Hicks & Lloyd, 2016; Wenger, 1998).

Seeing the natural world through windows fostered a sense of belonging through emotional connections to the place where they accessed that view (Cox, 2018; Scannell & Gifford, 2010, 2017). For example, Makayla would come early to secure her favorite corner table by a window, which "ma[de] being at school all day not so miserable." This was partially

because views through windows to a natural outside world reduced students' stress (Banning et al., 2010; Cox, 2018). As Isaac noted, views of "green trees and…the sky" grounded him "on earth." They also refreshed students' minds, so that they could focus on their studies (Ko et al., 2020). Menelik captured this idea, when he stated, "when you study intensive you refresh yourself, something like walking outside. The green areas, the light make you feel something." Finally, students, as Ariana expressed, "appreciate[d] the way they designed the campus," which relates to a sense of belonging to the College for the care taken in its landscape design (An et al., 2016; Esch et al., 2019; Lu & Fu, 2019).

In group study rooms, students experienced a sense of belonging through hearing the support of their peers. As Kebra described, his group interactions were "some kind of conversation or… some kind of clarification," which "helped me out." Such informal group work has been associated with a sense of belonging in multiple studies (Hurtado & Carter, 1997; Meeuwisse et al., 2010). In addition, these groups function as support networks, critical for URM students' sense of belonging (Strayhorn, 2008b). As Alexa described, with her peers she could, "socialize with people that know what I was going through" and from whom she was "feeling support." In particular, Alexa described that working in a group room made studying akin to teamwork. While schoolwork focused, these interactions fuse academic and social elements (Deil-Amen, 2011; Whitmire, 2006), which can stem the reduction in sense of belonging Hausmann and colleagues' (2007) found to occur over the course of the first year in college as academic integration supplants social integration in importance. Menelik described this phenomenon, stating that in group work meetings for him "almost 95% is academic but almost 5% is social." Indeed, Museus and colleagues (2017) have associated environments that foster

this type of collaborative social learning with a sense of belonging. This aligns with Ariana's recollection that they would "brainstorm together and get things done… tackle problems."

Future Research

Grounding a sense of belonging in sensory experiences opens up new possibilities for higher education research. Such research could assess particular campus environments' capacity to serve as retention resources via belonging. Studies may be conducted in student unions, residence halls, classroom buildings, and outdoor spaces, analyzing the capacities of different spatial features. This could also be done at different institution types and with different student demographics. For example, such studies could focus on students in specific URM communities. By taking into account the physical, spatial, and sensory experiential connections to belonging of these communities, targeted strategies to improve their student success outcomes could be developed (Museus et al., 2017, 2018; Samura, 2016a, 2016b). In addition, as online education gains in importance, it is critical to examine the relationship between student experiences and belonging in virtual campus environments.

Implications

The implication that libraries serve as personalized home bases where students feel a sense of belonging is that they may be considered retention resources, especially for higher education's increasingly diverse student communities. In order to maintain or augment this capacity, investments in library infrastructure may be warranted. As this study's data demonstrated, students prefer a variety of seating types, levels of sound, and visual stimulation in order to create their optimum locations to complete academic work and learn together (Antell & Engell, 2006; Foster, 2013). To address these preferences, physical resources, such as carrels and tables; comfortable study areas, such as soft chairs and couches; and study/research-related

resources, such as physical books and databases, are needed. Moreover, in consideration of the findings concerning seeing connections and opportunities for reflection, windows with natural views and abundant sunlight should be accessible in libraries. In addition, in response to the finding that students feel belonging through hearing the support of peers, spaces for collaborative learning, such as small group rooms, are necessary. It is critical that these resources continue to be provided and refreshed to maintain a welcoming atmosphere where students' spatial and sensory experience needs are met.

Conclusion

This paper has presented empirical data in support of an innovative approach to address disparities between graduation rates of privileged and URM student communities. Community college libraries, due to fostering belongingness through students' sensory experiences, are institutional assets for improving the academic success outcomes of students in URM communities. Specifically, for students who have many distractions outside of school, the library serves as a campus home base, where they can customize their environment to create a place where they can do their academic work and socialize with their peers. In their library places, they feel care, see inclusivity, inspiration, and restoration, and hear peer support. In this enveloping support system, they feel a sense of belonging to their library place, to the institution, and to their peers with whom they form a library community.

Appendix A

SWU Recruitment Ad

Volunteers Needed for Research Study

You are invited to participate in a research study:

Academic Libraries as Communities: A Comparative Case Study

Description of study: This is a study of how higher education students experience belonging in academic communities. The results of this study will be used as part of a dissertation in UNLV's Higher Education doctoral program. The study includes a demographic survey, taking pictures in SWU Library and uploading them on a study web page, and being interviewed.

To participate: You have to be a currently enrolled undergraduate SWU student, have completed at least six credit hours and at least one fall or spring semester at SWU, use SWU Library at least once a week, and be 18 years old or older. Begin the process at this webpage:
https://unlv.co1.qualtrics.com/jfe/form/SV_8vvEzmrKnVBjBNr

Or use this QR Code:

For your time: Participants will receive a $20 gift card.

To learn more: Contact Ted Chodock, the project's student investigator at 702-555-1234 or at chodock@unlv.nevada.edu

This research is conducted under the direction of Dr. Stefani Relles, Department of Educational Psychology and Higher Education. This research has been approved by UNLV's Institutional Review Board. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 888-581-2794 or via email at IRB@unlv.edu.

Appendix B

SWCC Recruitment Ad

Volunteers Needed for Research Study

You are invited to participate in a research study:

Academic Libraries as Communities: A Comparative Case Study

Description of study: This is a study of how higher education students experience belonging in academic communities. The results of this study will be used as part of a dissertation in UNLV's Higher Education doctoral program. The study includes a demographic survey, taking pictures in the SWCC Library and uploading them on a study web page, and being interviewed.

To participate: You have to be a currently enrolled SWCC student, have completed at least six credit hours and at least one fall or spring semester at SWCC, use the SWCC Library at least once a week, and be 18 years old or older. Begin the process at this webpage: https://unlv.co1.qualtrics.com/jfe/form/SV_e5LccHF9MduysAd

Or use this QR Code:

For your time: Participants will receive a $20 gift card.

To learn more: Contact Ted Chodock, the project's student investigator at 702-555-1234 or at chodock@unlv.nevada.edu

This research is conducted under the direction of Dr. Stefani Relles, Department of Educational Psychology and Higher Education. This research has been approved by UNLV's Institutional Review Board. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 888-581-2794 or via email at IRB@unlv.edu.

Appendix C

Grand Tour Observation Protocol

Date Time Location		
What will be observed?	Descriptive notes	Reflective notes
Space physical place or places		
Object physical things that are present		
Actor people involved		
Activity a set of related acts people do		
Act single actions that people do		
Goal things people are trying to accomplish		
Feeling emotions felt and expressed		
Busyness number of students in the area and traffic		
Lighting Natural, presence of windows, or artificial		
Other Observations		

Adapted from Spradley, 1980, p. 78

Appendix D

Seating Sweep Observation Protocol

DATE, TIME, SITE, LOCATION			
PROFILE			
gender estimate: female			
gender estimate: male			
gender estimate: transgender M/F			
age estimate: 16 or younger			
age estimate: 17-29			
age estimate: 30-49			
age estimate: over 50			
race/ethnicity est.: White			
race/ethnicity est.: Latinx			
race/ethnicity est.: Afr. American			
race/ethnicity est.: As. / As. Amer.			
race/ethnicity est.: other, short description			
ENVIRONMENT			
solo: shelving adjacent			
solo: hidden			
solo: window-view trees, grass			
solo: window-view no trees, grass			
solo: window-view blocked			
solo: communal study			
solo: soft chair or sofa, etc.			
solo: table			
solo: carrel			
solo: whiteboard			
2+: shelving adjacent			
2+: hidden			
2+: window-view trees, grass			
2+: window-view no trees, grass			
2+: window-view blocked			
2+: communal study			
2+: soft chairs or sofas, etc.			
2+: table			
2+: whiteboard			
homeness: shoes off			
homeness: possessions scattered			
homeness: items unattended			
homeness: walking without shoes			
homeness: eating, snack			
homeness: eating, meal			
homeness: drinking			
homeness: furniture reconfigured			
INTERACTIONS			
2+ White			
2+ African American			
2+ Latinx			
2+ Asian/Asian Amer.			
2+ other, i.e.,			
2+ men			
2+ women			

2+ similar-other, short description			
2+ people, diff. race			
2+ people, diff. age			
2+ people, diff. gender			
2+ people, diff. other, i.e.,			

w/baby/young child(ren)			
social-talking (whisper/low vol.)			
social-talking (regular indoor)			
social-talking (loud)			
w/earphones, etc.			
w/library computer			
w/laptop or tablet			
w/phone			
w/notebook: paper			
w/phys. book or textbook			
reading: paper/electronic			
writing: paper/electronic			
help seeking: library staff			
help seeking: librarian			
help seeking: student			
help seeking: faculty			

Appendix E

Photo-Elicitation Interview Protocol

Participant Name: _____ Date: _____

I. Introduction

Before we begin the interview, I want to thank you for participating in this study. I'd like to remind you of its purpose. I am interviewing SWCC/SWU students to better understand how they experience a sense of belonging in academic communities. The results of this study will be used as part of my dissertation in UNLV's Higher Education doctoral program.

As described on the eligibility web page and on the informed consent form, you have been invited to participate in this research study because you meet the eligibility requirements. Here is a copy of the informed consent form you completed, which details these requirements. After you consented to participate, you filled out the demographic survey and took five photos in the SWCC Library/SWU Library based on the categories listed on the webpage sent to you. Those photographs will be central to this interview.

This interview will take approximately one hour of your time. As compensation for your time taking pictures and in this interview, you will be given a $20 gift card.

I printed copies of the photos you took. Here's your set. I also have copies of the webpage with the photo categories. Please take a look at it and refresh your memory regarding which photos correspond to which categories.

I would like to record the interview to review and transcribe it later. After it's transcribed, I will give you a copy to check for accuracy. Do I have your permission to record the interview?

[IF YES] Thank you for letting us record our conversation. If you would like to stop the recording at any time, please let me know.

[IF NO] Thank you for letting me know. I will only take handwritten notes of what is discussed today.

I'd like to note that all responses to questions are confidential, that you have the right to skip any questions you do not wish to answer and to stop the interview at any time. Your participation in this study is voluntary. You may withdraw at any time. You are encouraged to ask questions. Are there any questions you would like to ask before we begin?

II. Photo Elicitation

The content of the interview will be based, in part, on the photos you have taken and uploaded. The way it will proceed will depend on which categories on the photography web page correspond to your photos. It will begin with questions about photographs connected to where you like to go when you have extra time in the SWCC Library / SWU Library. This will be followed by questions about your photographs related to where you feel comfortable, where you feel cared about, where you feel supported, where you feel at home, and where you

can be yourself. Last will be questions about photos connected to your favorite places in the library. Finally we'll talk about the photos you took, as a whole, in connection to belonging and community. Let's begin.

A. Warm Up

1) Are any of the pictures of places you like to go to in the SWCC Library/SWU Library when you have extra time?

[If their answer is yes for one or more of the photographs, follow-up with]

What do you like about that place?

What do you like to do there?

[Prompts, as appropriate:

Regarding location:]

Do you meet friends or classmates there?

Do you like to eat something there?

Do you like to study there?

[Regarding photograph's content:]

What is this?
What do you see here? / Can you describe what you see here?

How does this relate to your life?

Thank you for talking with me about your photo(s) related to places you like to go to in the SWCC Library/SWU Library when you have extra time. Next, we'll talk about places you feel comfortable, cared about, supported, at home, where you can be yourself, and finally your favorite place(s).

B. Places of Belonging

i. Comfortable place(s)

3) Are any of the pictures of places in the SWCC Library/SWU Library where you feel comfortable?

[If their answer is yes for one or more of the photographs, follow-up with]

a. Is there something about that physical space that feels comfortable for you?

Prompt: Tell me more

b. Are there people in that space that make it feel comfortable?

Prompt: Tell me more

[Prompts, as appropriate (regarding photographic content):]

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

ii. Place(s) you feel cared about

4) Are any of the pictures of places in the SWCC Library/SWU Library where you feel cared about?

[If their answer is yes for one or more of the photographs, follow-up with]

a. It could be by a friend or classmate or professor, or a group or a community, or even by something in the place itself.

b. Is there something about that physical space that communicates that you are cared about?

Prompt: Tell me more

c. Are there people in that space that makes you feel cared about?

Prompt: Tell me more

[Prompts, as appropriate (regarding photographic content)]:

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

iii. Supportive place

5) Are any of the pictures of places in the SWCC Library/SWU Library where you feel supported?

[If their answer is yes for one or more of the photographs, follow-up with]

a. It could be academic support or social support from a friend or classmate, or it could be support from a group or a community.

b. Is there something about that physical space that communicates that you are supported?

Prompt: Tell me more

c. Are there people in that space that makes you feel supported?

Prompt: Tell me more.

[Prompts, as appropriate (regarding photographic content):]

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

iv. Place you feel at home

6) Are any of the pictures of places on campus where you feel at home?

[If their answer is yes for one or more of the photographs, follow-up with]

a. Is there something about that physical space that makes you feel at home?

Prompt: Tell me more

b. Are there people in that space that makes it feel at home?

Prompt: Tell me more

[Prompts, as appropriate (regarding photographic content):]

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

v. Place you can be yourself

7) Are any of the pictures of places in the SWCC Library/SWU Library where you feel like you can be yourself?

[If their answer is yes for one or more of the photographs, follow-up with]

a. Is there something about that physical space that makes you feel like you can be yourself?

Prompt: Tell me more

b. Are there people in that space that makes it feel like you can be yourself?

Prompt: Tell me more

[Prompts, as appropriate (regarding photographic content):]

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

Thank you for talking with me about places in the SWCC Library/SWU Library where you feel comfortable, cared about, supported, at home, and where you feel like you can be yourself. Next, we'll finish this part of the interview by talking about your favorite places on campus.

vi. Favorite places

8) Are any of the pictures of places in the SWCC Library/SWU Library that are your favorite place(s)?

[If their answer is yes for one or more of the photographs, follow-up with]

a. What about this place makes it your favorite?

Prompt: Tell me more

b. Would you mind telling me the story of that place?

Prompt: Tell me more

c. Is there something about that physical space that you especially like?

Prompt: Tell me more

[Prompts, as appropriate (regarding photographic content):]

What is this?

What do you see here? / Can you describe what you see here?

How does this relate to your life?

III. Wrap up

Let's lay the pictures down on the table and see if we notice any themes or patterns. [We will start with talking about anything that stands out, that either the interviewer or the interviewee finds interesting. This may be related to the photos or to something that was discussed earlier in the interview. I will summarize some of the experiential roles related to a sense of belonging or community that seem to be present in the photos and the way the interviewee discussed them. I will ask the participant if my summary resonates with their experiences in the library and with their participation in this project. Finally, if it has not already been discussed, I will ask more directly about what role they think the library has (if any) in their sense of belonging in the academic community.]

IV. Conclusion

Thank you so much for your time and thoughtful responses. This concludes your participation in the research project. I will send you a copy of the transcript of this interview for your review as soon as possible. Please check the interview transcript for accuracy. Here is a $20 gift card in appreciation of your participation. If you have any questions or concerns about this project, please feel free to contact me. [I will then give them my business card.]

Appendix F

Eligibility Survey

We want to learn more about your experiences using the SWCC/SWU Library. To participate in a research project on this topic, which will contribute to a dissertation in UNLV's Higher Education doctoral program, you have to meet these eligibility requirements: 1) being a currently enrolled SWCC/SWU student, 2) having completed at least 6 credit hours at SWCC/SWU, 3) having completed at least 1 fall or spring semester at SWCC/SWU, 4) using the SWCC/SWU Library at least once a week while enrolled in classes, and 5) being 18 years old or older.

No	O
Yes	O

Appendix G

Demographic Survey

Thank you for your participation in this research project. The purpose of this survey is to better understand the diversity of students' experiences in the SWCC/SWU Library. No reference will be made in written or oral materials that could link you to your responses to this survey. You can skip any questions that you are uncomfortable answering. After you complete this survey, a webpage for the next step in this project, taking photos in the SWCC/SWU Library, will be emailed to you.

For the following questions please click the circle to indicate your response.

1) How many credits you have completed at SWCC/SWU?

6-29	O
30-59	O
60-89	O
90-119	O
120+	O

2) How many credits are you taking this semester?

1-5	O
6-11	O
12 or more	O

3) How many fall or spring semesters have you completed at SWCC/SWU?

1-2	O
3-4	O
5-6	O
7 or more	O

4) How often do you use the SWCC/SWU library during a fall or spring semester?

Between once a week and three times a week	O
Three times a week or more	O
Multiple times every day I am on campus	O

5) What is your current age?

18-24	O
25-29	O
30-39	O
40-49	O
50-59	O
60+	O

6) Do you currently have any children who are 17 years old or younger for whom you are a primary caregiver? (includes biological, adopted, and foster children, and children for whom you have legal custody)

No	O
Yes	O

7) Did any of your parents complete a college degree?

No	O
Yes	O
I don't know	O

8) What best represents your race/ethnicity (select all that apply)

Native American/American Indian/Alaskan Native	O
Hawaiian/Pacific Islander	O
Latinx/Hispanic	O
Black/African American	O
Asian/Asian American	O
White/European	O
Other (please specify) _____	
Prefer not to answer	O

9) What best describes your gender?

Male	O
Female	O
Transgender male	O
Transgender female	O
Gender variant/non-conforming	O
Other (please specify) _____	
Prefer not to answer	O

10) Do you identify as gay, lesbian, bisexual, pansexual, or queer?

No	O
Yes	O
Not sure/questioning	O
Prefer not to answer	O

11) Do you have a physical or learning disability? (select all that apply)

No	O
Yes, I have a mobility impairment or a sensory impairment (hearing or vision)	O
Yes, I have a learning disability (for example, dyslexia or ADHD)	O
Yes, I have a disability not listed (please specify) _____	
Prefer not to answer	O

Please provide your name and email address below to be sent the photo information and webpage.

Name_____
Email Address_____

Appendix H

Reflexive Photography Protocol

Again, thank you for participating in this research study! Next, we are asking you to take pictures of places in the SWCC/SWU Library that are meaningful or important to you. We'd like you to consider the categories listed below when you take the photos. These categories have been chosen because they are connected to belonging and community.

Please take 5 photos that relate to one or more of these categories. Then upload them using the "Choose File" buttons below.

You can take multiple photos in any of these categories and skip any of the categories that do not relate to your experiences in the library. Also, a particular photo can relate to multiple categories.

Please do not take pictures in which you or any other people can be identified. The easiest way to do this is to not take pictures with people's faces in them

Photo Categories

Place(s) in the SWCC/SWU Library you like to go between classes or when you have extra time

Place(s) in the SWCC/SWU Library where you feel comfortable

Place(s) in the SWCC/SWU Library you feel cared about

Place(s) in the SWCC/SWU Library where you feel supported

Place(s) in the SWCC/SWU Library where you feel at home

Place(s) in the SWCC/SWU Library where you can be yourself

Your favorite place(s) in the SWCC/SWU Library

After 5 photos have been uploaded, you will be sent an email to schedule the interview. Please provide your name and email address here:

Name_____
Email Address_____

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Whitmire, E. (2006). African American undergraduates and the university academic library. *The Journal of Negro Education*, *75*(1), 60-66. https://www.jstor.org/stable/40026504

Curriculum Vitae

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EDUCATION

University of Nevada, Las Vegas (Las Vegas, NV) PhD — May 2024
Higher Education

Simmons University (Boston, MA) MS — January 2007
Library and Information Science

Harvard University (Cambridge, MA) MTS — May 1999
Religions of the World

Oberlin College (Oberlin, OH) BA — May 1993
Religion Major, Politics Minor

RESEARCH

Chodock, T. (2024). *Belonging in a community college library* [Manuscript in preparation].

Chodock, T. (2024). *"A similar feeling to home": Diverse students' experiences in academic libraries* [Manuscript in preparation].

Chodock, T. (2024). *Equity in academic libraries: A student-focused review* [Manuscript submitted for publication].

Borchardt, R., Bivens-Tatum, W., Boruff-Jones, P., Chin Roemer, R., Chodock, T., DeGroote, S., Hodges, A. R., Kelsey, S., Linke, E., & Matthews, J. (2020). ACRL Framework for Impactful Scholarship and Metrics. https://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/impactful_scholarship.pdf

Chodock, T. (2018). The impact of student engagement at a community college. In M. Regalado & M. A. Smale (Eds.), *Academic libraries for commuter students: Research-based strategies* (pp. 117-138). American Library Association.

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REGIONAL AND NATIONAL PRESENTATIONS

Chodock, T. (2020, December 16). *Mapping sense of belonging in library spaces* [Paper presentation]. 2020 Library Assessment Conference: Critical/Theoretical Assessment and Space. https://www.libraryassessment.org/wp-content/uploads/2021/09/197-Chodock-Mapping-Sense-of-Belonging.pdf

Allard, M., Boucher, E., Chodock, T., Hatcher, W., Hayden, S., Klimow, N., Nehls, K., Soria, J., Spinrad, M., Thoman, S., & Tyler, T. (2018, February 26-27). *The business of international students at a community college* [Conference session]. Ethnographic and Qualitative Research Conference, Las Vegas, NV.

Chodock, T., & Relles, S. R. (2016, November 9-12). *Marginalized agents for student success: Conceptions of libraries and librarians* [Paper presentation]. Association for the Study of Higher Education Annual Conference, Columbus, OH.

Chodock, T., & Roberson, C. (2016, October 31-November 2). *Meaningful one shot assessment: Two years to get it right* [Poster presentation]. Library Assessment Conference, Arlington, VA.

Chodock, T. (2016, October 18-19) *Developing a culture of assessment* [Conference session]. Nevada Library Association Annual Conference, Las Vegas, NV.

Chodock, T. (2016, March 20-23). *Collaborate to strategically align with student success initiatives* [Conference session]. League for Innovation in the Community College Innovations Conference, Chicago, IL.

Chodock, T., & Roberson, C. (2016, March 20-23). *Library instruction that improves self-efficacy and student achievement* [Conference session]. League for Innovation in the Community College Innovations Conference, Chicago, IL.

Chodock, T. (2015, June 25-30). *Attitudes matter: Student success beyond information literacy* [Poster presentation]. American Library Association Annual Conference, San Francisco, CA.

Chodock, T., & Roberson, C. (2014, April 11-13). *Library resources for student online learning* [Conference session]. Nevada Conference on Digital Learning, Las Vegas, NV.

Chodock, T., & Dolinger, E. (2010, April 29-May 1). *Universal design for information literacy* [Conference session]. LOEX Library Instruction Conference, Dearborn, MI.

Thompson, J., Toomey, D., Major, A., & Chodock, T. (2010, March 17-20). *Rethinking and remixing academic writing: using multi-modality, scaffolded instruction, and universal design to teach a research process to diverse learners* [Paper presentation]. Conference on College Composition and Communication (CCCC), Louisville, KY.

PROFESSIONAL EXPERIENCE

College of Southern Nevada, Las Vegas, NV 2010-Present

Lead Librarian, Charleston Campus, CSN Libraries, *2021-present*

- Supervise, train, coach, and evaluate, in consultation with library director, three full-time Instruction & Reference Librarians and three part-time librarians
- Develop a campus library culture of collaboration, collegiality, equity, and inclusion
- Schedule and ensure staffing of reference desk, including 72 in-person public services hours per week during fall and spring semesters
- Collaborate with campus partners to improve and maintain library facilities; working with leadership team to address furniture and lighting needs.
- With Head of Access Services, recommend and administer library acquisitions, equipment, and wages budget

Reference and Instructional Services Librarian, CSN Libraries, *2010-present (Excluding Spring 2013)*

- Acted as Site Coordinator for the Charleston Campus Library (2013-2021); scheduled reference desk and developed and implemented evaluation plan for part-time librarians
- Lead Assessment Team (2015-2023), represented CSN Libraries in assessment and institutional effectiveness-related committees and initiatives, administer Unit Action Plan
- Member, Equity Diversity Inclusion (EDI) Working Group (2020-2021), EDI Team (2022-present)
- Led eStruction Team (2011-2014), Member 2010-present
- Develop instruction-focused web pages, tutorials, and subject guides
- Teach course-integrated library instruction
- Provide face-to-face, phone, chat, text, and email reference services
- Perform collection development functions for subjects that have included psychology, philosophy, religion, political science, business, and world history
- Taught LIB 101: Research for College Papers (Spring 2011)

Interim Director, CSN Libraries, *Spring 2013*

- Supervised professional and classified staff at the three campus libraries
- Coordinated Library student success initiatives with college-wide efforts
- Managed a complex budget including acquisitions, operating expenses, and staff wages

Adjunct Instructor, Philosophy, *2011-2014*

- Taught Introduction to Philosophy, emphasizing the cross-cultural history of philosophy.

Landmark College, Putney, VT 2007-2010

Research Services Librarian

Served Landmark College's unique student body, consisting exclusively of individuals with diagnosed learning disabilities, ADHD, and/or autism spectrum disorder, and its larger community:

- Provided face-to-face, phone, email, and chat reference services
- Developed, promoted, taught, and assessed a course-integrated information literacy curriculum

- Assisted faculty and staff with research through literature reviews and search strategy instruction
- Designed and updated Library website, including creation of course guides and subject guides
- Performed collection development functions for art, business, communications, environmental studies, mathematics, philosophy, religious studies, science, and world history
- Acted as the liaison to the Art, Business, Communications, Humanities, Mathematics, and Natural Science Departments

Yiddish Book Center, Amherst, MA 2004-2009
Bookseller and Visitors Center Assistant
Provided reference assistance, including recommending books and learning materials; led tours; processed and shipped items purchased in-store, online, and by telephone; stocked and organized materials.

University of Connecticut, Storrs, CT Fall 2006
Temporary Undergraduate Instruction Librarian
Prepared and delivered course-integrated library research instruction to first year English courses, assisted instructors in developing library research assignments, and provided face-to-face reference assistance.

Northfield Mount Hermon School, Northfield, MA 2003-2004
Chaplaincy Intern
Taught a seminar style comparative ethics course; organized community service projects; advised students and Japanese Student Association; led Amnesty International, Interfaith Council, and Student Deacons.

Kamo Town Board of Education, Kamo Town, Kyoto Prefecture, Japan 2000-2002
Assistant English Teacher
As a participant in the Japan Exchange and Teaching (JET) Program, taught English to over 1200 students in one junior high school and four elementary schools; developed curricula and international education programming.

Harvard University, Cambridge, MA 1996-2000, 2002-2003
Technical Services Assistant, Andover-Harvard Theological Library, *2002-2003*
Assisted with bibliographic maintenance and inventory, identified cataloging anomalies and resolved shelf-list conflicts, and provided conservator with support for shifting of rare books and high security materials.

Staff Assistant, Near Eastern Languages and Civilizations Department*, 1999-2000*
Responded to prospective student inquiries; acted as a liaison with students, faculty and the public; typed memos, correspondence and course materials for a large academic department.

Cataloging Assistant, Widener Library, *Summer 1999*
Cataloged Tibetan materials through subject analysis of books, transliteration of bibliographic information, identification of access points, and revision of MARC records with transliteration.

Cataloging Assistant, Andover-Harvard Theological Library, *Spring 1999*
Edited bibliographic records; prepared brittle and non-circulating books for relocation; discarded brittle books with fiche replacement; edited bibliography for and prepared shipment of over 1100 books to Fudan University, Shanghai, to establish a Western Theology collection.

Interlibrary Loan Assistant, Andover-Harvard Theological Library, *1997-1999*
Assisted with interlibrary lending within and outside of Harvard University, processed incoming print and electronic requests and determined availability of requested materials, and coordinated rush processing.

Circulation Assistant, Andover-Harvard Theological Library, *1996-1997*
Circulated materials and provided initial contact for patrons entering library and first-level reference assistance.

AWARDS & GRANTS
Recipient, with Emily King and Lorraine Rosales, Spirit of CSN Award, 2022, for a project titled, "CSN Living History Archive"
Recipient, ACRL Academic Library Impact Research Grant, 2019, for a project titled "Sense of Belonging in Academic Libraries"
College of Southern Nevada Excellence in Assessment Award, 2018
Nevada Library Association Librarian of the Year, 2014

PROFESSIONAL ASSOCIATIONS
Beta Phi Mu, National Library Honor Society, 2007-present
American Library Association, 2006-present
Association of College and Research Libraries, 2006-present