

**Going the Social Distance:  
The COVID-19 Pandemic, Space, and Student Social Connection**

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## ABSTRACT

This research asks how space shapes students' social connection, and how the COVID-19 pandemic affected this relationship. In drawing on interviews and journals from 19 University of Michigan undergraduate students, this study finds that before COVID-19, proximity to campus and boundless access to nearby third places and living arrangements enabled social connection despite symbolic class, race, and other barriers. The pandemic narrowed the scope of spatial propinquity, collapsed symbolic boundaries between places, and altered the rules for social interaction. On one hand, these spatial changes exacerbated social conflict and cultivated social burnout. On the other, they prompted students to reexamine their valued social connections and created a welcomed barrier of separation from social exclusion. This research expands our understanding of how social connection is experienced, defined, and fostered during a historical moment that uniquely upended our taken-for-granted assumptions.

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Forever and for always, Go Blue!

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## INTRODUCTION

The collective effervescence of hustling across a university campus to class is something unnoticed in the moment, yet critically missed upon its disappearance. Perhaps being physically surrounded by others oriented toward similar academic pursuits creates an unspoken bond of solidarity. I certainly felt this bond on Wednesday, March 11, 2020. My chest was burning with anticipation as I opened the door to a small lecture room crammed into the corner of a university building. We were expected to take a written quiz that afternoon, but an email flashing across my phone screen had already generated a buzz that wiped out any possibility of classroom normalcy. My professor sighed and addressed my class with a sardonic grin: “Looks like we won’t be having that quiz.” The World Health Organization declared COVID-19 a global pandemic that same day (WHO 2020).

COVID-19, a novel coronavirus, is spread via physical proximity with others (CDC 2020). In addition to global ramifications, there is substantial evidence that COVID-19 has affected individuals differently across demographic lines. Official records show disproportionate mortality rates among people over the age of 84 (United States Census Bureau 2020). In the United States, non-Hispanic Black individuals exceed their predicted rate of mortality by 79% and Hispanic individuals of any race exceed their rate by 64% (United States Census Bureau 2020). Non-Hispanic white individuals, in contrast, exceeded their predicted rate of mortality by only 21% (United States Census Bureau 2020).

The global pandemic undoubtedly affected everyone, rendering this period of time ideal for analyzing why and along which dimensions impact differed.

This research focuses on one aspect of life during COVID-19: social connection. On a micro-level, social connection encompasses the everyday interactions we have with other people. These interactions might involve verbal conversations or unspoken exchanges, including in-depth discussions or mutual eye contact. On a macro-level, social connection is conceptualized as relationships with others and feelings of belonging within a broader social context. University students, for example, might connect with their friends while feeling disconnected from their broader campus culture. These components of social connection are everchanging, as individuals constantly discover, define, and reevaluate their daily interactions, relationships, and perceptions. For the purposes of this study, the definition of social connection remains broad to capture the wealth of social experiences before and during COVID-19.

As social beings, social connection is an integral component of human psychological wellbeing and life (Hagerty & Williams 2020). Likewise, space is integral to social connection. We often describe our relationships in terms of proximity: “I’m close with her,” or “he seems distant.” The 20-item Social Connectedness Scale by Lee et al. (2001) even includes statements that subjects rate their agreement with such as “I feel close to people.” This rhetoric is emblematic of the important role spatial proximity plays in social connections—a phenomenon sociologists call spatial propinquity (Small & Alder 2019). But COVID-19 public health guidelines restricted in-person interactions

while officials urged—and at times, mandated—individuals to stay home. Physical distancing protocols urged people to stay at least 6-feet apart and wear facial coverings (e.g., masks) if they were to interact in-person. This sudden narrowing of space was acutely felt on college campuses, as universities closed their doors and required students to return to their hometowns or stay-in-place. Quickly ushered from campus, many students faced isolation from peers as they completed classes for the semester. Even students who decided to remain near campus were barred from visiting university libraries, student unions, and other local gathering places. The Fall 2020 semester presented students with a new choice: to return or not to return. The majority of classes were to be conducted online, loosening the obligation of students to be physically near campus. This unique time in history thus reconfigured the relationship between social connection and space.

To study this shifting dynamic, this study asks how space shapes students' social connections with peers, and how the COVID-19 pandemic affected the relationship between space and social connections. I answer these questions by way of a mixed methods approach involving interviews and daily journal entries. My sample consists of 19 undergraduate students at the University of Michigan. I selected seven of these individuals to write journal entries twice daily for 4-day periods and participate in second interviews based on their written submissions. Through a total of 26 interviews and 7 journals, participants discussed their interactions, emotions, perceptions, and daily experiences before and during the pandemic.



This study finds that before COVID-19, proximity to campus and boundless access to nearby third places and living arrangements enabled social connection despite symbolic class, race, and other barriers. Spatial propinquity, or the role of physical proximity in social connection (Small & Alder 2019), emerged as a consideration when talking with commuter students. Commuters discussed how the significant distance between their living arrangements and campus posed barriers to their ability to make social connections with peers. These students attributed these barriers to time-sensitive access to nearby living arrangements (e.g., their own dorm rooms) and “third places” between home and school (e.g., local cafés). While students living near campus also expressed feelings of disconnection, these individuals had a greater ability to make social connections with peers due to their boundless proximity with places near campus.

This study also finds that the pandemic narrowed the scope of spatial propinquity, collapsed spatial boundaries between places, and altered the rules for social interaction. These predominant spatial changes modified students’ relationships and interactions, which are two primary components of social connection. On one hand, these spatial changes exacerbated social conflict and cultivated social burnout. Social conflict eroded students’ home-centered connections with roommates and family members, who comprised the majority of students’ interactions during the pandemic. Attempts to replace in-person interactions in a virtual format advanced social burnout by compelling students to engage in most activity without moving between physical places. This

burnout disincentivized students from connecting with others during the pandemic. On the other hand, COVID-19 spatial changes prompted students to reexamine their valued social connections and created a welcomed barrier of separation from social exclusion. The narrowing of interactions and activity to the home provided some with the chance to step back, reexamine, and redefine with whom they most desired social connection. For some students, this meant moving home to maximize their relationships with family members, which they were previously forced to push aside upon moving away for school. Moreover, physical distance from the broader student body on campus afforded some students a desired degree of separation from exclusion. Some students described feeling like “imposters” on campus due to the competitive academic atmosphere. Attending class through a video call quelled anxieties spurred by physical proximity with thousands of other motivated, high-achieving students.

This research is of sociological significance because it examines how students experience, define, and foster social connection during a historical moment that uniquely upended our taken-for-granted assumptions. My findings affirm existing literature about how students’ proximity to peers is positively correlated with social connection (Chapman & Pascarella 1983; Dumford, Ribera & Miller 2019). Yet much past research on this topic is quantitative and focuses on student retention rates as a narrow indicator of success (Tett 2004; Chapman & Pascarella 1983; Soria, Stebleton & Huesman 2014; Broton & Goldrick-Rab 2018; Dumford et al. 2019; Silva et al. 2017; Sandstrom & Dunn 2014). This qualitative study expands our understanding of the student experience—and

social life more broadly—by examining the evolving relationship between space and social connection during a global pandemic.

## LITERATURE REVIEW

This section details existing theory and research about space and belonging. First, I outline theories and concepts related to space. Second, I reflect on existing literature about how space shapes social connection on college campuses. Third, I detail emerging research on the social impacts of COVID-19. Through a qualitative lens, this thesis expands existing literature by examining the relationship between space and students' social connection during a unique historical moment that has called into question our beliefs about daily interactions, relationships, and belonging.

### Physical/Symbolic Space and Third Places

Space has both physical and symbolic meanings. Sociologist Georg Simmel reflected that “spatial relations are only the condition, on one hand, and the symbol, on the other, of human relations” (1908, as translated in Park & Burgess 1921). Simmel’s conceptualization of a social form—the Stranger—as spatially physically near and symbolically distanced from a given group illustrates his point (1908, as translated in Park & Burgess 1921). The present study grapples with both these physical (i.e., “the condition”) and symbolic (i.e., “the symbol”) dimensions of space. Physical space is understood as one’s literal

position relative to place; symbolic space is the figurative meaning(s) of place relative to one's relationships, perceptions, experiences, and social positionality.

Consider a hypothetical student sitting in their dorm room near campus. The physical space this student occupies is their dorm room near campus. But the symbolic space they occupy may have multiple other meanings. For example, their dorm room may symbolize college, academics, and friendships. It may also symbolize exclusion, disconnection, and stress. These meanings are not mutually exclusive; this student may view their dorm room as a place symbolizing both stress and friendship. Individual perceptions and experiences inform the symbolic meanings one attributes to space and place.

Ethington (1997) delineates the historical trajectory of Simmel's physical and symbolic space in his account of "social distance" as a sociological concept. He argues later Simmelian thinkers, such as Robert Park and Emory Bogardus, focused on the symbolic dimension of space at the expense of the physical (Ethington 1997). In other words, Ethington critiques how these scholars disregard physical proximity between people in an effort to solely examine the symbolic meanings of places (Ethington 1997). Other researchers have attempted to reinstate this tangible aspect of Simmelian space by quantifying the physical distance represented Bogardus's symbolic "social distance" scale (Dodd & Nehnevasja 1954; Boguna et al. 2004). I believe that considering how close people are to each other is just as important as considering the symbolic meanings of the spaces they occupy.

Put differently, both the physical and symbolic dimensions of space are necessary to make sense of its complex relationship with social connection. Social connections are typically facilitated within—or impacted by—physical space. Spatial composition and spatial propinquity are two concepts useful for understanding this dynamic. Spatial composition is “the presence or absence of fixed places that make social interaction possible” (Small & Alder 2019). These fixed spaces may exist in various locations, but they remain relatively stable over a given period of time. Spatial propinquity is the role of physical proximity in relationship formation (Small & Alder 2019). Researchers have argued a positive correlation exists between spatial propinquity and probability of social connections (Blau 1977; Festinger et al. 1950). Whereas spatial propinquity is created by human relations, spatial composition is intrinsic to space itself (Small & Alder 2019).

Oldenburg’s (1989) “third places” between home and work serve a fitting illustration of spatial composition and propinquity. Coffee shops, libraries, and community centers are all examples of fixed, or “third,” places. The cardinal signals of a “third place” are its status as an informal gathering place aimed toward stimulating conversation (Oldenburg 1989). The spatial composition of a city may or may not include third places, and the spatial composition of third places themselves may affect the ways in which people interact. For instance, the composition a hypothetical college town includes coffee shops, libraries, and student unions apt for social connection. These third places have seating and common areas designed specifically to facilitate interactions amongst

students. By placing students in proximity with one another, third places encourage social connection—which is where spatial propinquity plays a role (Oldenburg 1989; Francis et al. 2012). As such, spatial composition and propinquity are both integral components of third places.

Wexler & Oberlander (2017) broaden the definition of third places into three types: communitarian, commercial, and digital. Communitarian third places are publicly accessible and not driven by profit (e.g., community centers). Commercial third places are privately accessible and driven by profit (e.g., restaurants). Virtual third places are accessible online and are often driven by profit, though they do not always require financial contribution on behalf of attendees (e.g., social media platforms) (Wexler & Oberlander 2017). In the context of this study, we may consider university common as a combination of communitarian and commercial places, as they are accessible to all students, yet these individuals must pay tuition to retain their student statuses. The COVID-19 pandemic has increased use of virtual third places for students—whether it be participation in online video conferencing or social media platforms (Harris Poll 2021). Therefore, these different types of third places are useful for interpreting the results of this study. My research contributes to literature on spatial composition and propinquity by studying a time period in which in-person access to third places was restricted by risk of exposure to COVID-19. I contrast students' reflections about life before and during the pandemic to demonstrate how their perceptions of space and experiences of social connection have changed.

### Student Social Connection

This subsection focuses on how the aforementioned theories of space apply to students' social connections near and far from campus. It details past research on the relations between spatial composition, spatial propinquity, identities, and student life in turn.

Spatial Composition. Literature about how students interact with space includes analyses of spatial composition. Hirsh and Khan (2020) emphasize how the spatial configuration of dorm rooms shapes students' behaviors. In their study, the availability of the bed as the most comfortable sitting spot in a cramped dorm room helps create an environment apt for sexual assault (Hirsh & Khan 2020). In another study on student housing, Heilweil (1973) discusses how the open architecture, or spatial composition, of student dormitories encouraged peer interactions and relationship formation. Other researchers have found that the vertical arrangement of high-rise dwellings, in contrast, discourage interactions due to the increased intention and effort required to go outside of one's apartment (Wallace 1952). Face-to-face interaction were integral measures of social connection in these studies. Mok, Carraso & Wellman (2010) found in-person interactions were still important to relationship maintenance even as virtual modes of communication have become increasingly popular. However, this study was conducted over 10 years ago—a period during which internet technology has rapidly changed. Situated in 2020, this study uniquely

adds to the literature by analyzing social connection when in-person interactions were substantially limited by the COVID-19 pandemic.

Other scholars have broadened these conversations to the spatial composition of universities campuses. Urban sociologists generally view campus spaces as purposively designed to facilitate educational interactions (Yaylali-Yildiz et al. 2014). Universities may have financial incentive to bolster the image of their campuses as central to student life. An aesthetically appealing campus composition—replete with green spaces, recreational areas, and study spots—may encourage prospective students to attend, promote positive memory formation, and subsequently encourage alumni donor contributions (Gumprecht 2007). Public spaces on college campuses, such as student quads and green areas, encourage student connection as places for recreation and interactions (Scholl & Gulwadi 2015). These public spaces fit well with Oldenburg’s (1989) definition of third places, as they contribute to conversation amongst attendees and are publicly available to all. My analysis will later deconstruct this public availability by considering how commuter students do not have the same *de facto* access to third places near campus, but this literature nonetheless acts as an important foundation for discussion.

Spatial Proximity. Prior research has shown that students who live in residences closer to campus tend to experience higher levels of social integration than commuter students (Chapman & Pascarella 1983; Dumford, Ribera & Miller 2019). These findings fall in line with the concept of spatial



propinquity in that increased social connections are correlated with their physical proximity with peers. Commuter students generally have a lower household income than their residential peers, and their differing life responsibilities (e.g., work) may bring about lesser identification with their institutions of higher education (Forbus et al. 2011). These data-backed differences between commuter and residential social connections underscore the importance of spatial propinquity in relationship formation and maintenance.

Scholars have also examined how daily interactions affect student social connections. Sandstrom & Dunn (2014) found that on days when students interact with more classmates than usual, they feel greater happiness and belonging. Students living near campus arguably have broader access to places and opportunities for interaction with peers, unbound by the need to eventually travel far distances home. Frequent interactions are integral to forming relationships, and a lack of social attachments is associated with poor well-being (Baumeister & Leary 1995). But the presence of relationships alone are not satisfactory for social connection and belonging. Research has found that simply interacting with others is negatively correlated with mental health issues such as anxiety and depression (Hoyle & Crawford 1994). Interactions with “weak ties,” or people with whom one has distant relationships (e.g., a passerby, unfamiliar colleague, or neighbor) are also shown to improve individuals’ moods (Epley & Schroeder 2014). Spatial propinquity underlies this aspect of social connection, as physical proximity provides greater opportunities for interactions. Before the COVID-19 pandemic, scholars found individuals

typically interact with between 11 and 16 “weak ties” daily (Sandstrom & Dunn 2014). Physical distancing restrictions have limited the spontaneity of these beneficial interactions, likely at the detriment of students’ wellbeing.

Social Identities. As mentioned previously, students’ identities and social positionalities inform the symbolic meanings they assign to spaces. The creation of symbolic meaning is an iterative, dynamic process. It is thus important to consider students’ social identities when examining how they interact with and perceive space.

Take for example socioeconomic status. The literature shows that low-income students feel a lesser sense of belonging on college campuses than their affluent peers (Soria, Stebleton & Huesman 2014). These students’ low social connection and subsequently limited social networks on campus may negatively impact their access to informal peer networking, possibly negating a benefit commonly associated with attending a residential college (Lehman 2012). Furthermore, Jack (2019) contends different pre-college experiences create disparate levels of social connection with peers amongst low-income students (Jack 2019). Pulling from existing literature, this thesis considers how socioeconomic status—and other social identities—play into the relationship between space and students’ social connections.

Much of this aforementioned research claims access to institutions of higher education is not the key to social integration. But these scholars stop short of providing a robust understanding of student experiences by solely

analyzing how their feelings of belonging impact retention rates (Tett 2004; Chapman & Pascarella 1983; Soria, Stebleton & Huesman 2014). Although graduating college is certainly beneficial to students, using retention as a singular measure of success ignores the qualitative experiences—the social connections—that make up students' everyday lives. If a student graduates yet was systematically denied the opportunity to form strong social, professional, and academic networks on campus, assuming that every college experience carries equal weight is dangerously reductionist. Scholars that push beyond retention narrowly consider institutional acceptance and peer relationships as factors contributing to social connection (Hoffman et al. 2003; Dumford et al. 2019; Sandstrom & Dunn 2014). This study contributes to the literature by analyzing how space interacts with students to foster or deny social connections, which make up the bulk of their experiences and has implications beyond retention.

Moreover, past research typically centers on the experiences of minority students (Jack 2019; Tett 2004; Chapman & Pascarella 1983; Soria, Stebleton & Huesman 2014; Lehmann 2012). Hierarchical power structures are created, validated, and perpetuated by all members of the campus community. This study aims to develop a more critical awareness of how all students, whether they benefit from the hegemonic norms or not, interact with space. By examining how social connection differs between groups, involving students of all socioeconomic statuses, racial identities, and genders will strengthen this particular piece.

### COVID-19 and Social Connection

Research conducted in the early stages of COVID-19 shows minor, insignificant changes in social connection. A preliminary study revealed that people felt little change in their feelings of social connection during the early stages of the pandemic (Folk et al. 2020). However, this study was published in July 2020—only 5 months after the pandemic first introduced physical distancing restrictions in America. Since these researchers gathered data before publication, this finding is temporally tied to the very beginning of the pandemic. Another early study suggested household size (i.e., number of housemates) did not play a significant role in social connection during the pandemic (Folk et al. 2020). But this research extrapolates that confinement to one's home may have caused conflict between those with whom individuals share space, leading to negative interactions that do not contribute to social connectedness (Folk et al. 2020; Baumeister & Leary 1995). The present study adds to the literature by specifically exploring the role of daily roommate interactions, and subsequently social conflict, in students' feelings of social connection.

Some researchers have explored whether online interactions blunt the impact of COVID-19 isolation. While depression was heightened by a lack of in-person social connections, a study found that health anxieties were partially quelled by internet social connections (Stuart et al. 2020). Other researchers point to online platforms as means to maintain “normal” social connections and networks, as urged by public health officials (Wiederhold 2020; Wu 2020). Like the aforementioned literature, these studies were conducted at the beginning of

the pandemic. Although online interactions likely help attenuate the effects of isolation, this thesis critically examines the extent to which virtual places act as adequate replacements for in-person places of social connection.

## METHODS

This research was conducted during the Fall 2020 term at the University of Michigan in Ann Arbor, Michigan (U-M). This time period was notably marked by the COVID-19 global pandemic. To prevent the spread of this novel coronavirus, students at U-M adapted to largely remote classes and virtual coursework. While few students continued attending in-person courses, the majority participated in online courses throughout the term. Other operations such as essential jobs and grocery shopping continued in-person with the added layer of personal protective equipment (e.g., masks, face shields, gloves). The interviews and journal entries in this research took place remotely to adhere to public health guidance and protect the health and safety of participants. Interviews were held via Zoom, an online video conferencing software available to students enrolled at U-M.

Regulations and laws regarding COVID-19 evolved throughout the Fall 2020 term. Washtenaw County, the county in which Ann Arbor is located, issued a public health order requiring U-M undergraduate students to stay isolated with roommates in their places of residence from October 20 to November 3, 2020 (Washtenaw County Health Department 2020) On November 15, 2020, Michigan Governor Whitmer issued an executive order limiting in-person gatherings and

activities in the state (Michigan Department of Health and Human Services 2020). U-M students were instructed to leave campus for the following Thanksgiving break, and instruction took place virtually through the end of the term. While impactful to students' daily activities, these guidelines did not alter the operations of this study.

### Sample

The inclusion criteria for participants was U-M undergraduate students living in (1) high-rise apartments within walking distance of campus, (2) houses or apartments within walking distance, or (3) houses or apartments with family members. I understood "walking distance" as relative to U-M's central academic campus in Ann Arbor, Michigan. "Walking distance" was loosely under 20 minutes by foot or bicycle. The majority of students living within "walking distance" preferred walking as a means of transportation to classes on campus, although a few preferred biking. The third criterion, houses or apartments with family members, was broken into two components: (a) students who lived with family before Fall 2020 (e.g., commuters) and (b) students who chose to live with family starting in Fall 2020. These criteria were added to purposively include students staying at home due to the COVID-19 pandemic. The two commuter students interviewed lived between 30-and-40 minutes driving distance from U-M's central campus. Students choosing to live with family during Fall 2020 differed with regard to distance, but none lived within walking distance to U-M's central campus. All participants staying at home were living in Michigan.

Although this study focused on the Fall 2020 term, participants often reflected on previous semesters. Participants occasionally provided information about both their previous and current living arrangements. These data were not excluded because they provided valuable insight on students' full experiences during their time at U-M. In sum, these criteria intentionally cover a wide range of students to avoid drawing conclusions from the experiences of only a subset of the population.

*Table 1* may prove useful for understanding the results of this study.

*Table 1* displays relevant demographic information for participants, each of whom is referred to with an assigned pseudonym. Participants are grouped by approximate housing categorization relative to the inclusion criteria. As shown by *Table 1*, 19 U-M undergraduates participated in this study. Four of these students lived in high-rise apartments, eight lived in houses/apartments near campus, two typically commuted to in-person classes, and five lived with their families during the Fall 2020 term. 15 participants identified as women and 4 identified as men. Participants varied in terms of race and ethnicity, household income, age, and academic year. However, there was only one first-year student in the sample, Alyssa, given the exclusion of students living in dormitories on campus. All but one participant, Robert, was attending U-M during the Fall 2020 term. Robert was taking a gap-year, which he explained during his interview.

*Figure A* shows the approximate locations of students living withing walking distance from campus. Rather than showing participants' addresses, this map displays the approximate neighborhoods in which these students live

by lumping participants together. Maize (light-colored) dots represent students living in high-rise apartments. Blue (dark-colored) dots represent students living in other houses or apartments near campus. There are a total of 11 participants who lived near campus. No identifying information, including pseudonyms, is tied to this map. The exact streets and locations of students' living arrangements are not provided. *Figure A* intends to provide readers with a general visual representation of students' proximity to central campus.

**TABLE 1. Participant Demographics.**

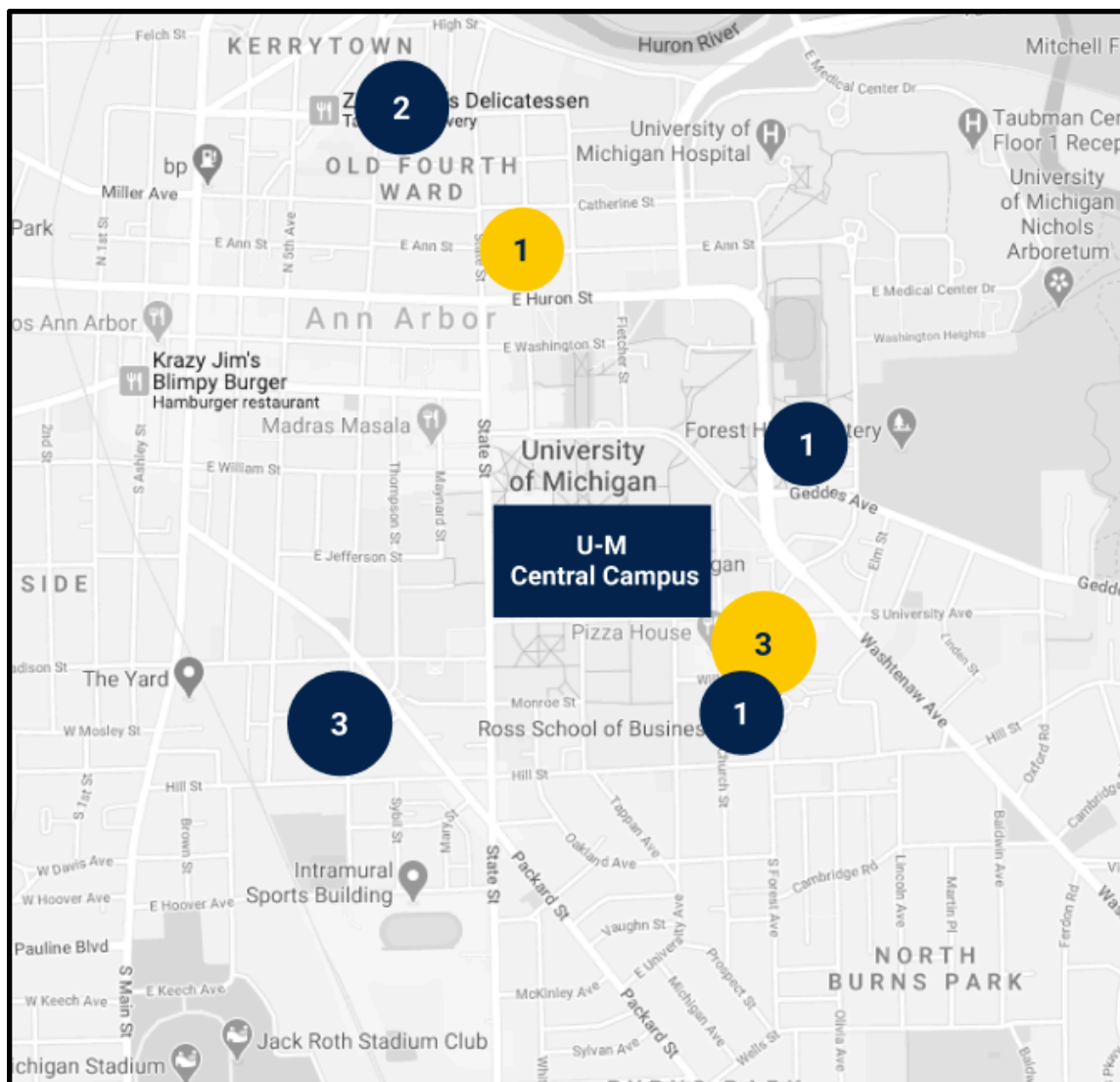
Name	Gender	Race / Ethnicity	Age	Academic Year	Estimated Household Income	Rent/mo.	First Interview Date
<b><i>HIGH-RISE APARTMENTS WITHIN WALKING DISTANCE</i></b>							
<b>Kayla</b>	Female	White	21	Senior	Unknown	\$1,374	9/25/20
<b>Gauri</b>	Female	South Asian	19	Soph.	\$100,000+	\$560	10/12/20
<b>Arjun</b>	Male	South Asian	20	Junior	Unknown	\$1,148	11/11/20
<b>Suha</b>	Female	Middle Eastern	20	Junior	\$500,000	\$1,149	11/18/20
<b><i>HOUSES OR APARTMENTS WITHIN WALKING DISTANCE</i></b>							
<b><u>Eliana</u></b>	Female	White	21	Senior	\$150,000	Unknown	9/29/20
<b><u>Lilah</u></b>	Female	Middle Eastern	20	Senior	\$300,000	\$900	10/9/20
<b><u>Alyssa</u></b>	Female	East Asian	18	Freshman	\$100,000 (\$250,000*)	\$500**	10/13/20
<b>Cass</b>	Female	White	20	Junior	\$250,000	\$750	11/24/20
<b>Eve</b>	Female	White	21	Senior	\$60,000	\$450	10/27/20
<b><u>Melanie</u></b>	Female	White	21	Senior	\$35,000	\$497	10/31/20
<b>Riley</b>	Female	White	19	Soph.	\$40,000 (\$70,000*)	\$1,667	11/20/20



<b>HOUSES/APARTMENTS FAR FROM CAMPUS (COMMUTER STUDENTS PRE-COVID)</b>							
<b>Gabe</b>	Male	White	20	Junior	"A lot"	N/A (\$600***)	10/20/20
<b>Robert</b>	Male	White	19	Soph.	\$48,000	N/A	11/10/20
<b>HOUSES/APARTMENTS FAR FROM CAMPUS (ONLY DURING COVID)</b>							
<b>George</b>	Male	White/Latino	22	5 <sup>th</sup> Year	\$120,000	N/A	10/6/20
<b>Rashmi</b>	Female	South Asian	22	5 <sup>th</sup> Year	\$150,000	N/A (\$750*)	10/20/20
<b>Kelly</b>	Female	East Asian	20	Junior	\$40,000	N/A (\$550*)	10/21/20
<b>Lydia</b>	Female	White	20	Junior	\$90,000+	N/A (\$530*)	10/28/20
<b>Lindsay</b>	Female	Native American	19	Soph.	\$65,000	N/A	12/6/20
<b>Yasmin</b>	Female	Middle Eastern	20	Junior	Unknown	N/A	11/29/20

**Participant completed second-round of this study // \*Before COVID-19 // \*\*Subletting price**

**FIGURE A. University of Michigan Central Campus.**



*Figure A excludes U-M's North Campus, which is northeast of Central Campus. Image Courtesy of Google Maps.*

## Recruitment

This study involved a purposive sampling method to select students living in a variety of locations relative to U-M's main campus. To accomplish this, I employed various recruitment methods such as digital flyering and snowball sampling. I posted a digital flyer advertising the study on four U-M class Facebook pages. Prospective students reached out via email to express their interest and were vetted according to the aforementioned inclusion criteria. I also contacted acquaintances and student organization group chats for participant recommendations. These individuals provided me with names and email addresses of other students meeting my inclusion criteria. I then reached out to the recommended participants via email with information about my study. Prospective participants were encouraged to respond if they were interested in setting up a time to interview. After the participants recruited through these methods finished their involvement in the study, I asked them to recommend other U-M undergraduates who met my inclusion criteria. Although I was unable to solicit recommendations from every participant, this small-scale snowball sampling method was moderately successful in recruiting undergraduates.

## Data Collection

I gathered data from 19 undergraduate students through a total of 26 interviews and 7 daily journals. Once recruitment was underway, I asked students to participate in an approximately 1-hour interview over Zoom, a popular video conferencing software available at no additional cost to U-M

affiliates. After the interview, I either thanked participants for their time or invited them to the second round of the study. The second round included writing a set of two journal entries each day for the span of four days and participating in a second 1-hour Zoom interview. Seven of the 19 participants were selected to participate in the second round of data collection. These participants included Suha, Eliana, Lilah, Melanie, Alyssa, George, and Rashmi. I compensated first-round participants with \$10 and second-round participants with an additional \$30. Given the financial constraints associated with this study, I could only invite a maximum of seven students to complete the second round.

My decision to invite students to the second round relied on three factors. First, I evaluated how engaged the student seemed in the first-round interview. If a student was checking their phone, providing short responses, resisting elaboration, or otherwise seeming uninterested in contributing, I did not invite them to the second round. Second, I considered how many other students I had already invited to the second round within their housing location subgroup (i.e., high-rise apartment near campus, apartment/house near campus, home with family, commuter student). I aimed to have a nearly equal distribution of second-round interviews across subgroups, though this goal ultimately went unrealized. The unequal distribution across subgroups is likely accounted for by students' invitation declines and my unmet expectations for equal recruitment by subgroup. Furthermore, this second consideration had a temporal dimension. As I completed additional second-round interviews, there was less opportunity to extend invitations. *Table 1* includes the date of each participant's first

interview to provide context for this dimension. Third, I initially invited students to the second round if I found their experiences to be of particular interest. This was the case with Alyssa, a first-year student who chose to move near campus without living in the dorms during the COVID-19 pandemic—an uncommon decision. I was curious about her association between spatial proximity with campus and belonging, which she articulated as a “fear of missing out” on the college experience if she were to live at home. I believed her unique situation, for instance, warranted a second-round invitation. These criteria assisted me in choosing which students to gather journal entries from and include in second interviews.

First Interviews. First-round interviews loosely followed an interview guide with questions about participants’ housing arrangements, roommate relations, social interactions, and academic experiences (Appendix A). Before the interview, participants read an informed consent document and sent an email confirmation of their consent to engage in the 1-hour virtual interview (Appendix C). Once they entered the Zoom call, I reminded them of their right to refrain from answering any uncomfortable or uncertain questions and asked for their vocal consent to record the meeting for transcription purposes. After participants consented, I recorded the virtual meeting to my personal laptop and later transcribed the audio from these videos via *Rev.ai*, an online speech-to-text application programming interface (API).

I asked participants questions under four broad themes: (1) housing, (2) the COVID-19 pandemic, (3) social/cultural integration, and (4) campus resources. The housing theme included questions related to students' living arrangement location and quality, housing decisions, roommate relations, and shared space experiences. To illustrate, I asked participants: "*What factors went into your decision to live at X?*", "*How would you describe your relationship with your roommates?*", and "*Do you share spaces with your roommates, and if so, have you had discussions regarding the use of these shared spaces?*". The COVID-19 pandemic theme included questions such as "*How has COVID-19 changed your routine since March 2020?*", "*Has the pandemic changed who you spend time with?*", and "*How has the pandemic changed your life outside of class—your social life or extracurricular activities?*". I also asked participants about their academic experiences during COVID-19. The social/cultural integration theme included questions about friends, student organizations, classroom connections, academics, and perceptions of U-M culture. I prompted every participant to "*Describe what a typical U-M student is like, in your opinion*" and tell me about their perceptions of campus culture. I then asked them to discuss how, if at all, they identified themselves in relation to the characteristics they associated with U-M culture. This question was largely used as a measure of belonging, as students defined belonging for themselves within "campus culture," a subset of "campus culture," or outside of "campus culture." The final theme, campus resources, included questions specific to students' use of professional and academic resources provided by the University. I finished the

first interviews by asking a brief series of demographic questions, such as participants' age, race, household income, and rent. Interviews varied in focus, but all involved discussions of students' experiences before and during the COVID-19 pandemic.

Journal Entries. Following the first interview, I selected seven participants for the second round of this study. The second round included a four-day journal entry process and another 1-hour virtual interview. Journal studies allow access to day-to-day interactional data from a specified range of time. Given COVID-19 limits on social gathering and the time constraints of this thesis project, collecting journal entries was a more feasible means to gather information about interpersonal experiences than a traditional, in-person ethnographic method.

Journal entries provided a glimpse into the daily lives of students by capturing their activities, interactions, locations, and emotions in an online Google Form. The form included guided questions about these topics (Appendix B). Participants submitted responses twice daily (each morning/afternoon and evening) over a four-day period. These consecutive four-day periods occurred throughout September, October, November, and December 2020. Journal entry periods took place within a week after the participants' first interviews, with the exception of Lilah. Lilah traveled out-of-state the week after, and thus completed her journal entries two weeks after our initial interview. Second interviews were conducted a few days after the journal entries, except Suha, who was diagnosed with COVID-19 during her journal entry period. We

scheduled a second interview for a few weeks later to allow her ample recovery time.

I also provided participants with information on how to sign up for *Remind 101*, a free texting service, for reminders about when to fill out their journal entries. Settings on the mobile application were adjusted so participants could not see identifying information about other participants using the service. I sent messages twice daily to participants who opted to use the texting service, once in the afternoon and once in the evening each day during their journal entry periods. However, only Alyssa used the optional *Remind 101* service.

Second Interviews. Unlike the first interviews, second interview questions varied from participant to participant. I generated a specific list of questions by reviewing participants' journal entries. These outlines were sorted into questions from three broad categories: work/school, social integration, and housing. In the first category about work/school, I asked questions about interactions with coworkers, workplace logistics, virtual class experiences, and pre-COVID academics. For example, I asked George, a student living at home in the sample, about his research position at the University. For the second category of social integration, topics included events, conversations, and emotions. Lilah's journal entries mentioned frequent interactions with her roommates, so I encouraged her to discuss these conversations in depth. The third category, housing, involved questions about location, transportation, quality, and decision-making related to participants' living arrangements. I asked Eliana, for



example, to further explain problems with wi-fi and elaborate on conversations with her landlord that she wrote about.

### Data Analysis

I used *Atlas.ti*, a qualitative data analysis and research software, to organize and code information from these interviews and journal entries. I recorded initial thoughts about participants' reflections and emerging categories in a personal journal. After generating these line-by-line codes, I grouped them into three large categories for analysis: (1) housing decisions, (2) pre-COVID social connection, and (3) during-COVID social connection.

### Reflexivity

My appearance and identities likely affected the data collection process. Like participants in this study, I am an undergraduate student at U-M. I conducted the virtual interviews from my living room or bedroom in Ann Arbor or my hometown, while participants' locations varied. Despite the absence of a formal request, the vast majority of participants joined Zoom calls with their cameras and microphones on. As a result, I was able to see these participants' faces and backgrounds from my computer screen. Only Gauri, Robert, and Yasmin kept their cameras off for the entire call. I did not ask nor require participants to turn their cameras on to respect privacy. Participants were able to see my face and background on the video call.

As a fellow student, I may have contributed to a comfortable or neutral interview dynamic with participants. Emerson (2015), for example, asked undergraduate students to run interviews with other students to gather more realistic accounts of interpersonal troubles. I was mindful of wearing neutral clothing and sitting in a neutral setting as to not show possible indications of socioeconomic status (e.g., expensive headphones, large paint chip on my door). I was cognizant of not overtly agreeing or disagreeing with the opinions participants shared, opting to nod silently to their responses. These adjustments intended to make every participant feel welcome to express their honest thoughts. Overall, I believe these methods were successful because most participants openly shared about their struggles, successes, political beliefs, religious experiences, and interpersonal conflicts. It is possible undergraduate students felt more comfortable discussing their personal life circumstances with me, who they likely perceived as a classmate or peer.

My race may have played an additional role in data collection. While I did not disclose my racial identity to participants, I am visibly a white woman. This study included a sample of 10 white students, 3 South Asian students, 3 Middle Eastern students, 2 East Asian students, and 1 Native American student. Long-standing literature posits the existence of race-of-interviewer effects on participants' responses (Hatchett & Schuman 1971). In particular, race-of-interviewer effects often reflect racial inequalities and introduce social desirability bias. Scholars find that participants frequently modify their responses to race-based questions to appear more socially acceptable to their

interviewer, depending on the interviewer's race (Snook 2004; Livert et al. 1998; Schaeffer 1980). Although this study did not include explicitly race-based questions (aside from end-of-interview demographics), some students discussed race in response to questions about social integration, belonging, and campus culture. Past literature demonstrates how my appearance as a white woman may have introduced social desirability bias into participants' responses.

### Methodological Limitations

Certain characteristics of the sample I gathered likely limited the results of this study. Out of 19 total participants, only four identified as male. Although this study did not focus on gender and housing, it is possible gender identity plays a role in social integration or sense of belonging. Gender may also impact with whom participants share space or feel comfortable sharing space, especially within their houses or apartments. The resulting gender distribution of roommates may have shaped the troubles experienced by participants. More concretely, socialized gender differences may have affected the division of household responsibilities or social expectations. Since this study did not include a substantial number of male participants, however, findings on the basis of gender may not be generalizable across the U-M undergraduate population.

Another limiting characteristic is the balance of participants between subgroups. Most participants lived within walking distance to campus, as residential students comprise the majority of undergraduates at U-M. Of

students within walking distance, eight lived in local houses or apartments and four lived in high-rise apartments. It was exceptionally difficult to recruit undergraduates who typically commute to in-person classes, which was a core subgroup from which I wanted to collect data. The first obstacle was identifying commuter students to recruit, but the second obstacle was commuter students agreeing to participate. One commuter student cancelled our interview a day prior, and another student I reached out to declined due to anticipated academic burdens. I recruited both Gabe and Robert via snowball sampling, and there were no commuter students who reached out based on the Facebook group advertisement for this study.

There are a few possible explanations for this small commuter group sample size. For one, the pandemic may have placed disproportionate time and financial burdens on commuter students. Commuters typically have greater life responsibilities and financial necessities than typical residential students (Jacoby 1990; Chickering 1974), which may have prevented them from taking the time required to participate in my study. Additionally, commuters tend to not identify as closely with institutions of higher education due to their differing life responsibilities and average age (Forbus et al. 2011). Commuters' lesser sense of identification with the University of Michigan could inhibit their desire to visit U-M Class Facebook groups, lessening the chance they encountered advertisements for this study. Yet another possibility is that most students live near campus. The small commuter student population may have simply made recruitment difficult.

Recruiting students living in high-rise apartments for the second round of this study was similarly challenging. I asked three of the four high-rise participants if they would like to complete the second round, but only one student accepted the offer. One participant who declined mentioned academic-related responsibilities that would impede her from writing journal entries, while the other declined without citing a reason. The final student, Suha, had an unusual second-round experience due to being diagnosed with COVID-19 a few days following our initial interview. Although I was able to interview four students in high-rises, they were not represented in my sample to the same extent as others living near campus.

## RESULTS & DISCUSSION

This section presents findings from participant interviews and journal entries. The data are examined chronologically, starting with students' experiences before COVID-19 and ending with students' experience during the pandemic. Before COVID-19, constant proximity with peers and boundless access to nearby places for interactions were important for social connection. The pandemic altered this relationship between space and connection by introducing physical distancing restrictions that centralized activities to the home. Specifically, COVID-19 narrowed the scope of propinquity (i.e., the role of proximity in social relations), collapsed symbolic boundaries between places, and modifying rules for in-person and online interactions. These spatial changes stimulated social conflict and burnout, but also enabled students to maximize

time with their valued relationships and enjoy a symbolic boundary from social exclusion. While the pandemic significantly reshaped the relationship between space and social connection, the effects of spatial changes were highly nuanced and occasionally unexpected.

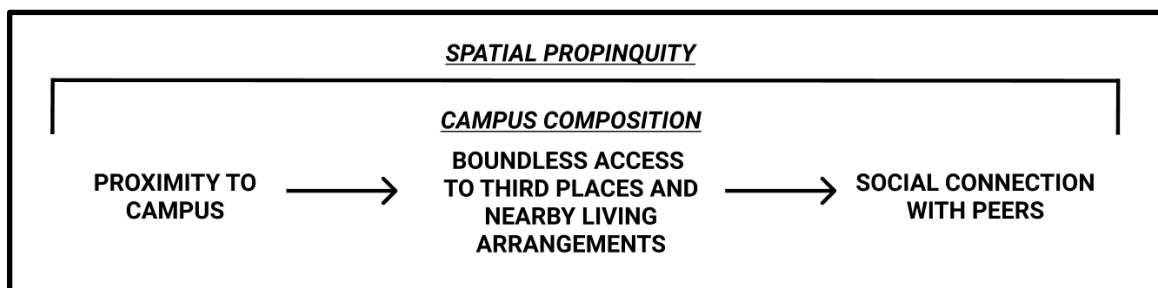
### Pre-COVID Experiences

Spatial proximity with peers allowed students to make social connections prior to the COVID-19 pandemic. Spatial propinquity, or the role of proximity in social relations, is the sociological term for this phenomenon. The spatial composition of campus, or availability of third places, underscored spatial propinquity. By living far from campus, commuter students were denied boundless access to these third places in which social connections were fostered. But commuter students were not alone in facing barriers to social connection. Low-income students and students of color felt disconnected from the predominately affluent, white student body at U-M. Other students encountered academic struggles and felt less worthy than their peers. However, living near campus better allowed these individuals to find and maintain social connection within smaller niches of the campus community. This section will begin by outlining how the interplay of spatial propinquity and campus composition shaped students' social connections. The section will then conclude by demonstrating how spatial propinquity moderated the relationship between students' feelings of disconnection and their ability to make social connections despite social barriers. I argue proximity to campus and boundless

access to nearby third places and living arrangements largely facilitated social connection before the pandemic.

Spatial Propinquity and Campus Composition. Before the COVID-19 pandemic, access to third places near campus such as classrooms, study lounges, student unions, libraries, and coffee shops were important in relationship formation and maintenance. College campuses are often designed to stimulate conversation amongst students (Yaylali-Yildiz et al. 2014), and third places between home and class can help facilitate these connections (Oldenburg 1989). Access to other students' nearby living arrangements also had implications for social connection. Although these third places and nearby living arrangements are technically available to all U-M students, the reflections of commuter students demonstrate how *de facto* access is unequal. *Figure B* illustrates how proximity to campus affected students' social connections with peers before the COVID-19 pandemic.

**FIGURE B. Pre-COVID Spatial Propinquity.**



Commuter students' use of third places near campus was oftentimes constrained by an eventual need to drive home. Robert and Gabe, two

commuter students, encountered similar troubles with social planning and transportation logistics in this regard. When reflecting on his infrequent attendance at social events with peers, Robert said:

I think that part of the issue is like, when you have somebody like me, who's not invited to many parties, that eliminates 50% of the chances that I'll be at a social gathering with people on campus. The other 50% of that chance has already been eliminated because I don't live on campus. I can't throw my own on-campus parties. If I lived in a dorm, you better believe I'd be like, "Hey, come over to my dorm!"

The location of Robert's home—30 minutes driving from Ann Arbor—excluded him from unlimited access to places for socializing. He emphasized having a nearby living arrangement, or a dorm, in which to host other people as important to social connection. Despite his desire to spend time like this with other students, the distance of Robert's living arrangement from campus inhibited the formation of stronger peer relationships. He typically used third places early in the morning and in-between classes but would preemptively avoid asking others to spend time together due to transportation logistics. Although he joined a student club that met in the late afternoon, Robert reflected on not seeing other students outside of meetings:

I didn't hang out with anybody from the [club]. I think eventually, I dunno, I feel like I didn't really click with too many people in the [club] super well. And I guess it kind of circles back, in a way, to the commuter thing because it's so—it's so easy. It's so much easier, I feel like when you live on campus, you can just be like, "Hey, you want to hang out?" It's like, "Yeah, sure. I'm not doing anything tonight," you know? But when you're a commuter, it's like, you don't even want to pose the question in a way, I guess, because if you already know you, it's going to be kind of a hassle to schedule because then you're going to be like, "Well, what days work for you?" And "I gotta go home."

This sentiment was echoed by Gabe when detailing his attempts to participate in student organization events after his classes ended for the day:

When I commuted, [I attended the student organization events] probably about half as much because I could only go to the [meeting] on Thursday because like, it wasn't just *my* schedule. It was my brother's schedule since we drove together.



The physical distance of Robert and Gabe's living arrangements prevented them from sharing space with others as freely as those living near campus.

Transportation logistics contributed to these constraints. As illustrated by the above interview excerpt, Gabe had to coordinate rides with his twin brother between home and Ann Arbor. His ability to make social connections on campus was contingent upon his brothers' plans for the evening, and vice versa. When making social plans, Robert was cognizant of the fact he would eventually need to drive home. Although his hometown was 30-minutes driving from Ann Arbor, traffic would often prolong Robert's commute. Therefore, he typically left home 1-hour to 1 ½-hours early and arrived on campus ahead of his classes for the day. Robert would then use this extra time to watch videos or catch up on homework by himself in a university library. Although Robert's parents did not mind him staying near campus overnight, he attributed a lack of social connections with others to his commuter-student status:

It's more of the preemptive stages to [hanging out] that I guess is like, either in my mind or I guess where I feel like it usually starts is maybe with other people, like it's easy—It's easy enough to just schedule lunches and stuff, because you're already on campus. I'm already on campus at that time. But anything after class time is then kind of a toss-up. I feel like maybe some people didn't want to invite me to things because I was a commuter. And, hey, I have no way of confirming that. Maybe it was just me, you know, maybe I just didn't click or vibe with them terribly. Well, which I guess, I mean, there are only a couple of people that I felt like I really connected with...I feel like [being a commuter] had to have played a little bit into it at least.

Robert actively wanted the social connections he lacked. He recalled walking to class one day and “thinking so hard about [wanting] to hang out with somebody on campus,” and “yearning to make that connection.” Yet the remoteness of his

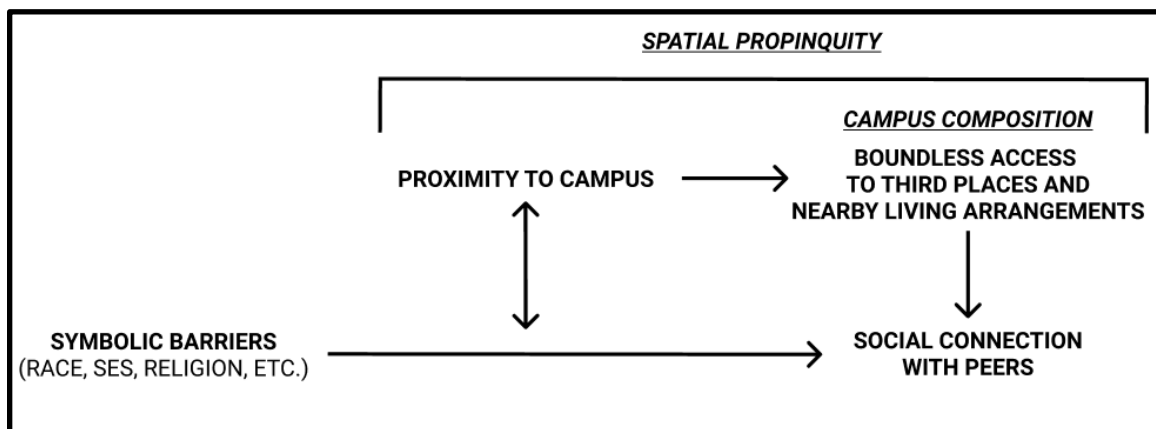
living arrangement limited the time periods during which Robert could imitate social gatherings in third places near campus.

Boundless access to third places was of the utmost importance for making social connections. Hypothetically, students living near campus could text a friend and shortly thereafter meet up at the library for a late-night study session. Their access to third places was less restricted by transportation logistics and an eventual need to return home. Robert mentioned this dynamic when discussing the benefits of predominantly residential colleges:

There are benefits because people that do live [near campus] can wake up and be at classes, you know, in five minutes or whatever. And you have all of your resources centralized in one location where you always are. So, you can always get your mentoring and everything right there. You can stop by home to get whatever you need before the next class, or to just touch base. If you have an hour between classes, that's kinda nice...[residential colleges] do provide a space for you to grow in and meet lots of different kinds of people...you'll find more opportunities to build your network larger while you're actually on campus...having those connections could definitely be valuable later in life.

Robert's reflection demonstrates how spatial propinquity better allows students to make a diversity of social connections. He observed that physical presence on campus provided greater opportunities to meet fellow U-M students. Robert humorously offered an example of bumping into "the next Mark Zuckerberg" in the dining hall to illustrate his point. His thoughts underscore the possible benefits that social connections—made possible by spatial propinquity—may confer after graduation by way of an expanded professional network. In sum, consistent proximity to campus broadens access to third places to make social connections.

Symbolic Place, Exclusion, and Leveraging Proximity. While spatial propinquity demonstrably shaped students' abilities to make social connections, some students living near campus faced other symbolic barriers to connection. Place took on class, racial, and other symbolic meanings, constraining how some students felt able to make social connections. In particular, low-income students, first-generation students, and students of color often described feeling disconnected from the predominantly affluent, white U-M student body. Other dimensions of disconnection such as religious identity, political ideology, social preferences, and academic prestige also emerged. But in comparison to their commuter counterparts, these students' proximity to campus better enabled them to find smaller communities of peers with whom to connect. Students facing symbolic barriers created their own communities by defining which social connections were of personal value. This subsection will consider how low-income students, first-generation students, students of color, and other students facing symbolic barriers to connection leveraged their proximity to campus to foster valued social connections. *Figure C* illustrates this relationship between space and students' connections with peers.

**FIGURE C. Pre-COVID Space, Symbolic Barriers, and Propinquity.**

Class barriers. Low-income students encountered obstacles to connection and inclusion amongst peers on campus. According to a recent University of Michigan Central Student Government survey, students pay an average rent of \$832/month (CSG 2018). Working part-time (20 hours/week) in Michigan for minimum wage (\$9.49) only amounts to about \$759.20/month before taxes, which is less than the average amount for rent. In terms of student body demographics, about 10% of students attending the University of Michigan in Ann Arbor come from families in the top 1% of wage earners (Wermund 2017). Moreover, about 66% of students come from families in the top 20% of earners, and the median family income of U-M students is approximately \$154,000—sitting at nearly three times the average income for Michigan families (“Economic diversity” 2017).

For some low-income students, the predominantly affluent student body at U-M cultivated social exclusion. Low-income participants often reflected on interactions with other students that left them feeling disconnected from the

broader campus culture. Melanie, a low-income student living near campus, described microaggressions she received due to her socioeconomic status:

I remember when I was in the [low-income/first-generation summer program], one of my friends who was there on orientation, but not in [the summer program]—she was just there in the summer. She was in a tour group and one of [the other students], their group had passed like a group of [summer program] kids. And one of the people was like, “Oh, wow, they’re only here because they’re poor.” And it’s like, Woah. I mean, *yeah*, for *me*. But like, woah, that mindset: people [are in the summer program] because they’re poor. “Oh, we need to be, you know, we need to offer charity for the poor, poor people who are stupid.”

And then even at work too, I work mostly in our dish room and that’s quite literally cleaning up after people...I came up [to a student] and was like, “Hey, you know, I need to go to the other side. I can take any dirty dishes you have.” And he’s like, he looked, he looked at me and he’s like, “I’m not done.” Then looks down and keeps eating, then does this to me: \*Shooing hand motion\*. And I’m like, [sarcastically] “Okay...”

Furthermore, Melanie identified three different “types” of students at the university. The first group was extremely affluent students; the second was people who “really care” about social issues; the third was people from “non-traditional backgrounds” like hers. Melanie utilized space-based terms to describe herself as “indefinitely far away from” the “rich frat people,” but identified with the latter two groups. Her use of space as a metaphor signals how physical place and proximity are symbolically linked to social connection. Despite occupying the same physical place as affluent students, socioeconomic microaggressions symbolically distanced Melanie from her peers. She further described an unwelcoming environment on campus for low-income students:

I just find it really difficult to be in class with a lot of people just because of class divides and class differences... It’s very difficult for me to interact with people, socially, who aren’t coming from a working background or have the experience of being poor and like what that means. Which I think influences why a lot of people that I’m friends with come from people I’ve worked with because we have that shared experience and, you know, need to be at work during school, which not everyone has. Which is another reason why, I feel kind of isolated from academics is because...it’s [a] fact, a lot of people here are wealthy as fuck.

Eve, another low-income student, likewise experienced microaggressions related to her socioeconomic status. Her last living arrangement was a co-operative house (“co-op”), as it was the cheapest option she could find near campus. Eve described her friend’s reaction when visiting:

I would have some friends that just wouldn't want to come over to my house because it was a “dirty co-op”. And I would like, I dunno...One time I had a friend come over and...she saw the dishes and was like, “How do you live like this?” And I was like, “Well, damn, I have 40 other people in my house. I can't do the dishes for all of them.”

Like Melanie, Eve delineated the experiences of “typical” affluent students at the University from her own. She also framed her distinction in metaphorical terms of space, commenting that her affluent friends seem to “live in a different world” and “in a new, different town”:

They wear a Canada Goose (expensive jacket). I don't know, [they wear] Air Force Ones, skinny jeans. They're like—Oh my God, it's so weird because it's like, I was hanging out with some of my wealthier friends that fit this vibe, and their vision of how they do UofM is so different than mine. 'Cause they're like, “Let's go to [restaurant] and then let's go to [another restaurant] and then let's go to like this club and this club and this club and this club,” and I'm like, “I can't afford to go to clubs. Let's just go home.” ... I just feel like they live such a different [life], it's like a different world for them. It's genuinely a different way of going about and navigating UofM. Like I just—I can't even—it's like they're in a new, a different town than I am in. It's so weird.

Both Melanie and Eve implicitly identified how places near campus were symbolically coded with exclusive class meaning. Melanie occupied the same dining halls as affluent students, but she felt “indefinitely far away” from people like the rich kid who shooed her aside as a student employee. Eve lived in Ann Arbor alongside affluent students, but the city—and its third places of expensive clubs and restaurants—symbolized the outlandish wealth of her peers. Despite living in the same place, Eve described these symbolic distinctions as barriers to making social connections. She could not go to clubs with other students, and

thus missed out on occupying third places in which to build and maintain relationships.

First-generation students also felt excluded from the predominantly affluent student body. Riley, a first-generation student, described not fitting in with out-of-state students whom she perceived to be wealthy. She mentioned feeling excluded when these students discussed their vacation locations:

Sometimes I definitely feel like I just don't fit in with everyone, especially like with all the out-of-state students and stuff like that. Like, there's just a little bit of a barrier there, being from Michigan...it's not the same culture as someone who's from New York, California...I find myself a lot of time when people are talking about their home states, a lot of people will be like, "Yeah, I've been there." I have not been anywhere—I've been to Michigan, and that's about it. So, it's just like, even small things like that.

...It's more difficult to find someone from Michigan, from the same part of Michigan who understands the background you grew up in and stuff like that.

Riley has lived in Michigan her entire life and could not relate to the experiences of out-of-state students who had traveled across the country. For Riley, visiting places outside-of-Michigan symbolized affluence. Lindsay, another first-generation student, distinguished herself from wealthier students on campus:

I'm definitely one of those people that feel like people that—most of the people that go to UofM—do think of themselves as being “higher” than everyone else. But I think that's just because of where I come from. I don't come from the same place that I feel like a lot of other U of M students come from. I feel like they're wealthy. They have nuclear families—mom, dad, brother, sister. I feel like they're more into academics and they're all into organizations or sports...I do kind of feel like there is a big polarization sometimes of me and people who are typical UofM students.

Lindsay described her exclusion in terms of metaphorical place, saying that she does not “come from the same place [she feels] like a lot of other UofM students come from.” This thought demonstrates how Lindsay felt as though her reality was situated in a place different from that of “typical” wealthy students. Like

Melanie and Eve, Riley and Lindsay faced symbolic barriers to making social connections with their peers.

Nevertheless, the proximity of these low-income and first-generation students better allowed them to make social connections of personal value. Melanie, for instance, found her closest group of friends—including her romantic partner—among other student staff members at work. She explained how “a lot of what [she does] is work-based, and that kind of ends up being [her] personal life.” Melanie felt more comfortable around students who worked while attending school and she held other students from similar backgrounds in high regard. Lindsay described making social connections through a University summer program designed for first-generation and low-income students:

I was in [summer program] and we have to move to campus [before classes begin]. We aren't allowed to stay at home or anything and it's like, they're really strict on making you like stay there and making friends. So, I didn't go home in the summer as much as I did during the school year, because we had activities that were planned for us to do. Like we had to go out, travel on buses to places and do things. And so that was just kind of the way that I made friends...like a lot, all of my friends, basically, I met in [program]...And so, yeah, I would say that that's like the main part of like my social life was, um, being able to do that.

Spatial propinquity helped facilitate Melanie and Lindsay’s social connections with peers. Melanie’s proximity to campus allowed her to work at the dining halls—a hub of student employment. She detailed how her workplace enabled her to form strong connections with peers who also “needed to work” while attending school. Likewise, Lindsay explicitly described how being required to live on campus with other students empowered her to make social connections. These connections helped Lindsay overcome a stressful introduction to the entire student body once classes started:



When I first [arrived at campus], I was okay in the summer with the [program] friends. But when everyone came to campus, it was really overwhelming...Me and my friends talked about it all the time, how we wished that it was just us and didn't like it when everyone else came in. But you just kind of get used to it. Like it just doesn't become such a big deal. You just kind of understand.

Spatial propinquity played a role in both Lindsay and Melanie's abilities to make social connections on campus despite class-based exclusion. As shown by Lindsay's reflection, these connections were not only important to students' social lives but their comfort occupying space on campus.

Racial barriers. Students of color also faced symbolic barriers to making social connections. As a predominantly white institution (PWI), 65% of University of Michigan students are white/Caucasian. Asian students make up 15%, Hispanic/Latino students make up 6%, Black students make up 5%, and Native American students make up 1% of the student body (University of Michigan Diversity Equity & Inclusion 2016). The University has expressed a commitment to increasing racial diversity, but students of color reflected on a tension between U-M's support of diversity initiatives and substantive demographic changes. Arjun, a South Asian student, described this conflict when asked his perception of campus culture:

Most of [campus culture] is just very white-dominated...I mean, it's pretty evident that most of Greek Life is like, the members are usually just white boys or white girls and they're just, yeah, I think that's just a common-thread, and I think a lot of sororities especially are very selective, and I think race does definitely play a big part into it. And I think that's definitely a negative, especially when the campus prides itself on being very diverse.

Yasmin, a Middle Eastern student, also mentioned the tension Arjun identified:

[The University of Michigan] lacks a lot of diversity though. That's the thing that I didn't really expect since I moved to Ann Arbor: [there's] barely diversity, even though [Diversity, Equity, and Inclusion] is something they flagship....There are barely any students of color, barely any Muslim students. The Arab students aren't—I literally am convinced they only take out of students from Dearborn because we were like the

highest concentration of Arab-Americans... Just makes me think sometimes like, do they actually value it, or do they value money more?

These excerpts show how the majority presence of white students at U-M symbolically associates campus places with racial exclusion. Arjun specifically pointed to Greek Life—fraternity houses and his friends' experiences of the “rush process” to join sororities—as symbolic of “white-dominated culture.” Yasmin described how shocking it was to arrive in Ann Arbor and notice there was “barely diversity, even though it is something [the University] flagship[s].” For Yasmin, her occupation of space near campus shattered the illusion of inclusion that the University tries to promote.

But spatial propinquity and proximity to campus allowed Arjun and Yasmin to make social connections. Both students lived within walking distance to U-M's central campus prior to the COVID-19 pandemic. Arjun discussed “going to the library together, doing homework, getting coffee, going out together, going to a friend's house—you know, school, food, party, repeat. Sleep somewhere in there.” Yasmin also made use of her access to third places when living near campus. She would frequently invite classmates to eat at local restaurants, study with peers at libraries late into the evening, spend time with others after student organization meetings, and “hang out at [her friends'] apartment until five in the morning just doing literally whatever.” These students' frequent use of third places and living arrangements near campus demonstrates the importance of space for having impromptu gatherings. These casual, on-demand social connections are special to the college experience, as it is unique

for nearly all members of one's primary friend group to live within walking distance. Yet commuter students, who must plan social activities around their need to travel a long distance to return home, are excluded from these routine connections. Although Arjun and Yasmin expressed disconnect from the predominantly white student population, their proximity to campus broadened social connections with other students.

*Other barriers to connection.* Students also felt disconnected from the dominant campus culture based on a variety of other dimensions, including religious identity, social preferences, and academic competition. Lydia, a student who lived near campus prior to COVID-19, attended a Catholic High School and highly values her religion. Before moving, she was uncertain about how she would fit into campus culture. But proximity to campus encouraged Lydia to attend a church with other students practicing the same religion:

Everybody [from my hometown] scared me that people were going to try and get me to do all of this stuff I didn't want to do. And [when] I got here, that wasn't the case at all. I feel like I really fit in here. And I found my, you know, group of people that feel the same way about a lot of things that I do. And, you know, I'm very Catholic, very Roman Catholic. And then I was always told before I came here, too, that everybody was going to try and turn you into an atheist...But then I got here, and I felt like... everybody's super chill and Catholic.

Living in an apartment near campus provided Lydia access to church: a third place for social connection. To others in her hometown, Ann Arbor and U-M symbolized secularism and liberal political views. The fears they instilled in Lydia disappeared as she began connecting with other students in church. Lydia's proximity to campus and subsequent spatial propinquity with other students bolstered her ability to socially connect.

Other students felt disconnected from the party scene at U-M. Gauri, a student living near campus, felt “50/50” about how much she fit in on campus, as she occasionally wanted to relax at home instead of going out to parties. According to Gauri, though, social connection was essentially guaranteed if one was willing to seek it out:

...The campus is so big, [so] you definitely get every type of person in it. You just have to find them. 'Cause there's so many different clubs and groups of people and stuff you can do. But I think everything has a slightly different vibe, then you will fit into one of them.

Access to club meeting places, different groups of people, and activities underlie Gauri's reflection. Living near campus allowed Gauri to easily choose if she wanted to “hang out with a bunch of people and do a bunch of fun things,” or “just chill at home.” Unlike commuter students, transportation logistics did not play a large role in Gauri's ability to coordinate social activities; her proximity to campus also opened the gates to opportunities for on-demand connection.

Spatial propinquity was found not only in third places, but homes and work. Since the areas surrounding U-M's central campus are largely walkable, home, work, and third places were perhaps not as different as envisioned by Oldenburg in 1989. Kayla, a student living in a high-rise apartment near campus, mentioned how “many of [her] good friends [made during] freshman year were in [her dorm] hall.” Living in the dorms meant consistent spatial proximity with peers. The dorm enabled Kayla to connect with other students much like how third places did for other students. Commuter students do not typically have their own living arrangements near campus, so the dormitories are another

example of how residential students are better able to utilize spatial propinquity and make social connections with peers.

Commuter students did not have boundless access to social connections like their residential counterparts. This finding falls in line with existing literature, but this research adds a qualitative dimension to the breadth of quantitative studies. Furthermore, the role of space in social connection cannot be understated. Spatial propinquity moderated the relationship between symbolic barriers and social connections. More specifically, students living near campus had greater access to spaces—third places or nearby living arrangements—in which to make social connections. Commuter students' *de facto* exclusion from these places limited their ability to connect with their peers. Despite experiencing disconnect on various dimensions such as socioeconomic status and race, residential students could initiate spur-of-the-moment interactions and were subsequently given more opportunities to make social connections.

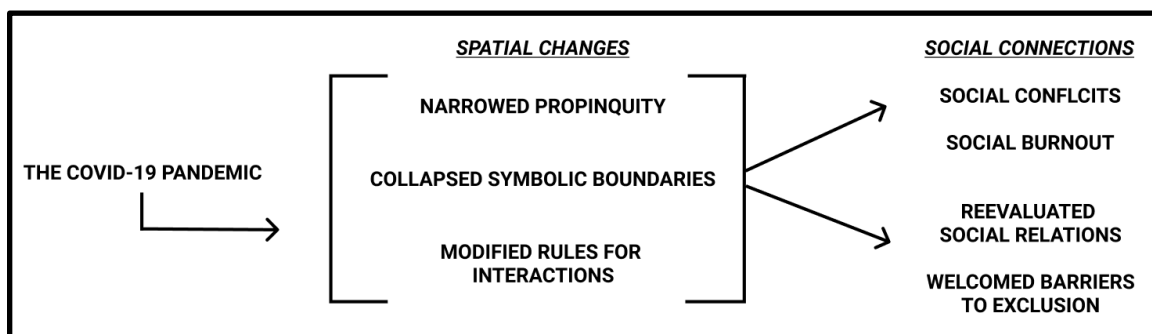
### COVID-19 Experiences

The COVID-19 pandemic reconfigured space by limiting access to the third places and living arrangements detailed in the previous section. Physical distancing restrictions centered activity around the home. This change narrowed the scope of propinquity to involving home-centered relationships with roommates. It also collapsed symbolic boundaries between places such as lecture rooms, dining halls, libraries, and cafés, as students largely engaged in all activities at home. Even when individuals occupied the same places they did

prior to the pandemic, many of their experiences had noticeably changed due to health protocols and new rules for interaction (e.g., facial masks, sanitation, enforced distance between individuals). On one hand, COVID-19 failed to meet students' expectations for social connection by exacerbating conflict and cultivating social burnout. On the other, it prompted students to reexamine their valued social connections and created a welcomed barrier of separation from social exclusion. Physical distancing protocols narrowed propinquity from campus to the home, collapsed symbolic boundaries between places, and modified rules for interactions in in-person and online spaces.

*Figure B* visually demonstrates this evolving relationship between space and social connection during the pandemic. This section details how these spatial changes had different, often simultaneous, effects on students' social connections. It begins with a discussion of how the pandemic changed space and concludes by analyzing the effects of these spatial changes.

**FIGURE D. COVID-19 Space and Social Connection.**



COVID-19 Spatial Changes. The pandemic's physical distancing restrictions narrowed the extent of spatial propinquity, collapsed symbolic boundaries

between places, and modified in-person rules for interactions. Spatial propinquity, or the role of physical proximity in social relations, effectively shrunk from proximity to campus to proximity to those with whom students lived. Furthermore, distancing protocols blurred distinctions between physical locations. Before the pandemic, activities were often segmented by physical location; students would attend class in lecture halls, study in libraries, socialize in bars, party in houses, and watch football in the University stadium. But COVID-19 centralized those same activities to the home for most students. By way of the pandemic, increased time spent at home simultaneously affected the role of space in relationships (i.e., narrowed propinquity), activities (i.e., collapsed boundaries), and interactions (i.e., modified rules)—each integral components of social connection. This subsection successively outlays these three spatial changes.

*Narrowed propinquity.* COVID-19 narrowed propinquity to the home. With most University operations online, students' opportunities to bump into others outside of the dining hall, casually socialize between classes, or grab a coffee together after lecture declined. In the United States, physical distancing regulations reduced individuals' amount of daily social contacts on average by 31% (Del Fava et. al 2020). Students' journal entries also described infrequent interactions with those outside of their respective homes. Spending more time at home meant spending more time with roommates or family members. These home-centered relationships thus became of the utmost importance as social connections during the pandemic.

Unlike before COVID-19, the pandemic constricted social connections for students both living near and far from campus. Melanie, a student living near campus, described the restrictions COVID-19 placed upon her friendships:

I feel like in a lot of ways, some of my friendships have faded a bit. And that's like one, disappointing. And two, sad because it's [my] senior year of college. I feel like at this point I'd want to strengthen my friendships. So [COVID-19 has] impacted me in the sense that I've really narrowed down my friend group [to the] two people I hang out with. Like, it just doesn't seem right to go hang out with [other] people.

The pandemic narrowed Melanie's frequent interactions to approximately two people—a significant change to the larger pool of peers she had spent time with before. She felt both disappointed and sad that her social connections with friends and acquaintances were fading. Yet Melanie was not alone in this experience; students far from campus mentioned a similar phenomenon. Riley, a student living with family for Fall 2020, described her narrowed social circle:

I guess in the summer, my like block of neighbors were really close. So, we would like occasionally see them. But other than that, I don't really interact with anyone else that lives in town with me besides like the people who are in my family that live near me, but I don't really see anyone else because a lot of my friends are [living far away].

The summer weather allowed Riley to see others in her neighborhood while adhering to public health guidelines and physically distancing outdoors. However, she was unable to see friends due to their geographical distance. Riley's family members, with whom she retained proximity, composed her main social connections during the semester. Spatial propinquity did not disappear due to the pandemic, but rather shifted from campus to the home.

*Collapsed boundaries.* The COVID-19 pandemic collapsed symbolic distinctions between places by centralizing activity to the home. In addition to third places, COVID-19 distancing protocols restricted access to other students'



living arrangements due to the health risks posed by the virus. Whereas students might have attended class at an academic building, eat lunch in a dining hall, and study at the student union before the pandemic, COVID-19 made it so most of these activities occurred in one place: the home. Symbolic boundaries between places blurred for many students as the home became the new center of daily interactions and activities, both of which facilitate social connections.

Students' reflections about spending less time walking between activities are emblematic of collapsed symbolic boundaries. For some, the walk signified a much-needed break between activities. Melanie, a student living near campus, described how not having "the walk" harmed her wellbeing:

Now, it feels like [my schedule is] full all the time...the boundary between home [and] work or home and schoolwork has just merged into one...normally I'd be at school and could, you know, categorize school things into that time and into that physical space...In the past, going from location to location helped me because I can block out time and be in a space where I knew I could go get things done. So, for me it just kind of has a mental refresh. I mean, it's not just physical but it's [also] mental. If I can go to a new physical space, I feel like, okay, I'm here to do this thing...Going to class and then going to the [library] to do my homework before class, and then I'm at work. And then I come home, and I'm home.

Melanie lamented the collapse of symbolic boundaries. She felt that the correlation between physical place and symbolic meaning helped her better organize her time and relax. The walk between activities additionally acted as a necessary "mental refresh" that improved her ability to focus on the activities at hand. Alyssa, a first-year student living near campus, also associated movement between different physical places with mental clarity. She described doing most activities in her room as claustrophobic:

...When you're outside or when you're moving in general, I just feel like there's more breathing room almost, but I'm in such a claustrophobic space. And I mean that like both in my tiny room and then my virtual space. I think it makes things, it almost feels like I don't have enough time in the day when I'm literally working all day.

Although Alyssa had not yet attended in-person classes, she explicitly recognized the benefits of traveling between physical places would have for her mental health. Physical stagnation seemed to exacerbate the immediacy of academic demands. Many students' homes became the central location of class, club meetings, social activities, work, mealtimes, and other activities. Without the need to change physical locations throughout the day, students could not physically escape a constant pressure to engage.

Students living at home away from campus for the semester found similar troubles with collapsed symbolic barriers. Lydia distinguished her life on campus from her life at home during Fall 2020 with the aforementioned “walk” between physical places:

It's like two totally different lives. In Ann Arbor, it's like I'm walking everywhere—to one class and then going back, and I'd have like a million different things, and all these different classes, all just different club meetings in each [place]. So, all at once and you know, I didn't mind it, it wasn't that bad, you know? But then now it's *here*. Like, okay, well I don't walk anywhere... I'm walking from my desk chair, to the bathroom, to the fridge.

Despite framing this realization in a humorous way, Lydia's tone conveyed a mixture of shock and dissatisfaction. She explicitly described feeling like she had “two different lives”: one before and one during the pandemic. Lindsay, another student living at home, also discussed the collapse of symbolic barriers. She commented that being physically removed from campus made her feel like she was on a school break. Her symbolic association between campus and

academics made it difficult to study and manage her time. Lindsay's schedule seemed much busier than previous semesters:

It's hard because I don't really feel like I'm like at school, it's hard to be, I don't know if this makes sense, but it kinda just feels like I'm like on break because I'm at home, like sitting here. But I also know that I have schoolwork to do, and I have two jobs right now because I'm at home. I took advantage of that. I kind of just forget about a lot of things too, because it's hard to be in that mindset. Like we've had to reschedule [this interview] three times, 'cause like, I just feel like I have so much going on that I wouldn't have going on if I was on campus being normal college student.

Lindsay equated being a “normal college student” with proximity to campus, signaling her symbolic association between campus and student life. Melanie, Alyssa, Lydia, and Lindsay—as well as other participants—mentioned and were affected by blurred symbolic boundaries between places.

*Modified rules for interactions.* Physical distancing protocols changed space by modified rules for in-person, and subsequently, online interactions.

For in-person interactions, the pandemic introduced facial coverings (i.e., medical and cloth masks), limited seating, and enforced physical distance. Melanie, a student living near campus, discussed how she made important social connections at work. This “separate space” allowed her to retreat from academic stressors, work with her hands, and “talk to people.” But the pandemic's accompanying rules of interactions made work challenging:

I [now] feel dread going to work because of those conditions really like the face mask, the face shield, just like fogged up and like, I can't hear anyone.... And there's not really those benefits anymore of talking to people and being away from school.

Melanie found that benefits typically conferred by working—namely, social connections—were limited due to COVID-19 regulations. Riley, another student, discussed similar issues with modified rules for interactions. She lived in a sorority house with specific regulations aimed at preventing the spread of

COVID-19. Riley was required to wear a mask in all common areas, which included every space in the home except for her shared bedroom. She described having to sit at individually at tables 6-feet apart from other members of her sorority, which inhibited her ability to cultivate social connections with them. Furthermore, students living outside of the sorority house were not allowed to visit. Riley was thus unable to maintain social connection with friends she previously considered very close:

Pre-COVID, I spent a lot of time with my freshman year roommate, and then we both moved out. We just live in different places and with the pandemic, she can't come visit me here. And her house is also being pretty strict about having as little visitors as possible. So that's just like, not very feasible.

...

[My friend and I would] walk to class together because we had one of those same classes, we'd get meals together. And just things like that—sit in class together. But now with the pandemic, you're not even sitting in class with anyone. And so that changed, and also the same thing. She's in a different sorority. So, like, I can't go there. She can't come here.

Riley mentioned how her inability to invite her friends over negatively impacted their social connections. Moreover, she detailed how other moments of sharing spaces (e.g., sitting in class, walking across campus, and eating meals together) had helped bolster their connections before the pandemic. As demonstrated by Melanie and Riley's experiences, the COVID-19 pandemic's reconfiguration of in-person interactions altered students' social connections.

However, the spatial composition of certain living arrangements allowed some students to socially connect in ways similar to before the pandemic. These students specifically chose to bend new rules of in-person interactions

toward their favored modes of connection. High-rise apartments<sup>1</sup> often include amenities designed for student comfort and activity, such as study lounges and gyms. This unique spatial composition arguably has allowed certain students access to more space than their peers living in other near-campus houses and apartments. Suha, one such student, took advantage of the spatial amenities offered by her high-rise apartment building. The county surrounding the University issued a stay-at-home order in late October 2020, which specifically requested U-M undergraduate students not leave their places of residence as much as possible (Washtenaw County Health Department 2020). Suha found ways to circumvent these regulations, even when local restaurants and other nearby third places were closed to students:

**Suha:** They have a lot of study rooms, which I like. I'm a very, I need to see people, especially during COVID when I'm in isolation so much, I like going down to the study room, seeing people I haven't seen in years and just finding a way to study and socialize at the same time.

...

**Sara:** In these [study] spaces, who do you see? Are there other people that live in [apartment building] or is it usually your roommates, or friends from other places?

**Suha:** Usually friends from other places. I know a lot more people this year living in [apartment building]. So, when I go downstairs, it's friends from freshman year. Some of them from my sorority, some of them from other organizations I'm part of. I'll invite my cousin and like, I'll be like, "Hey, like let's go study downstairs in the study room." Just things like that. It's hard to find study places now. Like I know you can rent out places, but the occupancy is usually low in the one downstairs. It just gives me a little more freedom to see people I want to see, especially during things like the stay-at-home order when like restaurants are closed and you can't see people.

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<sup>1</sup> Ann Arbor, home to the University of Michigan, has experienced a boom of luxury high-rise apartment buildings. Since 2004, the city has seen 16 new apartment developments, with several other major projects currently in the works (Stanton 2020).

The high-rise study rooms allowed Suha to socialize with people other than her roommates. Suha mentioned how “it’s nice to get out and see other friends” because of how much time she spends with her roommates. When nearby third places were out of reach, the spatial composition of Suha’s living arrangement allowed her to continue connecting with non-roommates. In this way, Suha’s willingness to take advantage of her living arrangement composition lessened the impact of spatial change on her social connections.

Yet new rules for interaction persuaded some students against using the amenities available in their high-rise apartment buildings. Kayla, one student, described feeling disappointed at the lack of social connection occurring in her apartment building’s common areas. But she qualified her disappointment by concluding with “I guess it’s especially hard now with COVID,” referencing the physical distancing restrictions and facial masking requirements in her building. Gauri, another student living in a high-rise, discussed how she would use the gym provided by her apartment complex if not for the pandemic. These experiences indicate how living arrangement composition only affected students willing to bend the new rules for interactions. While students’ decisions to abide by these rules was up to individual interpretation, these new in-person norms nonetheless existed and had implications for social connection.

Physical distancing protocols additionally increased the frequency of online interactions as substitutes for face-to-face connections. The rules for online interactions thus became more pronounced as students attempted to recreate their in-person experiences in virtual places. But online spaces were

largely inadequate replacements for social connections. Gabe, a student, described how extracurricular activities are “always better...in-person”:

...I can't really interact as well with other people because if there's a [video conference] of like 50 people, the only way I'm interacting, like one-on-one, is if there's breakout rooms (assigned virtual “rooms” that segment video participants). Which sometimes happens, sometimes doesn't, and that's definitely the biggest negative about online activities.

Gabe found that one-on-one interactions were less accessible online than in-person. Riley, another student, echoed Gabe's sentiments. She specified how video conferencing did not allow multiple students to speak at once like typical in-person group conversations:

There isn't that face-to-face connection. It's different. Especially in group settings, you can't talk to several people [at once]. Like, you and I are having a good conversation but there is only two of us right now. If there's four people, two more people, in a normal setting we could be having a conversation, but [online] you hear only one person at a time is talking. And everyone else has to kind of like sit there and listen. It's just not as interactive as it could be...

Both Riley and Gabe detailed how virtual spaces only typically only allowed for one speaker at a time, turning nearly all online interactions into a lecture-style format. When one person was speaking, others in the virtual place—whether there be 4 people or 50—were not typically permitted to speak. While places created by video conferences facilitated communication, their technological functionalities fundamentally changed the relationship between space and social connections. Like other student participants, Yasmin discussed how these virtual places allowed students to retreat from social connections during moments in which connections were typically fostered:

...When you're in a big room on [a video conference], it's kind of like, you're not really held accountable. You can just turn off your camera and the professor is just talking to a bunch of blank screens. Or sometimes like your tone can get misconstrued as really rude when you're not trying to be rude...in-person they'd actually see it genuinely, they'd

understand what [emotion is] coming from you, whereas over [a video call] you have to—you're missing that human element...plus body language is missing...

Virtual places allowed students to physically disappear from a space for social connection. Whether students attended a lecture, club meeting, or other activity, the anonymity of online spaces shaped their interactions. The new rules for interaction—muting, video displays, one-speaker norms, and others—affected social connection in ways distinct from in-person experiences.

The pandemic altered space by narrowing propinquity, collapsing symbolic boundaries, and modifying rules for interactions in in-person and online spaces. Although these three spatial changes harmed students' abilities to make social connections, they also granted unexpected benefits for some. This following two sections explain common trends regarding the evolving relationship between space and students' social connections during COVID-19.

Social Conflict and Burnout. The spatial changes outlined in the previous section accentuated the role of home-centered relationships for students' social connections. Students' daily interactions largely shrunk from a diversity of others on campus to their roommates, housemates, and family members. Conflicts over shared spaces emerged for students living near and far from campus, though these troubles took different forms depending on with whom students lived. Furthermore, COVID-19 spatial changes led to increased online interactions that amplified social burnout. This subsection discusses how the



pandemic reconfigured the relationship between space and social connection in terms of conflict and burnout.

*Conflict near campus.* Spatial changes emphasized disagreements over shared spaces as grounds for social conflict for students living near campus. Narrowed propinquity accentuated social connections with roommates, as time spent at home increased for most students. Yet roommates often had different ways of justifying social interactions outside the home during the pandemic. Inviting non-roommates into shared living arrangements posed a risk for exposure to the virus; spending time with non-roommates in close quarters outside the home posed a similar risk. Different cost/benefit analyses of socializing during the pandemic created unforeseen roommate troubles. Specifically, narrowed propinquity and modified rules for interactions built the foundation for conflict over rationalizing interactions during COVID-19.

These spatial changes created a disconnect between expectations and realities of social connection on campus. Eliana, a student living near campus, had a “fear of missing out” on social connections with friends if she were to stay living at home. Her dislike of missing out on connections during the summertime ultimately overrode her acute concerns about exposure to the virus:

Even though I would still be in Ann Arbor if I lived with my parents, that fear of missing out—FOMO situation—all of my roommates were [near campus in the summer] and I was still at home studying for my [graduate school exam] and I hated that. Um, and so once I took my [graduate school exam], I decided to come back, and I really like having my own space and being able to, you know, kind of do my own thing. So even though I really enjoyed living with my parents for close to four months, um, I really enjoy being here as well. And so, I thought that this would be the best place for me to be able to focus on getting my work done while still having a social situation that I enjoy.

Although Eliana's parents live in Ann Arbor—a few minutes driving from central campus—she decided to move back in with her roommates during the Fall 2020 semester. But Eliana's experiences did not necessarily meet her expectations.

Conflict over COVID-19 exposure shattered Eliana's hopes for strong social connections on campus. While Eliana viewed sitting with others outside on their house's porch as permissible, spending time together inside as the weather turned colder posed too great a risk for infection. Eliana identified herself as high-risk to COVID-19 and lamented her roommates' decisions to see friends outside of the home. Given Eliana was most cautious about exposure to COVID-19, the dynamics in her household unexpectedly shifted. Eliana's roommates began asking her for permission to see others rather than discussing within the group:

My issue is that I can't control people and I can't say, "No, you can't go do that." Like, I'm not the gatekeeper, I'm not the mom. Like, that's just not how it works. And so [my roommates] have been asking me, "Are you okay with this? Like, can I go do this?" And I'm like, "Well, I can't tell you no, but I'm not comfortable with it. So, I just ask that you're like safe, you know, but be safe and take precautions where you can." So, that's been like an interesting vibe to be like, I'm not in control of you, but also, I'm not comfortable with this.

Eliana discussed a situation in which her roommates visited their mutual friends' home. She decided to stay home due to COVID-19 precautions but felt left out upon their return. Narrowed propinquity shaped Eliana's social connections by inextricably linking roommates' social decisions in ways unique to the pandemic. If Eliana's roommates independently decided to see friends outside of the home, they unduly put her at risk for viral exposure due to the increased amount of time spent together. As further illustrated by the interview excerpt,

Eliana's roommates comprised her main social group and tensions that arose put the connections on precarious grounds. Furthermore, modified rules for interactions arguably informed the students' decision-making processes for socializing during COVID-19. These students rationalized their decision to engage in out-of-home connections by drawing from their existing knowledge of distancing protocols. While Eliana accepted distanced interactions outdoors, but she personally drew the line at interactions indoors.

Eliana's roommate troubles were not isolated incidents. Cass, another student living near campus, also conflicted with roommates over different ways to rationalize social interactions during the pandemic. Unlike Eliana, though, Cass's struggles originated from inviting others into their shared living space:

I actually tested positive for COVID right before I came home for Thanksgiving. And two of [my roommates] had had their boyfriends over who had been, been exposed. And then they were kinda mad like, "Oh, well now my boyfriend's exposed." I'm like, well, I didn't want her boyfriend over in the first place. So *sorry* (sarcastically)... It's just been an underlying tension around everyone. And then like trying also—picking and choosing who could come over. It was very hard. 'Cause I had a few friends in fraternities, but my housemates weren't comfortable with one or two of those guys coming over and I'm like, well, (sarcastically) *okay?*

"Picking and choosing who could come over" was a difficult process for Cass and her roommates. While significant others were allowed into their shared space, Cass's friends living in fraternities were barred from entry. Like Eliana, narrowed propinquity and modified rules for interactions shaped her social connections throughout the semester. Cass's constant proximity with roommates similarly bound their social decisions together, as evidenced by arguments over Cass exposing her roommates' partners to the virus. These emerging conflicts chipped away at Cass's connections with her roommates,

with whom she spent the most time. Additionally, modified rules for interacting likely informed the “picking and choosing” process Cass described. Spatial changes played a role in both Cass and Eliana’s roommate troubles. These conflicts created newfound tensions amongst those who they spent most time with, harming their social connections.

The narrowing of social connections to the home additionally emphasized the role of students’ living arrangement composition. Students in living arrangements with amenities for socializing outside of shared spaces had the means to circumvent some roommate troubles. These amenities took different forms, ranging from study rooms in high-rise apartments to single-occupancy bedrooms. With limited access to neutral third places, students living in houses or apartments—especially with roommates—frequently faced conflict over sharing spaces. Eve, a low-income student, illegally shared a room in her house’s attic with another student. While this deal was necessary for Eve’s checkbook, it limited the amount of personal space she could claim. Eve shared every space in her home with others. Inviting non-roommates into her space thus directly involved consultation of not only her housemates but her roommate. Compromise was necessary yet difficult:

With my roommate upstairs, like in our room, that has been a little bit challenging just because it's like, we'll both either be in class at the same time or one of us will be in class and one of us will want to have my partner over, and I don't want to interrupt her class. And so that's been difficult to navigate, but we're like, she is like such a good compromiser and is just such a selfless person. And I try to meet her at that level, and we'll like compromise and I'll be like, “Oh, if you want the room, like I can do my stuff down here.”

...

And like, [one time she didn't want my partner to stay the night] was sucky. 'Cause I hadn't seen him for like a week because, um, I was gone and then he had a big final to study for, and I was like, fuck, I just really wanted to see him. And that was the first time I was going to see him, but I was like, "No, this isn't worth making my roommate uncomfortable or getting into a fight about it."

Students sharing personal spaces during the COVID-19 pandemic had to consider the additional risk bringing others into their homes would pose. While roommate troubles over sharing space certainly existed before, the pandemic likely exacerbated these tensions. Sharing space far more often than typical semesters placed a greater emphasis on maintaining positive social connections with roommates.

*Conflict at home.* During the Fall 2020 semester, U-M students adapted to remote classes, virtual classwork, and social distancing protocols to prevent the spread of this novel coronavirus. Students previously living on-campus were thus faced with the question of whether or not to return. While few students continued attending in-person courses, the majority participated in online courses that did not require physical proximity to campus. Thus, a new category of students emerged during the pandemic: those who previously lived near campus but decided to live at home with their families for the Fall 2020 and/or Winter 2021 semesters.

Students oftentimes associated independence with living near campus. Arjun, for example, moved back to Ann Arbor partly in order to have his "own space" and mentioned how "living with parents [can] be overwhelming." When asked why he decided to return to campus during COVID-19, Arjun commented that living near campus constituted the "authentic college experience." Students

living at home frequently described a process by which the independence of living near campus—a piece of their authentic college selves—was stripped away. The centralization of activity and social connection to the home exacerbated these tensions by placing family members in consistent proximity.

Narrowed propinquity, working in tandem with the spatial composition of living arrangements, often led to social conflict amongst parents and students.

Rashmi, a fifth-year student living at home, had lived near campus in an apartment for the past four years. She mentioned noise complaints and feeling frustrated with her father for interrupting virtual classes and meetings:

The living room is directly below my bedroom. I can hear when they open the back sliding door, or like, you know, they're cooking and there's pots and sounds like the microwave closing... And so, I've told them, I tell them every single time before I get into a class that I have to talk, or I'm being unmuted in that I'm getting into a class—I'm going to be not muted. Please don't be in the kitchen or please turn the TV down. Which is annoying. But the most annoying thing is my dad will come into my room when I'm like in a class or he'll knock on my door if it's locked. And then I'm like, "If [my door] is locked, what does that mean? I'm in a class." I'm sure he's going to come like any minute and try to open my door or not knock on it. But, yeah. So, there's conversations about being quiet or not being in a space when I'm in a class.

As she predicted, Rashmi's father walked into her room later during the interview and was promptly met with an irritated sigh. The spatial composition of her home made it so she could clearly hear family members' activities while attending classes, studying, or working from her room. While she may have also experienced irritating noises in her apartment near campus, the pandemic amplified these troubles by collapsing spatial barriers and shifting all academic work toward the home. Rashmi associated her life on campus with greater independence, which likely spurred conflicts centered around these struggles:

I guess I could find 10 minutes of time to empty the dishwasher, but I just don't want to. 'Cause I didn't have to when I was on campus, it just kind of was like, "Oh, you wash

your own dishes"-type of thing. Which I mean, I could do at home if I do it on campus, but if my mom is there to do it for me...Like you want me to do well in school, but you want me to do the dishwasher. Which one do you want me to do?...[I'm] a little frustrated because it's like, you want me to come home after four years of having this new routine and this new way of doing stuff, and come back to my old ways...It was just kind of frustrating to move backwards.

Rashmi's conflicts over independence largely stemmed from spending more time with her parents in close quarters. The bulk of her social connections were with her parents rather than a variety of students on campus, as was the case in semesters past. Unlike before COVID-19, the space Rashmi shared with her parents took on academic and personal meaning. These collapsed spatial boundaries prompted struggles over independence uncommon to Rashmi's previous years in college.

Other students experiencing parent troubles at home took action to change the spatial composition of their living arrangements. Yasmin, for instance, bought a lock for her bedroom door. This decision allowed her to block others from the spaces she deemed her own:

Before [COVID], I didn't have a lock on my door. 'Cause there was never a need because it's like no one ever opened my door. I never used a lock. And then I ended up buying a lock 'cause I was like, yeah, I need privacy. So, I think that's the biggest thing that I've done, which is like kind of chilling because now if someone wants to like talk to me or something and I want like my alone time, they have to knock on the door. It's like leaving me alone. 'Cause they leave me alone, but [have] a bad habit of knocking sometimes, sometimes not...I bought it and I installed it myself.

Yasmin's parents did not approve of her decision to create this spatial barrier at home but did not remove the lock by the time I interviewed her. Lydia's parents also had a habit of interrupting her studies when she initially returned home in March 2020, but she too created a solution for this issue:

My family has been really respectful of it. I think when I go home, I made a little sign and put on my door right before I started... And I think that really helped because before, I didn't have that when we got sent home in March, and it was just so bad, like every like

10 minutes, “Oh, do you want lunch?” Or, you know, it's really sweet things, but it's just frustrating, and I don't, you know, interruption was hard. So, I think that that really helped. But now that we've kind of been in [the pandemic] for a while and made a routine of it, I think it's gotten a lot better.

Lydia altered the spatial composition of her home in a way different than Yasmin's lock installation, but her tactic was nonetheless effective. These two students' decisions to change their living arrangement spaces illustrate how the relationship between space and social connection changed. Prior to the pandemic, Yasmin “never used a lock” at because she likely spent additional time in places—especially places near campus—other than her home. With her social connections largely limited to family members at home, Yasmin discovered a need to explicitly define her private space. Collapsed spatial boundaries made it so Lydia had to attend classes at home, an activity previously reserved for lecture halls on campus. Like Yasmin, she had to explicitly delineate space in her home for academic work away from parents. Both students' connections with their family members took on new forms as they performed various roles—student, daughter, club member, and friend—in one physical place.

Regardless of location relative to campus, students experienced conflict regarding shared spaces. Students living near campus struggled with roommates about COVID-19 exposure; students living far from campus struggled with family members due to breaches of personal space. These interpersonal troubles were centered around the home, demonstrating how



propinquity narrowed to home-centered relationships differently affected social connection during the pandemic.

*Virtual Places and Burnout.* Attempts to transfer in-person social connections online accompanied the pandemic. During COVID-19, most students attended class online asynchronously or through video conferencing software. Social connections made previously in lecture halls, then, now took place in a virtual format. Students found these virtual places to be inadequate replacements for face-to-face interactions. Beyond their inadequacy, some students also found that the on-demand accessibility of virtual places fostered greater social burnout than physical places. This subsection contrasts students' pre-pandemic and during-pandemic social experiences to demonstrate how virtual places deteriorated their desires to connect. Each COVID-19 spatial change—narrowed propinquity, collapsed boundaries, and new rules for interactions—played a role in students' burnout.

Students' social groups centered around the home at the detriment of their academic motivation. Narrowed propinquity with roommates, when combined with virtual places inadequate for social connection, caused students' drive to fizzle out. Before COVID-19, students often tied together physical proximity and academic productivity. Eliana discussed how being surrounded by other students helped her stay focused:

I think I just have better focus when I'm physically in a place with other people doing the same thing. When [classes are] online, people have their camera off in the [video call] nobody talks... Just being around people and it helps me focus better on the topic at hand or the lecture...now, I can just easily zone out. So that's tough.

Eliana distinguished her online and in-person experiences in terms of place and social connection. When near “other people doing the same thing,” Eliana could better focus. Virtual places—in her case, video calls—allowed students to turn off their cameras and disengage from situations which previously required social connection. Like these students, Eliana found it much easier to “zone out” during online interactions than during face-to-face interactions. Lydia paralleled these sentiments by contrasting her experiences taking classes at home with her time on campus:

And now it's like, if I'm alone, I'm alone in my room, and it's just kind of unmotivating. I feel like it's a lot easier to get distracted too, when you're not surrounded by a bunch of people that are also doing work. Um, cause like in the apartment [last year] it's like, oh, I'm surrounded by five other roommates and we're all sitting on the counter and we're all cramming for physics and you know, and then it was like, it was kind of like, can, you know, set you like, it was like made me want to keep going. And like I could ask the questions and then like one of them would be like, Oh, I want brownies. We need, we need “finals brownies.” You know? And so, it was just, it was like a totally different environment.

Like Eliana, Lydia derived her motivation from physical proximity with other students doing similar activities. Proximity narrowed from these students to Lydia’s immediate family members, none of whom were studying together or making “finals brownies.” She felt alone and unmotivated living far from campus. However, living closer to campus did not improve Eliana’s belonging quite like it may have before the pandemic. Eliana and Lydia were both physically separated from their broader groups of peers and inhibited from making strong social connections in virtual places.

Even students who did not explicitly connect proximity with peers and academic productivity found the isolation of narrowing proximity difficult.

George, a student living at home, was generally happy about his decision to spend time with family away from campus. But he also mentioned the strain of remaining in one physical location:

I've been able to manage, but I understand why, you know, it's not healthy for human stay in one spot all the time, and it's really important to get out of the house and just how important social interactions are to one's health...When I'm doing homework or whatnot, or I'm trying to pay attention, um, I guess just the feeling of not seeing people or a lot of people and seeing how they perceive things really just makes me feel frustrated or it indirectly causes some frustration towards what I'm doing...I just feel more tired, I guess, or occasionally frustrated.

The narrowing of space to the home caused George to feel both tired and frustrated, emotions that signal burnout. As a self-described introvert, George still acknowledged “just how important social interactions are to one’s health” and how not being physically near others has harmed his wellbeing.

Collapsed spatial boundaries also impacted students’ social connections by way of virtual burnout. Kelly, a student living at home, felt exhausted due to a lack of breaks between classes and studying:

I guess [school] is wherever I would be though, it’s convenient because I don’t have to travel, it cuts time down. And it’s kind of like—it’s hard to have a break between school, life, and everything. I guess it’s kind of like, it's very easy to just do school all the time, then you get like more exhausted quicker and it's just not efficient.

Without the need to move between physical places for activities, Kelly’s laptop provided unending access to her academics, social life, and work. Her physical stagnation seemed to exacerbate the immediacy of academic demands in particular. Yasmin, another student, provided an example of exhaustion Kelly mentioned when discussing an exceptionally difficult day of online meetings:

...One day I had back-to-back meetings for five hours and I didn't move, not once did I move. And I was starving, and I was thirsty, and I was like, my head was killing me 'cause I was staring at a screen the whole time, and I was just sick of it. I was like, I can't do this anymore. I'm so tired. All I want to do was hop into bed. And I never experienced that in-person because I'd always be walking from place to place. Like

there's always be a break, you know, whereas it was back-to-back-to-back, no break. You don't even get a chance to think. It's like you're a robot.

Like other students, Yasmin considered “walking from place to place” to be a necessary mental refresh. Back-to-back online meetings and physical stagnation exhausted her. Student frequently mentioned the stresses that these collapsed spatial boundaries placed upon them. The centralization of activity to the home and resulting constant, underlying demands for online engagement left many students feeling burnt out.

Virtual burnout oftentimes eroded students' willingness to socially connect with others. Alyssa, a first-year student, moved to a house near campus due to a “fear of missing out” on social connections after high school graduation. Despite living near campus, though, Alyssa mainly connected with others online due to concerns about exposure to the virus. Collapsed boundaries between activities and the immediacy of her academic demands consumed Alyssa. At the end of the day, she felt guilty about not wanting to attend online social events:

...The social activities I do engage in, if they're not like with family or my house mates or my two, like designated friends then they're all virtual as well. So, for example, like even my [professional fraternity], like [fraternity social event] was completely virtual and honestly it felt a little bit like a chore, as excited as I was. So that's unfortunate. I really don't think it's like the [fraternity] or anything like that. I think it's just the fact that it's through a [video conferencing] call.

Alyssa framed her social activities as “chores” rather than enjoyable breaks in her schedule. Her reluctance to continue spending time on video calls after class is emblematic of burnout. Alyssa's social burnout thus impacted her ability

to connect with other students. Riley, another student living near campus, also described how her enthusiasm for online social activities decreased:

[Virtual] burnout is very real to me. It's like, if I've been sitting on classes for like hours that day, and then there's like a monthly [student organization] meeting, I don't have as much motivation to go because it's [an online] meeting... I feel like there just like is no break. When I finish one lecture, I'll just immediately do something else. I'm constantly staring at my screen compared to like last year. Even if you were taking notes on your laptop [during in-person classes], you had a break to walk from building to building. You have a couple minutes to just put your mind on something else. And you had that face-to-face interaction. Whereas here there is just like no connection.

Collapsed boundaries between activities limited Riley's need to walk between physical places, exacerbating her exhaustion. All of Riley's student organization meetings were conducted online, shifting her social connections away from campus toward her home. This changing dynamic demonstrates the link between narrowed propinquity and collapsed spatial boundaries. Since Riley's house prohibited visitors, the majority of her interactions occurred virtually. These new rules for interactions, in conjunction with narrowed propinquity and collapsed boundaries, thus negatively impacted Riley's social connections.

Students frequently expressed they did not value virtual interactions to the extent of in-person interactions. Yasmin, a student living at home, found it difficult to stay connected with friends from school via virtual forms of communication:

We [video call] and text. I think that's the extent of it...[these interactions are] way less meaningful. There is less substance, I guess. Which is fine, like it's to be understood. But it's still kind of upsetting.

Yasmin previously described valuing frequent visits to her friends' apartments on campus for casual social activities. For Yasmin, virtual interactions were not

adequate replacements for in-person connections. Lydia echoed this perception when describing her online experiences with student organizations:

I mean generically, obviously none of us are meeting in-person or doing anything. So, you don't get—it's hard to get as much of the fun and bonding experiences with people...and it's just like hard to think of like how to get to know [new student organization members]. 'Cause we don't really see them, and you don't really know them [enough] to reach out.

Both Yasmin and Lydia agreed that virtual interactions were less substantive than in-person interactions. Although students were expected to continue engaging in academics and social activities during the pandemic, video calls did not create sufficient spaces for these interactions to take place.

The inadequacy of these virtual places for social connections was underscored by modified rules of online and in-person interactions. Eliana felt discouraged when attending meetings for a student organization:

I would say the main issue is that because everyone is muted [on the video call], until you choose to unmute, the social interaction part of it and the ability to speak up is kind of diminished. I've found that I just kind of sit there, and I don't really talk because I don't really, I mean, it's more like announcements and thoughts by the [student organization] directors rather than feedback about how things are going or questions. Which, not that I don't have the ability to say that, I've just found that I'm a lot more quiet than I used to be in these meetings. Because some of [the meetings] used to be in-person... And I speak a lot less than I think I used to.

The new rules of online interaction harmed Eliana's ability to speak as comfortably as she would during an in-person meeting. Emerging norms such as only one student "unmuting" to speak at a time prohibited natural back-and-forth conversation. These new processes for interaction may have prevented Eliana from expressing herself similarly to how she would face-to-face. Eve similarly found that new rules for interactions impeded her ability to connect online. She detailed issues with her virtual theatre classes:

...Being in the room is so much more fruitful... [online] you can't read a room, you can't act on a [video call], especially with the masks too. Today we were acting with masks and I was like, I feel like I'm in a science fiction movie. I don't know what's going on.

Eve discovered that rules of in-person interactions also affected her online interactions. Despite attending class virtually, the theatre students practiced acting in facial coverings due to the mask requirement for forthcoming in-person operations. Eve commented that these facial coverings impeded her ability to accurately assess the intentions of interactions, an integral component of social connection. Eliana and Eve's reflections demonstrate how the pandemic's modification of rules for interactions shaped their social connections during the semester.

These accounts illustrate how narrowed propinquity, collapsed boundaries, and modified rules for interaction heightened students' stress and burnout. Virtual third places, in acting as attempted replacements for in-person places of connection, were constantly available and demanding. Students described feeling apathetic, exhausted, and frustrated in their commentary about online social connections.

Valued Social Connections and Welcomed Distance. COVID-19 spatial changes did not always shape social connections in ways detrimental to the wellbeing of students. At times, the relationship between space and social connection shifted in a direction desired by students. The narrowing of interactions and activity to the home provided some with the chance to step back, reexamine, and redefine with whom they most desired social connection. Moreover, this physical

distance from the broader student body on campus afforded some students a desired degree of separation from symbolic exclusion. This section explores these two potentially unexpected effects in turn.

*Valued Social Connections.* Distancing restrictions and remote academic operations provided students with a unique opportunity to reassess their valued social connections. The pandemic broke students' underlying obligation to be physically near campus to attend in-person classes, subsequently presenting an option to remain home. The narrowing of propinquity to the home prompted students to examine with whom they wished to spend most time, whether it be their roommates near campus or their family members. No longer did most students interact daily with massive swaths of the University's population in busy lecture rooms or cramped dining halls. Gauri, a student living near campus, reflected on how the pandemic differently shaped she interacted with others:

I had another friend who—I was already friends with her—but we got a lot emotionally closer over quarantine. 'Cause we would just talk a lot more, especially at night. But the thing that like before [COVID-19], it would just be like, "Oh, we're going to go like get lunch or dinner or go try out a new restaurant together." But the dynamic—or not [that] the dynamic changed, but it was just what we did together would change. And I feel like it opened it up to just like talk a lot more rather than doing something, which I think lets you get closer to a person. So, I think what the pandemic really did is kind of show you who your really-close friends are because it's the people who will talk to just to talk to you because you can say anything to them versus the people who you could do things with, but maybe don't have as much to say.

The difference between non-pandemic and pandemic socializing, in Gauri's opinion, was the emphasis placed on talking rather than doing activities. Her understanding underscores how space matters for social connections. Literature on third places posits that certain spaces stimulate social interaction and connection by orienting participants toward similar activities (Oldenburg 1989).



In past semesters, for example, students may gather at nearby coffee shops to order drinks and socialize. The act of “doing” something in these spaces made possible the formation and maintenance of social ties. But the pandemic upended this relationship between space and social connection. An inability to spend time together in places outside of the home redefined social connection as “talk[ing] just to talk.”

This reevaluated meaning, spurred by home-centered propinquity, encouraged students to reconsider with whom they most valued social connection. Travel between different places risked spreading the virus, creating a zero-sum game in which students living near campus could not visit home at nearly the same frequency as before COVID-19. These risks narrowed propinquity, or the role of proximity in relationships, to where students lived. Lindsay, a student living at home, described feeling strongly connected to others in her hometown. Before COVID-19, she was forced to sacrifice time with her family members for on-campus academic responsibilities. Remote instruction and narrowed propinquity enabled Lindsay to reassess her valued social connections:

I'm just like really close with my family. I'd say I haven't been like that my whole life. And I was—I'm the first one to go away to school. So, I felt like I was like missing out on things because no one else is my age doing that. I was like the only one that was gone.

Lindsay identified a “fear of missing out” on frequent family gatherings as a first-generation student; she was the only member of her family to move away for school. Lindsay seized the opportunity COVID-19 presented to reconnect with her home-centered relationships away from campus. Living at home likely

helped alleviate her feelings of “missing out,” as her proximity with family members better allowed her to connect. Like Lindsay, Yasmin had very close relationships with her family members. She is also a first-generation student and expressed a similar concern about “missing out” on family events:

I'm Middle Eastern. It's very cultural. If I don't go home as often as other people—like family values are really big. So, I was raised with my family, my extended family. If I don't come home on the weekends, I miss a lot of events like weddings or gatherings or get-togethers. And it's something that I don't really want to compromise because I really value those connections with like my family and extended family.

Although Yasmin framed her reasoning in terms of cultural values, both her and Lindsay expressed a similar “fear of missing out” on connections with their family members when living near campus. Whether these concerns were related to their status as first-generation students or cultural values—or both—students who decided to live at home often cited their strong desire to connect with family as reasoning. Traveling between home and campus presented a risk of exposing valued family members to COVID-19, which neither Lindsay nor Yasmin were willing to take. Spatial changes thus differently shaped students' social connections by presenting the option between tending to hometown or campus-centered relationships. This decision encouraged students to reassess their valued social connections and maximize time spent with them.

Even if students did not explicitly view time spent between family and campus as a tradeoff, their reexamination of valued social connections informed their housing decisions. George, a transfer student, decided to spend time with family during the Fall 2020 semester. For his first few years of higher education, George commuted to a university near his hometown. He mentioned having a

few friends at U-M, whom he mainly met through class or professional channels. George enjoyed the few semesters he lived near campus but seemed to very much enjoy his time at home, as evidenced by his daily journal entries and positive relationships with family members. He did not mention a “fear of missing out” on social interactions near campus during the semester and defined himself as “not really a social person in general.” It is possible that the value George placed on connections to people in his hometown—family members, friendly neighbors, and friends—affected his desire to stay home for the semester. Consequently, the pandemic’s centralization of activity to the home drove George to connecting more with family members than other students on campus, the former in which he placed significant value.

Welcomed Distance. COVID-19 also changed the relationship between space and social connection by introducing physical distance from symbolic exclusion. All students—regardless of their proximity to campus—spent more time in their living arrangements. This physical separation from places typically associated with student life, such as lecture halls, campus commons, student unions, and libraries, improved some students’ abilities to socially connect. Eve, a student living near campus, attributed her stronger social connections to having more face-to-face time with her roommates during the pandemic:

Well, now that everything is online and I'm always at home besides when I'm working all-day, because [my roommates and I will] all be together at the house all the time, which is like, I've said this—and I think I wrote about this in an article once too—being at home, the pandemic kind of like, and putting a pause on productivity and that kind of thing. Being forced to be home made me like reconcile with my inability to maintain relationships and made me forcibly, made me be at a place where I can work on maintaining relationships and be present with the people that I'm with and stop wishing that I was somewhere else or like thinking about a billion things I have to do in my head.

With most activities virtual, Eve felt as though she had more time to spend working on interpersonal relationships. She framed this realization in terms of space, describing how the pandemic forced her to “be at a place” to improve relationships and stop thinking about being “somewhere else.” Eve’s sentiment about the pandemic “putting a pause” on her busy daily routine is particularly striking. Collapsed symbolic barriers made the home a new center of activity, providing a welcomed degree of separation from the rush of campus life. Eve no longer had to walk from place to place in order to work, learn, and socialize—these activities were far more accessible in one physical place: her home.

This degree of separation from campus also allowed students to step back from the competitive academic environment of University. Students did not constantly find themselves surrounded by others vigorously studying for midterms or finals; the twinge of guilt felt when walking past a library chock-full of stressed students on the way to a social event essentially disappeared. Kelly, a low-income transfer student, discussed how online classes provided a much-needed degree of separation from her peers:

At the beginning (after transferring), I was both super excited to be in, you know, in classes. But also, it’s kind of like intimidating, ‘cause there were a lot of—[at] Michigan [there are] ambitious people and that’s kind of scary to compare yourself. And then not be eager to participate in stuff. I, yeah, so it was kind of somewhat relieving, I guess—having things switch to online...I guess in some ways, because you know, less people—there’s less room to be intimidated by others [during the online format].

Kelly associated in-person classes at the university with an intimidating atmosphere. Taking classes online helped remove Kelly from the immediate presence of other students, lessening her feelings of toxic academic pressure.

For some students, this welcomed distance was initially unexpected.

Alyssa, a first-year student living near campus, felt academic pressures similar to those Kelly described. She initially thought moving close to campus would provide her with greater opportunities for social connection, basing her housing decision largely off of a “fear of missing out” on student life. However, Alyssa quickly realized that visiting her hometown helped remove her physically and mentally from academic stressors:

...My dad asked me if I wanted to do the two week stay-in-place [Washtenaw county order] back in [my hometown]. He asked if that would be more comfortable. So, I was actually thinking about that. And it's strange 'cause it's stressful in different ways when I'm here. I'm working really, really hard, but I'm stressed obviously because all I can think about is school. Like, this is my box [referencing her room]. That's also my bedroom and my office... So, when I was at home, I had interviews and stuff while I was at home, and I found myself forgetting about [them] until like the minute before, which would never would have happened to me in Ann Arbor. I would've been thinking about the meeting the entire day. So, that's the weird thing about being home and being with my family is I think a lot of the stress is taken off in a way...

Alyssa's stressors were tied to space. At her parents' house, Alyssa felt as though she had more space to relax; her hometown acted as symbolic separation from academics, which she deemed stressful. As a first-year student, Alyssa described feeling unaccustomed to the academic rigor of U-M. The collapse of barriers between places confined Alyssa to a small room for all activities and led to monumental stress, as described in a previous subsection. To cope with these stressors, she created her own separation from school by visiting her hometown. She welcomed this self-configured physical—and symbolic—distance with open arms. Despite expecting proximity with peers to aid her social connection, Alyssa found distance from peers helped attenuate her social burnout. Alyssa's experience demonstrates how COVID-19 spatial

changes simultaneously shaped social connections in negative and positive ways.

## CONCLUSION

This study examined how space shapes students' social connection, arguing that COVID-19 reconfigured this relationship by changing how students interact with space. Before the pandemic, proximity to campus and boundless access to nearby third places and living arrangements enabled social connection despite symbolic class, race, and other barriers. The pandemic narrowed the scope of spatial propinquity, collapsed spatial boundaries between places, and altered the rules for social interaction. On one hand, these spatial changes exacerbated social conflict and cultivated social burnout by centralizing activity to the home. On the other, spatial changes prompted students to maximize their valued social connections and created an unexpected but welcomed barrier of separation from social exclusion.

These effects impacted students' social connection differently but were not mutually exclusive. Social conflict eroded relations between people living in the same households, which made up the bulk of students' daily interactions during COVID-19. As past research has shown, negative interpersonal interactions detract from feelings of social connectedness (Baumeister & Leary 1995). Attempts to replace in-person interactions in a virtual setting increased social burnout at the detriment of students' desires to connect. During COVID-19, more interaction meant more time spent staring at a screen, prompting

some students to dread social connections or avoid them altogether. However, the pandemic also broke students' obligations to be physically present on campus for their classes. This allowed students to reexamine with whom they wished to spend time, enabling some to focus on these social connections rather than splitting their time between different places. Furthermore, distancing restrictions placed a welcomed physical barrier between students and exclusion from places on campus that symbolize an excessively competitive academic environment.

This research contributes to the literature by painting a highly nuanced picture of the relationship between space and social connection. Despite place-based symbolic class, racial, and other barriers, consistent proximity to campus enabled students living nearby to socially connect more so than their commuter counterparts. Moreover, the pandemic disrupted our taken-for-granted assumptions—and data-driven findings—about how physical proximity to campus better facilitates student social connection (Chapman & Pascarella 1983; Dumford, Ribera & Miller 2019). While spatial propinquity never disappeared, the narrowing of its scope reveals the malleability of our social relations. Our experiences and definitions of social connection are context-dependent and constantly undergoing revisions. Past literature on student belonging—including recent research related to COVID-19—often operationalizes social connection quantitatively and uses student retention as a narrow indicator of success (Tett 2004; Chapman & Pascarella 1983; Soria, Stebleton & Huesman 2014; Broton & Goldrick-Rab 2018; Dumford et al. 2019;

Silva et al. 2017; Folk et al. 2020; Folk et al. 2020). This thesis expands these understandings by examining students' qualitative experiences of space and social connection during a unique time of physical distancing.

Like most social phenomena, the ways in which space shapes students' social connections are not straightforward. To appreciate the complexity of this relationship, I used a mixed methods approach designed to best capture students' perceptions of social connection and daily interactions. I recruited 19 undergraduate students at the University of Michigan to participate in 1-hour virtual interviews. Seven of these students also completed eight journal entries about their daily lives over a four-day period, as well as participated in a second 1-hour virtual interview. The combination of 26 in-depth interviews and 7 twice-daily journal entries provided data on both the macro- and micro-levels of students' everyday experiences, providing a holistic understanding of students' social connection.

There are aspects of this research that warrant further investigation. Given time and financial constraints, the sample of this study only included two commuter students. Capturing the thoughts and experiences of a greater diversity of commuter students would improve the robustness of these findings. Moreover, the majority of participants were white and/or female. Gender did not emerge as a substantial factor in social connectedness, but it is quite possibly impactful. Since social connection is extremely context-dependent, involving students from a variety of colleges and universities would also help further solidify the arguments made in this thesis.



Going forward, future research on how the relationship between space and social connection continues evolving post-pandemic would be valuable. COVID-19 upended our expectations for and realities of social interactions, relationships, and belonging. This time likely marks a shift in how we make sense of the world around us. While this study focuses on life before and during the pandemic, a post-pandemic analysis will round out this examination of space and student social connection.

On that fateful day in March 2020, I would have never imagined the conversations I've had with fellow students throughout the course of this study. Not yet did I miss the moments of sitting in crowded lecture halls, walking across campus, or studying in libraries for hours on end. Physical proximity elicited implicit social benefits unacknowledged by most before the pandemic. As I type this thesis, I sit at a makeshift desk in an apartment near campus. It has been over a year since seeing many of my friends. I have lost loved ones to the virus, just as so many others have. I empathize deeply with the struggles students discussed in their interviews and journal entries.

In the face of unexpected hardship, though, this study is replete with hope. Examining the ways in which space differently affects people along various dimensions may suggest solutions for more equitable, just outcomes for all students. If we can recognize the mechanisms that create social disconnection, we can actively work to quell these effects.

The results suggest ways to mediate social disconnection. For now, it is important to recognize how students are experiencing novel social conflicts and

heightened burnout. The stress of physical stagnation and online replacements for activities cannot be understated. We must exercise compassion with others and ourselves, acknowledging the social burdens placed upon us by a global health crisis. But the pandemic also brought about unexpected benefits that we should not do away with when returning to in-person operations. Perhaps the “way we always do things” is not the “way we *should* always do things.” Should classes compel every student to split their time between campus and home? Instead, we could continue offering strong online education programs for competitive schools that allow students to better maximize their valued social connections, whether they be with others near or far from campus. Reimagining education to include virtual forms of participation may also reduce the symbolic exclusion students feel amongst their peers. Asynchronous options for classes could allow students with highly volatile lives to engage in education when best suits their family, work, and life schedules. This new, flexible system could truly increase the accessibility of “prestigious” institutions of higher education.

When in-person classes resume, I urge the university community to consider how the physical distance of commuter students may negatively shape their social connection. Commuter student meeting groups and webpages to encourage information-sharing and social connection are a good place to start. Furthermore, individual students might consider taking initiative to invite commuter students to social activities, student organizations, and third places—when best suits their time-contingent schedules. Yet structural change is likely required to create a culture in which commuter students feel better able to

overcome pre-emptive social hesitation on campus. We must problematize the inaccessibility of third places to commuters; we must ask questions about how to redesign higher education to foster social connections for all.

The COVID-19 pandemic has underscored the adaptable nature of social life. This unique period of social upheaval is ripe for our sociological imagination. As we experience both the expected trauma and unexpected advantages of this global pandemic, it is our collective responsibility to “go the social distance” and reimagine a more inclusive system of higher education.

## APPENDIX A: INTERVIEW GUIDE

**HOUSING**

- Where are you living this semester?
  - IF HIGH-RISE: Are there any additional amenities or benefits of living in a high-rise?
- Where is your apartment/house located relative to campus?
- How did you find this housing?
  - Do you find this location convenient or difficult? Why?
  - How so?
- How would you describe the quality of your housing?
- What are your thoughts on the cost of living here?
- How often do you interact with people living near you (in the same apartment building or neighborhood)?
- Why did you decide to live in a house/high-rise rather than high-rise apartment/house on campus?
- What went into your decision to commute (or not) to classes at U-M?
- Are you living back at home or with family away from campus?
  - How has this experience been for you?
- What factors went into your decision to live at X housing arrangement?
  
- Do you live with roommates?
  - If so, how did you meet?
  - How much time do you spend together in the apartment/house?
    - Tell me about a specific time.
  - Where in the house do you spend most time together?
    - Do you spend time together outside of the apartment/house?
      - Tell me about a specific time.
- Do you share your room?
  - If so, with whom?
  - How would you describe your relationship to them?
  - Have you lived together before? When did you decide to live together?
- How would you describe your relationship with your roommates?
  - Has this relationship changed after living together? Has this relationship changed after March 2019 (when COVID shut down classes)? How so?

- How would you describe your relationship with the people you're living with?
  - Has this relationship changed after living together? Has this relationship changed after March 2019 (when COVID shut down classes)? How so?
- Where in your house/apartment do you tune into remote classes?
  - Do you usually share this space with your roommate(s)/housemate(s)?
  - If so, have you had any discussions with them regarding the use of this space? Tell me about these conversations.
- Has there been any conflict or tension between you and your roommates?

### **COVID-19**

- How have you felt doing school in this new format? Would you describe these changes as disruptive, welcomed, or somewhere in between?
- Has the pandemic changed who you spend the most time with, or is it relatively the same as past semesters?
  - What are your thoughts about these changes, if any?
- Let's talk more about how COVID-19 has changed your routine since March.
  - Did you transition to a virtual learning format last Spring? What are your thoughts about this transition?
  - Tell me about your interactions with classmates. How about your professors or teachers?
- How about your life outside of class? How has COVID-19 impacted your extracurricular activities? Social life? What are your thoughts on these changes?
- Has the pandemic affected where you live? Did you stay in this (apartment/house/etc.) when U-M closed last spring?
  - If not, describe the process of moving out. Moving back in?
  - Tell me about these decision processes.
  - If you didn't live in this (apartment/house/etc.) during the pandemic, tell me more about where you lived.
    - Did you live with family members? Describe how you felt while living there. How was virtual learning while living in this location? Is it different than learning where you live now?

### **SOCIAL/CULTURAL INTEGRATION**

- With whom do you spend most of your time?
  - How do you know them?
  - During a typical semester, where do you spend the most time with them?
  - What do you do together?
    - Describe a specific time when you did something together.
  - This semester, with the pandemic, do you spend time with them still?
  - How, if at all, do you interact? What are your thoughts about these interactions? How do you feel when you're with them?
- Are you involved in any student organizations? Which ones? Tell me more about that student organization.
  - What role or roles do you play in it?
  - Walk me through why you decided to join this organization.
  - Describe a time that you attended an in-person event/activity for that organization.
    - Who were you with? Tell me about your relationship with these people.
    - Describe the atmosphere of the event. How did it make you feel?
  - Has the structure of this student organization changed in response to the pandemic? If so, how?
  - Describe a time that you attended a virtual event/activity for this organization. How, if at all, was it different than in-person events? How did these changes make you feel about your participation in the organization?
  - Has recruitment for the organization changed this semester? What are your thoughts on these changes?
  - How, if at all, do you virtually interact with other members of this student organization?
- How often, if at all, do you talk with professors/GSIs outside of the classroom?
  - Why/why not?
  - What is your perception of their availability?
  - If you have interacted with them, describe a specific time.
    - How did this interaction go?
- Have you interacted with a professor or GSI virtually this semester?

- If so, tell me more about this interaction. Was it similar or different than in-person interactions with faculty/GSIs?
- How often, if at all, do you interact with other students in your courses?
  - Why/why not?
  - If you have interacted with them, describe a specific time.
    - How did you feel about this interaction?
    - Did you keep in touch with them after the class was over?
- Have you interacted with other students in your courses virtually this semester?
  - If so, tell me more about this interaction. Was it similar or different than in-person interactions? Was it via video chat during class, personal messaging, class text chats, or some other form of communication?
- When things were normal, have you ever attended an in-person event hosted by the University?
  - If so, what event was it? Describe who you were with and how you felt about the event.
  - If not, why? Is there something the University could do to make you want to attend?
- Have you ever attended a virtual event hosted by the University?
  - If so, what event was it? Describe who you were with and how you felt about the event.
  - If not, why? Is there something the University could do to make you want to attend?
- How often have you used in-person University common spaces this semester?
  - If you've used them, did you go with anyone else? If so, who?
  - When did you use these common spaces? How frequently do you use these spaces?
  - If you've used them, did it feel different than previous semesters?
- Describe what a typical U-M student is like, in your opinion.
  - What characteristics best describe them?
  - What physical attributes do they have?
  - What activities do they do?
  - Who do they hang out with?
  - Where do they live?
  - What kind of grades do they get?

- Do you think all U-M student have anything in common? This can be in terms of anything like characteristics, goals, physical attribute, daily activities, motivations, etc.
  - Elaborate on what you've identified, if anything. Why do you think that?
  - How do you fit in with the traits you described?
- Tell me about your perceptions of campus culture.
  - What words best describe it?
  - Are these negative or positive?
  - Why do you associate these words with campus culture?
  - Are there certain people who fit in best with this culture?
    - Who, if anyone, do you associate with campus culture?
      - Why is that?
- How do you see yourself in relation U-M's campus culture?
  - What makes you feel that way?
  - Who or what, if applicable, evokes this feeling?
  - Describe a certain moment when you felt this way.
    - Who were you with?
    - Where were you?
    - What thoughts were going through your mind?
    - What do you think would make you feel a greater/lesser sense of belonging on campus? Why is that?

### **CAMPUS RESOURCES**

- Have you used any on-campus professional resources like the Career Center at U-M?
  - Describe your experience using this resource/these resources.
- Have you ever talked with another U-M student about life after graduation?
  - If so, who did you talk with? Can you tell me about a specific time you've had a conversation like this?
- Have you ever talked with a U-M alum about life after graduation?
  - If so, describe this interaction. Did you exchange any advice? How did you feel about your conversation(s) with them?
- At any point during the conversation, did you discuss your mutual experience as a student at Michigan? If so, tell me more about this.
- Why did you choose to attend U-M?



- What benefits, if any, do you think attending U-M, a primarily residential college, over other forms of higher education (e.g., community college, online college) has?
  - Have you personally experienced these benefits? Tell me more.

## **DEMOGRAPHICS**

I'm going to ask you some information about yourself. If any of this makes you uncomfortable, please feel free not to answer.

- What is your year in school?
- How old are you?
- What is your gender identity?
- Which sexual orientation or sexual orientation(s) do you identify with?
- What is your race and/or ethnicity?
- What is the highest level of education your parents have completed?
- What do your parents do for a living?
- Could you tell me roughly what is your family's total household income?
- How much do you pay for rent per month?
- What expenses do you personally pay for?

## APPENDIX B: JOURNAL ENTRY QUESTIONS

### LOCATION

- Please describe where you spent your time this (morning/afternoon/evening).
- Did you visit multiple locations during this time period? (y/n)
  - If so, where?
- For what reasons did you spend your time there?

### INTERACTIONS/ACTIVITIES

- Tell me about who you interacted with this (morning/afternoon/evening).
- Who, if anyone, did you expect to see? What relationship do they have to you (e.g., professor, friend, significant other, boss, parent, sibling, etc.)?
- Who, if anyone, did you not expect to see? What relationship do they have to you (e.g., professor, friend, significant other, boss, parent, sibling, etc.)?
  - Describe your conversation(s)/interaction(s) with them.
- Discuss what you have done this (morning/afternoon/evening).
  - Which activities did you engage in?
  - Did you plan to do these activities (i.e., part of your routine) or were they unplanned? Tell me more about these activities.
  - Where were you?
  - How did you get there? (e.g., walking, car, bike, etc.)

### EXPERIENCE

- Describe how you felt this (morning/afternoon/evening).
- Did anything happen to make you feel this way?
- Did a particular interaction or sets of interaction cause you to feel this way? Are there any reasons you can identify as to why you feel this way?
- Were these feelings expected or out-of-the-ordinary?

## APPENDIX C: INFORMED CONSENT FORM

I provided the following information sheet before students agreed to participate in this study. All correspondence was conducted via email in recognition of physical distancing protocols and public health safety. Students reviewed the information sheet and, if they agreed to participate, replied to my email with: “I have fully read and understand the Informed Consent Document for HUM00183824 and consent to participate in this study”. I reminded students their participation was voluntary and that they could revoke their consent at any point in time.

**INFORMATION SHEET  
STUDENT HOUSING AFFORDABILITY AND SOCIAL INTEGRATION DURING  
COVID-19  
HUM00183824**

Principal Investigator: **Sara Jex, Sociology Undergraduate Student, University of Michigan**

Faculty Advisor: **Renee R. Anspach, Ph.D., Department of Sociology, University of Michigan**

Study Sponsor: **Department of Sociology, University of Michigan**

You are invited to participate in a research study about how the affordability of housing affects students’ ability to participate and feel included in the campus community. The study is taking place as part of a Sociology Honors thesis to complete SOC 497, SOC 498, and SOC 499 at the University of Michigan.

If you agree to be part of the research study, you will be asked to participate in an interview that should last about an hour over Zoom. After this interview, you may be selected to participate in the second round of this study. For the second round, you will be asked to keep an online journal of your daily activities via a Google Form, in which you will make two (2) entries each day for a span of four (4) days. You will also be asked to sign up for *Remind 101*, a free smartphone app in which I can send you reminders about when to fill out your diary throughout the 4-day period. You will then be asked to remove yourself from the “class” listserv after your 4-day period is over. I will provide you with a detailed instruction sheet on how to do this after your first interview, if you are selected

to continue. After these journal entries, you will be asked to participate in a second interview that should last about an hour over Zoom. You have the right to not continue to the second round of this study, even if you are asked to do so.

**Benefits of the research:** Although you may not benefit directly, this study may help in designing more equitable policies that make affordable housing more widely available. It may also help in designing campus communities that make it easier for all students to participate in campus life, with focus on the inequalities exposed by COVID-19.

**Risks and discomforts:** I anticipate the risks and discomforts of this study to be minimal. You may be asked about your family income, your rent, the location of your housing, or your interaction with your house or roommates. You are free not to answer any question for any reason. I will also protect the confidentiality of the information you provide as explained below.

**Compensation:** You will receive \$10.00 for completing the first interview. If you are selected to complete the second round of this study, you will receive an additional \$30.00 for your time. You must complete the first interview to receive the initial \$10.00. You must complete all eight (8) journal entries and the second interview to receive the additional \$30.00, if you are selected to participate in the second round of this study.

Participation in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any interview or diary question for any reason.

I will protect the confidentiality of your research records by removing your name from the interview transcripts, diary entries, and any notes I may take. The information within these records will be identified by an assigned number. Your name and will be kept only to apply for compensation. The interview transcripts, diary entries, and notes will be stored separately from your name and email address in encrypted files on my password-protected laptop. Any identifying information, including your name and email address, will be destroyed within 24 hours after I have applied to give you compensation.

If any information from the interview(s) or journals is included in my thesis, your real name will not be used.

If you have questions about this research study, please contact Sara Jex at [sarajex@umich.edu](mailto:sarajex@umich.edu) or my faculty advisor, Professor Renee Anspach at 734-417-7730 or [ranspach@umich.edu](mailto:ranspach@umich.edu).

## APPENDIX D: SECOND ROUND INSTRUCTIONS

Seven students participated in the second round of this study. I provided selected students with this instruction document and asked them to review the Informed Consent Document (Appendix C). If they wanted to participate, students replied to my email with the acknowledgement: “I have fully read and understand the Informed Consent Document for HUM00183824 and consent to participate in the second round of this study”. I reminded students their participation was voluntary and that they could revoke their consent at any point in time.

**SECOND ROUND INSTRUCTION DOCUMENT  
STUDENT HOUSING AFFORDABILITY AND SOCIAL INTEGRATION DURING  
COVID-19  
HUM00183824**

Principal Investigator: **Sara Jex, Sociology Undergraduate Student,  
University of Michigan**

Faculty Advisor: **Renee R. Anspach, Ph.D., Department of Sociology,  
University of Michigan**

Study Sponsor: **Department of Sociology, University of Michigan**

You are invited to participate in the second round of a research study about how the affordability of housing affects students’ ability to participate and feel included in the campus community.

**Journal Entries:** Please record two (2) journal entries each day for a span of four (4) days in this [Google Form \(https://forms.gle/fEGwBncyre6rSTAL9\)](https://forms.gle/fEGwBncyre6rSTAL9). Your first response should be completed by ~1:00 PM every day, and your second response should be completed by ~11:59 PM every day. All entries should be in complete sentences, but they need not be formal. You are encouraged to write everything that comes to mind in a stream-of-consciousness style. You may think of the questions like journaling prompts and your responses like personal diary entries. The email this instruction document is attached to will instruct you as to which days you should begin and end your journaling.

**Remind101:** To receive daily reminders to complete your journal entries one hour before the encouraged deadlines above, you may sign up for a Remind101 texting service in which I will personally send you reminders. You will not be able to see anyone else signed up for the Remind101 listserv, and no one else will be able to see you. Remind101 is an application you can download on a smartphone, but it also operates as a texting service independent of the application. Please text @8e2ed29 to 81010 or click <https://www.remind.com/join/8e2ed29> to join. You will be asked to remove yourself from this group after your four (4) day journaling period. If you would not like to participate in the Remind 101 service, please let me know. This is not a required component of the second round.

**Second Interview:** The email this instruction document is attached to will include a message asking to set up a second interview. This interview will take place the week following your journal entry period and should last approximately an hour over Zoom.

**Compensation:** You will receive an additional \$30 for participating in the second round of this study. You must complete all eight (8) journal entries and the second interview to receive this compensation.

Participation in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any interview or diary question for any reason.

I will protect the confidentiality of your research records by removing your name from the interview transcripts, diary entries, and any notes I may take. The information within these records will be identified by an assigned number. Your name and will be kept only to apply for compensation. The interview transcripts, diary entries, and notes will be stored separately from your name and email address in encrypted files on my password-protected laptop. Any identifying information, including your name and email address, will be destroyed within 24 hours after I have applied to give you your final compensation.

If information from the interview(s) or journals is included in my thesis, your real name will not be used.

If you have questions about this research study, please contact Sara Jex at [sarajex@umich.edu](mailto:sarajex@umich.edu) or my faculty advisor, Professor Renee Anspach at 734-417-7730 or [ranspach@umich.edu](mailto:ranspach@umich.edu).

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