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Student-Centered Learning Spaces During a Pandemic

By

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THESIS

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ABSTRACT

The purpose of this study is to examine the experience second year, live on students study habits in outside academic spaces during a pandemic from 2020-2021 academic year. Through gathered testimonies of residents it was found students value their communities, appreciate localized spaces for collaboration, and acknowledged various influences that can enhance or inhibit their ability to study. Additionally, they shared the impact COVID-19 had on their personal lives, academics, and how they interacted with others. It was found that holistic measures are needed for students to be successful in outside academic spaces. This study brought attention to these measures by identifying the need for multiple designs that offered privacy, public view, or solidarity. These spaces should provide safety, large surface areas, and offer a sense of peace. Additionally, students shared resources should be readily available, whether that be basic needs such as water, food, or restrooms, technology, even human connection, such as friends, staff, or strangers.

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I would like to dedicate this thesis to my family, Anthony, Mom, Dad, Haydn, Whitney, my grandparents, and all the rest. This has been a year that we all will never forget. I could not have made it this far without your unconditional love and support during this time.

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at Eastern Illinois University. I have fully embraced the saying "it's a great day to be a

Panther".

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Chapter I

Introduction

We shape our buildings; thereafter they shape us.

-Winston Churchill,

1943

Research has shown constructed environments can shape, guide, compel, and inspire all those who move within them (Ibrahim & Fadzil, 2013; Strange & Banning, 2015; Tookaloo & Smith, 2015). In order to be effective, these spaces must be intentionally designed to promote purposeful activity within them such as academic studies, social gatherings, and idea sharing (Strange & Banning, 2015). From the smallest details such as temperature, to pigment of the walls, the architecture itself produces subliminal messages that influence human behavior (Ridder & McCandless, 2010). This is particularly important among higher education institutions as they compete for a shrinking pool of Generation Z students, whose schemas are molded and shaped by social media (Turner, 2015). The critical messages these types of environments should portray is that of social activity, productive space, and mobile in nature in order to reach this new generation of college students. These holistic environments should be adaptable in various ways to fit students' academic needs (Spanier, 2010).

Understanding the intricacies of space and the effects it has on student learning has not been extensively studied. To address this need, there must be a holistic approach to learning environments that are offered outside of the traditional classroom and what they have to offer the student. Such environments offered on campus grounds should include outside learning spaces that inspire a sense of community, that will encourage,

challenge, and support students, by providing opportunities for those individuals to grow (Barkley, 2009). The value of these environments is not only important to the students that utilize those spaces, but to the university itself (Boys, 2010; Temple, 2008). In higher education institutions, space management plans need to be implemented, with the focus on outside learning environments, to increase retention efforts of the current student populace (Fink, 2004; Quagliaroli, 2017). Higher education institutions are designed to be places of learning; therefore, it is important to examine the current options and explore future opportunities, not to create the ideal environment, but to achieve the optimum environment that is needed. This can be done by studying and understanding students' behavior in outside academic learning spaces found on campus grounds (Moos, 1986; Walker et al., 2011).

Purpose of Study

The purpose of this phenomenological, qualitative study is to understand live on students' perceptions of study spaces located on campus grounds at a public, 4-year, rural Midwestern institution. In addition to analyzing student experience, this study will allow for the exploration of the wants of students in outside learning environments that are needed for academic productivity, camaraderie, and environmental adaptability found on campus. The researcher is interested in understanding the social and physical structure dynamics offered at midsized universities that affect the time and energy of a resident's choice in outside learning environments offered on campus. Second year, live on students' perceptions of campus academic spaces will be used to conceptualize what is needed for students to be successful.

Research Questions

Students' voices have the power to influence change on their campus (Healey, 2014). To encapsulate these student voices, the following research questions were formulated. This foundation will aid in the holistic understanding of students' wants, needed for their collegiate success.

RQ1: Pre-COVID-19, where do live on residents spend their study hours on campus?

RQ2: Why do second year, live on students choose to study in outside learning environments?

RQ3: Post COVID-19, how has socially distanced space changed and what perceived influences has altered in those spaces if any? Have these changes impacted your study habits?

Propositions

The following propositions are based on literature of space and the influence it has on behaviors of students who utilize outside academic learning spaces on campus. These will guide the development of interview questions:

1. Some students do not utilize on campus, outside learning spaces.

2. Students who use outside learning spaces prefer to go to areas that can be social (lobbies, coffee shops, etc).

3. Students prefer areas that are adaptable, have access to technology, and are suitable for both individual and group activities.

4. Students prefer outside learning spaces that are comfortable, inviting, and allow for adaptability.

5. Students prefer spaces that provide safety and privacy due to COVID-19.

Significance of the Study

As universities compete for a shrinking pool of students, it has increased the value of the students' voices on campus (Healey, 2014). As institutions make decisions about upgrades to aging infrastructure, this study seeks to offer insight into the dynamic environments responding to students' ever-evolving needs (James, 2002). Additionally, this information is valuable to universities as it pertains to the use of facilities and the appeal they bring to campus (Tookaloo & Smith, 2015). Although research is limited, there is evidence that well-designed spaces contribute to higher retention rates, greater opportunities for group activities, and greater availability of social learning spaces for all students (Strange & Banning, 2015; Temple, 2008).

Furthermore, the proposed study will provide insight into the social behaviors that are influenced by structural and intentional environments universities provide (Guthrie, 2010). This information may contribute to some understanding of what the future holds in designing spaces beneficial to restoring, retaining, and redirecting students' study habits and safety features needed during a pandemic (Akyıldız, 2020; Stein & Wanstreet, 2006). Strange and Banning (2015) believe there are visible and invisible paths made by students every day. These hidden paths are seen in the grass where students walk and noticed in spaces that are never used. These behavioral clues, especially those heightened from the pandemic, are important to study and understand in order to create a safe, informal, and holistic learning spaces for students to utilize at their higher education institution (Tor, 2015).

Limitations of the Study

Three limitations have been identified that could impact the validity of this study. They are sample profile, timing, and a historical threat. The first limitation relates to the sample profile of participants because of the requirement to live on campus. This prerequisite may provide skewed data regarding the locations in which students choose to study because off-campus students may choose different locations than on campus students. Another limitation is timing of the research will be conducted in the fall semester. During this time, residents may not be familiar with outside learning environments offered around campus or may not feel the need to utilize those spaces yet. To minimize the potential timing limitation, this study will take place at the end of fall semester to allow time for students to find locations offered around campus and for classes to be well into session.

The final limitation that may affect this study is the historical threat posed by COVID-19, a pandemic that took place at the start of 2020. This form of validity threat has changed the environment of the participants and thus can affect the conditions of the outcome to the study (Internal validity: Laerd Dissertation, n.d.). Although identified in 2019, COVID-19 did not impact the United States until March of 2020, where it disrupted millions of lives in terms of health, financial security, transportation, and means to resources (Zahneis, 2020). At most higher education institutions, including the site of this study, administrations urged all students and residents to leave campus in response to the stay-at-home mandate (D. Glassman, personal communication, March 20, 2020). The students could return to campus for the fall semester of 2020, but the learning and living environments were both very different. This historical threat may affect the outcome of

this study due to the availability of access to students and the uncertainty of how individual lives have changed due to this pandemic.

Definitions of Terms

COVID-19: Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. There are many types of human coronaviruses, including some that commonly cause mild upper-respiratory tract illnesses (CDC.GOV, 2020).

Designed Spaces: Intentional locations designed by higher education institutions for the utilization of activity, learning, and socialization found on campus grounds for students, faculty, and staff (Tookaloo & Smith, 2015).

Holistic Learning Environment: "One that nurtures all aspects of students' learning. The environment is safe, supportive, and provides opportunities to help students deal with nonacademic as well as academic factors that impact their learning" (Modell, et al., 2009, p.1)

(Outside) Learning/Academic Environments: A range of locations that a student can learn. Definitively refers to locations that are not traditional classroom settings (Partnership, 2013). This term is also interchangeable with informal learnings spaces as well as study spaces.

Pandemic: (of a disease) prevalent over a whole country or the world (Merriam Webster, n.d.)

Self-directed Learning: Includes the process of andragogy theory that allows for adult student learners to take initiative of their active learning. This includes the

capability of understanding their own learning needs, creating goals, finding resources, and reaching learning outcomes. (Knowles, 1975).

Social Distance: Social distancing, also called "physical distancing," means keeping a safe space between yourself and other people who are not from your household. To practice social or physical distancing, stay at least 6 feet (about 2 arms' length) from other people who are not from your household in both indoor and outdoor spaces (CDC.GOV, 2020).

Space Management: The maintenance, upkeep, and budgeting of all campus grounds. This includes, but is not limited to classrooms, grounds, residential facilities, and outside learning environments (Whitchurch, 2012).

Chapter II

Review of the Literature

The purpose of this literature review is to identify the factors that influence students' success in outside learning spaces and their ability for self-directed learning. Knowles (1975) defines self-directed learning as the "process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 18). Specifically, this literature review will help the researcher understand why students have preferences to spaces outside of the classroom for their academic studies.

The following literature will describe how the environment influences a student's ability to be successful and enhances their experience at a university. Thus, it is important to investigate the various factors of space management which can inhibit or support students' ability for self-directed learning. The following review of literature includes the historical philosophies for studying, the evolution in the landscape of teaching, along with the influence of space management and its perceptional value. These ideas will be detailed in the theoretical framework that will guide the study's methodology.

Evolution of Learning

As our world rapidly advances with the constant influx of new technologies, it is important to know how academic philosophies and practices have evolved over the years. Knowledge is obtained in various forms and can be offered in a variety of locations at

higher education institutions (Shay, 2013). The following will discuss the evolution of learning both inside and outside of the classroom in university settings.

History of Study Practices

In the 1960s, Puritan attitude influenced academic professionals to advise their students to be as uncomfortable as possible during their studies (Sommer, 1969). Sommer (1969) described how professors encouraged their students to be in chairs without cushions and to avoid being able to relax in locations such as couches and beds. Despite this advice Sommer (1969) pointed out there is no difference in the grade point averages between students who studied at a desk or comfortable locations such as their beds. Although these ideologies varied, it was ultimately the students' decision to determine which space was most productive and best suited their needs for their academic studies.

Today, campus environments should facilitate self-directed using the andragogy theory for adult learners by incorporating some key concepts. Those include fostering a safe space for decision making, encouraging learning, providing support, in addition to connecting students to resources (Henschke, 2016). Wolfe (2009) stated, universities have expected the student to assume responsibility for their independent learning, they do so by advising that for every credit hour spent inside a classroom, a student should spend double, if not triple, the amount of time on their own outside of class to study (Surviving College, n.d.).

Arguably, the use of technology has become the biggest resource assisting students with studying. It also has increased the ability for these students to be self-directed learners (Bates & Sangra, 2011; Fischer & Scharff, 1998). Therefore, it is critical for professors to provide resources such as online PowerPoints from class discussions to

assist in students' studying habits. This resource helps not only with synthesizing information but allows for a clearer understanding of the material provided (Mbah, 2010; Wolfe, 2009). Ultimately, self-directed learning is something the adult student must determine for themselves. However, students should be challenged and supported in their outside learning endeavors by their professors and academic advisors (Sanford, 2017).

Landscape of Teaching

In the early 1950s, furniture in classrooms was organized into straight rows and followed the rule of two-thirds. This rule indicated that the instructor held the conversation for two-thirds of the time and accessed one-third of the physical space in the classroom (Sommer, 1969). With the limited freedom due to assigned seating which resulted in limited personal space, this design may have inhibited students' learning capabilities. This limitation could have been amplified if the student were to have any form of disability that affected sight or hearing (Sommer, 1969). This design, however dated, is still utilized in many classrooms today (Barret et al., 2015).

Therefore, it is important to understand there are physical factors that actively influence the outcome of students' involvement in classrooms (Dancer & Kamvounias, 2005). Barret, et al. (2015) argued if one looks past the design, there are various components to the environment that directly impacts the senses which can influence students' comfort in the classroom and hence their ability to learn. Many of these directly influence distance receptors such as eyes, ears, and nose as well as the immediate receptors that allow for up-close sensations such as touch (Hall, 1966). Hall (1966) argues that built environments can create a social mode of interaction that can enable or constrain outcomes based on the design, thus impacting educational opportunities. The

classic design of the college classroom composed of fixed features and offer lecture-styled designs, can lead to stagnant learning opportunities that negatively impacts students (Sommer, 1969; Rands & Gansemer-Topf, 2017). These teacher-centered designs only allow for limited interactions among fellow students may limit meaningful conversations which may directly impact their psychosocial development (Astin, 1996; Modell, et al., 2009; Ozuah, 2016).

However, it is not fair to judge professors or expect them to have all the answers when creating productive learning environments, but it is reasonable to expect the faculty member to offer support and encouragement by developing strategies to help create a community in these environments (Modell, et al., 2009). Booker (2016) suggests that to create a community and sense of belonging in the classroom, there must be transparency of goals and multiple opportunities for students to work together. These strategies will help empower self-directed learners (Booker, 2016).

Holistic Classroom Designs

As our world changes so does the population of students. With these changes, environments need to be adaptable and versatile to accommodate student needs. In order to create active learning centers there are significant characteristics required to make it a holistic environment that enhances and not inhibits, nor distracts students from learning in the classroom (Rands & Gansemer-Topf, 2017). Additionally, it is the faculty's responsibility to create active learning environments to allow for freedom of expression where the student will feel safe and supported not only in the classroom, but in their lives as well. (Booker, 2016; Modell et al., 2009). Valuing the space and creating an

environment that will support the whole student will allow for self-directed learners to be successful in the classroom and in outside learning spaces.

To create these holistic environments, Barkley (2009) strongly encourages the following: (a) creating a sense of community, (b) challenge and support for the student and (c) ability to teach holistically. Students expect to have creative spaces that offer malleable settings that will provide the supportive features to help instill these holistic environments (Oliveira, 2016). These features include adjustable lighting, mobile seating, available writing spaces, and the integration of technology to help engage self-directed learners (Barret et al., 2015; Ibrahim & Fadzil, 2013; Rands & Gansemer-Topf, 2017; Sommer, 1969). However, it is noted these flexible rooms, although valued by the student, can cause distractions and even disorientation to the staff (Rands & Gansemer-Topf, 2017; Sommer, 1969). Professors often describe these types of rooms as messy or disorganized (Rands & Gansemer-Topf, 2017). Nevertheless, based on the literature of the students' perceptions, there is strong evidence these holistic environments provide higher positive results in their learning outcomes which outweighs the negative reactions faculty may have (Rands & Gansemer-Topf, 2017).

In the book *Personal Space: The Behavioral Basics by Design*, Robert Sommer (1969) studied the design of universities, the perceived experience of students, and their academic success. What he observed at some universities was a minimalistic view of the student which defined housing as a place to provide students peace, rest, security, storage, and even companionship (Sommer, 1969). Ibrahim and Fadzil (2013) argues that a campus environment should be accessible and dynamic locations around campus help create a sense of belonging and inspiration. It should provide a safe place that challenges

and supports students in improving their educational outcomes. These environments allow students to not only be productive in their studies, but also promotes group work and social interactions (Barkley, 2009). Han and Cheng (2017) strongly suggested:

> College students have strong ability of independent thinking and have personal experience of public facilities on campus. Schools should arouse students' enthusiasm to design and construct public facilities on campus, take their advice and meet their demands in using public facilities (p. 424).

Higher education institutions can best assist students in their learning environments by assessing the needs of the population—both present and future—and investigate various factors affecting learning capabilities of students such as the design of seating arrangements, types of furniture, and even the temperature (Fitch, 1965). These key concepts help to determine which practices are best in creating supportive learning environments for students to be successful in college.

Environment Matters

Han and Cheng (2017) states when creating spaces in learning environments, it is important for people to feel relaxed, safe, and connected by creating facilities that offer humanistic environments. The literature is consistent and provides strong evidence environments and surroundings have the capability of affecting people's lives, performance, health, and well-being (Barret et al., 2015; Ibrahim & Fadzil, 2013; Rands & Gansemer-Topf, 2017; Sommer, 1969). Some of these key influences, known as semi-fixed features, are desirable as they allow for flexibility between design and function (Hall, 1966). These semi-fixed features are those that effect the senses, such as light, sound, temperature, and the connection to nature. Another is the amount of stimulation

offered in those environments such as complexity and color (Barret et al., 2015). Additionally, Bosch (2003) characterized these factors' need to support educational outcomes, to allow for socialization, to be aesthetically pleasing, and to provide accessible resources. However, it is crucial to remember designed spaces may have different impacts on other cultures. Hall (1966) provides an example of a chair, which Americans perceive as a semi-fixed item. Yet, in a Chinese home, a guest cannot move the chair without expressed permission from the homeowner. Thus, it is critical to be culturally aware that the design of the environment may affect interpersonal distances differently depending on the attitudes of the patrons based on their, culture, gender, age, and even climate (Szasz, 2020).

Today's model provides environments that should reflect student's diverse feelings by creating attachments to these higher education institutions (Ibrahim & Fadzil, 2013). Universities today are being used to gauge the performance of their buildings by applying the Indoor Environmental Quality (IEQ). The IEQ is used to see the impact of facilities and the related effects it has on participants' (students, staff, and faculty) health, satisfaction, and performance (El Asmar, et al., 2014). In addition to those instruments being used, residential buildings are taking other factors into deeper consideration. See Appendix (A). The attachment students have to these facilities are a part of the concept of community building universities use to create a sense of belonging (Barkley, 2016; Modell et al., 2009). Booker (2016) stated, "traditionally, sense of school belonging refers to a student's experience of the full school community, which includes the classroom setting and the interactions that take place therein" (p. 218). The main goal for space management at universities is to benefit students by building communities and

environments that can balance both being economically justified and consistently used (Singh, et al., 2001). However, even when those goals are met in creating well-utilized spaces, there are often instances were universities fail and neglect the maintenance in sustaining the standards of the campus beauty (Han & Cheng, 2017). As the needs of students change, so will design of campuses to support self-directed learning locations inside and outside of the classroom (Ibrahim & Fadzil, 2013).

Socially Distanced Environments

Social distancing, also called "physical distancing," may be a term used in day-to-day activities due to the COVID-19 virus that caused a pandemic in 2020, but its meaning was coined by that of Hall in 1963 (Szasz, 2020). However, today "we are facing compulsory social distancing beyond the amygdala and proxemics. We are ordered by public health authorities to create distances between households, neighborhoods, cities, and even countries" states Szasz (2020). In effort to stop the spread of COVID-19, many universities made the decision to close, this impacted nearly 91% of the world's student population (Billy, 2019). To continue the efforts of limiting the spread of this virus in the United States, the CDC.GOV (2020) issued a statement that individuals should be at a distance of at least 6 feet or longer to allow for a proper and safe space between individuals.

The CDC.GOV (2020) suggests the following guidelines for businesses and universities to create these socially distanced environments. The first is to increase physical space between individuals by modifying the space with physical barriers, using signs, taper markers and other visual cues on the floor to indicate where to stand and to provide a flow of direction for foot traffic. Next, they suggest that it is best limit capacity

in common areas where individuals are likely to gather and interact. Another suggestion is ensuring ventilation in indoor spaces are adequate or provide outside air flow if possible. The CDC also encourages educational posters to encourage hand hygiene to assist in stopping the spread of COVID-19. This should include signs for non-English speakers, as needed. It is strongly suggested to change seating layout or availability, such as blocking off rows or sections in seating areas to provide space that is at least 6 feet apart. Lastly CDC states that is best practice to stagger the use of shared indoor spaces such as game rooms, lounges, and classrooms as much as possible to provide time to clean and disinfect between uses.

Additionally, socially distanced environments provide a wider definition than physical spaces between individuals. It is strongly encouraged all activities should be held in outdoor spaces where social distancing can be maintained as much as possible along with offering online attendance (CDC.GOV, 2020). Murray et al., (2020) claims in educational settings,

> Educators are tasked with finding ways to prepare student teachers to teach either online or in changed classroom settings and also to support them in developing appropriate pedagogical skills. Furthermore, they must adapt their modelling of caring professional relationships to the online space thus demonstrating to student teachers how connections can be maintained despite the change in circumstances (paras. 2.1)

This disturbance of COVID-19 to the ordinary day has changed the perception of normal activities. It has shifted the way individuals interact and it is still unknown what other implications will come from the COVID-19 pandemic (Murray et al., 2020).

Theoretical Framework

This study will be guided by Hall's (1996) proxemics theory. The following section will discuss various key points of literature highlights how space influences behavior.

Hall's Proxemics Theory

In Hall's (1966) proxemics theory of understanding, man's use of space started with the foundation of Franz Boas's work. Hall (1966) used Boas's philosophy that the core of culture is verbal and physical and furthered his work to understand how space influences behavior. Hall (1966) exclusively studied animals and their reactions in environments when space was a variable. In addition to the impact of behavior, Hall (1966) studied the interactions of verbal and non-verbal language interactions of animals based on the influenced alterations of space and the social reaction. Hall (1966) created his theory based on animal's social behavioral changes in altered spaces and projected this theory onto the psychosocial interaction of man.

In one of Hall's (1966) studies, he confined rats in an enclosed space. The result of this impacted all the animals negatively in terms of reproductive behavior, unstable hierarchies, and even sadism amongst the rats. He stated it was noticeable the collapse of social population that lead to large scale die off when the space was overcrowded. However dramatic, concerning humans, his point is true regarding social disruption when places are overcrowded or when individuals feel confined. See Appendix (B) for a diagram of this concept.

Hall (1966) describes intimate space as the form of physical communication that is the closest, such as hugging, where all body parts are connected. For some this is a sign

of care, for others who may be strangers found in this space can cause serious unease and possibly aggression based on their non-verbal communication. Comparatively, personal distance is "thought of as a small protective sphere or bubble than an organism maintains between itself and others" (Hall, 1966, p. 112). The social distance as described in relation to proxemics theory is often communicated by using normal levels of voice, observing others with clarity, and often having interpersonal business at this distance (Hall, 1966). This theory allows us to see how the perception of space, design, and social interactions influence our capabilities to functionally communicate in society. As such, it is relevant to this topic to emphasize how space, whether in physical environment or society, influences our decisions, behaviors, and our ability to succeed in higher education learning environments.

Summary

As the needs of students change, so should surrounding environments; spaces should be adaptable, supportive, and available to assist in their academic endeavors (Olivera, 2016). The proxemics theory allows one to understand how space influences behavior and allows a holistic experience for students to be successful on a college campus (Hall, 1966). Thus, justifying the continued importance of space management needed for universities to maintain growth, comfortability, and utilization in campus facilities (Barkley, 2016; Modell et al., 2009; Booker, 2016). Andragogy theory-based designs for adult learners, should create experimental, experiential, and affirming ways to allow a student to self-motivate and find learning environments that best suit their needs (Knowles, 1980; Lindeman, 1926; Merriam, 2001; Houle 1996). It is the responsibility of higher education institutions to create safe spaces for students to learn and grow.

Chapter III

Methods

This chapter describes the process and protocol that will be utilized by this study. This study is guided by the three primary research questions:

RQ1: Pre-COVID-19, where do live on residents spend their study hours on campus?

RQ2: Why do second year, live on students choose to study in outside learning environments?

RQ3: Post COVID-19, how has socially distanced space changed and what perceived influences has altered, if any, study habits?

This chapter will discuss the design of the study, sample of participants, description of the research site, instruments utilized, data collection, protection of participants, and analysis of data. Qualitative research methods are designed to study various aspects of the lived human experience via a multitude of data collection strategies, primarily focusing on interviews (Jacob & Furgerson, 2012). The purpose of the study is to gather on-site residents' testimonies of their use of outside academic spaces, the perceptions of these spaces, and the benefits students perceive in these spaces offer. This study will be used to promote an understanding of the decision-making processes students utilize when determining which spaces to use during a pandemic caused by COVID-19.

Design of Study

A phenomenological approach will be conducted for this study to allow for a holistic view of the residents' experience in outside learning spaces offered on campus. A phenomenological approach for data collection and analysis will allow the researcher to hear directly from the participant about their experience utilizing outside academic

spaces, gaining in-depth information that quantitative methods could not offer (Bryman, 1984). According to Creswell and Poth (2016), "A phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon" (p. 75). In this study, the researcher will interview undergraduate residents by listening to their experiences in order to learn why they utilize certain outside academic spaces on campus. By creating and following an interview protocol, the researcher will provide a guide to gain informed consent, a script, and prompt additional probing questions allowing for the researcher to focus on the ethnographic and oral history of the participant (Jacob & Furgerson, 2012).

This information will help the researcher understand how the resident lives and will allow for a better understanding of the lived encounters of participants and their experiences using supportive academic environments. This approach is chosen to help recognize each resident's voice as unique and valid.

Sample

The researcher will use undergraduate students who are second year live on residents as the sample for this study. The study will include at least six participants. The participants must meet the requirements of being at least 18, living on campus for a minimum of one full year, as well as being a full-time undergraduate student. The method utilized to collect the participants is one of convenience sampling. The researcher will utilize their resources and contacts with students to create a snowball effect to gain a wide array of students. The goal of the researcher is to have a diverse group of residents by the beginning of October 2020 with various demographics such as, age, race, background, and educational pursuit.

Research Site

This study will be conducted at a rural, midsized institution located in the

Midwest. The researcher is somewhat familiar with settings like this. The researcher grew

up in a rural community, however, completed their undergraduate degree on the West

Coast at a larger institution compared to where the study is being held. In the fall of 2020,

the institution has approximately 7,400 undergraduate students enrolled with 2,004

residents living on campus. Of this on campus population, approximately 37.7% are male

and 62.3% are female. Additionally, 48.6% of these students living on campus are

residents of color.

The research site offers housing with various living communities and

arrangements. At this institution, there is a one year live on requirement for all freshmen

and transfer students, as well as a two year live on requirement for student athletes.

However, if a student is married, a military veteran, at least 21 years old, or a commuter

student living within 50 miles of campus, this live on requirement does not apply. This

institution offers traditional residential buildings, Greek community chapters, and on

campus apartments.

Traditional residential halls provide community bathrooms, community spaces

(basement, hall lounges, and front desk lobby), and Residential Advisors. These typically

cater to athletes, freshmen, and transfer students, as well as those who choose to continue

to live on campus. The ages of this population ranges between 18 to 28 years.

The Greek community chapter houses provide Senior Staff Assistants and

community spaces such as kitchens, living rooms (also known as chapter rooms), and a

shared study room between two chapters. The Greek Community Chapter houses require

all residents to be members of Greek organizations and at least a sophomore. The age range of these students is between 19 to 25 years.

The university-owned apartments offer a much more independent form of living. There are no shared common areas in this environment besides laundry rooms shared by all the building's residents, the central office for mail and package pickups, and a community pool available for any resident to use. Residents who wish to live in these apartments must have at least a sophomore status. The age ranges from 19 to 30 years.

Instruments

Semi-structured interviews

A protocol (see Appendix D) was created to guide an interview with participants in a one-on-one setting. A semi-structured method will allow for the researcher to create a unique and explorative space to provide probing questions for thorough answers or to unexplored topics with the participant (McIntosh & Morse, 2015). The protocol of this interview will be divided in three stages: demographics, participants' experience with campus-provided academic spaces, continued probing and guiding questions to understand the space, and then their experiences in socially distanced spaces due to COVID-19.

Demographic Questions

At the beginning of the interview, the researcher will ask participants several demographic questions including age, gender, race, marital status, employment status, number of children, high school diploma, location of hometown, and enrollment. Knowing the demographics of the participants could increase the transferability and generalization of data collected (Trochim, 2020).

Participant Outside Experience

The interview will then include open-ended questions designed to acquire deeper knowledge into the participants experience with outside academic learning spaces found on campus. Examples of these open-ended questions will include: (1) Where on campus do you find yourself most academically productive? (2) What are key impacts do you feel influences your experience in these locations?

Researcher

It is important to acknowledge that as a human instrument, the researcher will bring their unique characteristics into the study, which have potential to influence the collection of data and its analyzation process (Pezalla, et al., 2012). Turato (2005) stated that "researchers use their sensory organs to grasp the study objects, mirroring them in their consciousness, where they then are converted into phenomenological representations to be interpreted" (p. 510). Thus, it is crucial for qualitative researchers to analyze data holistically by including the participants' behaviors and presentation of self in addition to their responses to questions. Additionally, the researcher must be able to create a warm and inviting location where participants can feel comfortable and safe (Pezalla, et al., 2012). As a qualitative researcher, it is important to understand that individual's "reality' is not a fixed certainty and experiences, interactions, and backgrounds give people a unique view of the world" (Tenny, 2020). Therefore, as the primary instrument, I recognize that my participation will include my biases.

According to Merriam-Webster (n.d.), bias is defined as "an inclination of temperament or outlook." In qualitative research, it is understood that bias will influence the collection and interpretation of data (Pezalla, et al., 2012). The background

of my interest to this topic comes from my experience working in a restorative

community space at my undergraduate institution. This restorative space allowed for

community building, a place of friendship, a location for creativity, and offered

adaptability to be used for various events. Due to this experience, I am curious to see if

students are seeking to find or create restorative locations over academic spaces in the

face of a pandemic.

However, to minimalize my bias, I will not mention nor describe this location to

my participants. This will allow for objectivity and neutrality in creating reliable and

valid data (Krefting, 1991). In addition, I will video record each interview to allow

audible and visual reflection to help interpret the participants' reactions during the

interview. To further analyze the data, I will also utilize my thesis advisor to compare

data collected to come to common consensus.

Data Collection

Each interview will be at the participant's choice of location on or around campus

that will allow for some privacy and noise control. It will take place in the fall of 2020

after mid-terms are completed. This timeframe ensures residents have ample time to

establish themselves on campus and find their best fit in location for academic studies

and social circles. The times of these interviews will be scheduled at the convenience of

the participant. To ensure a sense of transparency for both the interviewer and

interviewee, at the onset of the interview the participant will be given all informed

consent materials, be notified the interview is being video recorded, and will be provided

an opportunity to ask the researcher any initial questions they may have. After the

participant consents, the first three phases of interview questions will take approximately

30 minutes to complete. When the interview ends, the researcher will store the information gathered on a password-protected, personal laptop to ensure the confidentiality of all participants.

Data Analysis

Upon completion of the interview the researcher will reflect and take note of the overall conversation, behavior, and impression of the time spent with the interviewee. This is done to prevent hindsight from tainting data (Beltrani, 2018). In addition, the researcher will transcribe all verbal interaction and send a copy of the transcription to the participant for evaluation in order to improve the trustworthiness of the data collected (Shenton, 2004.) The transcribed data will then be thematically analyzed using coding to help identify any patterns that arise in the data set (Braun & Clarke, 2014). The interpretation of the data collected will describe the residents' use of current outside academic spaces and provide insight into the residents' perceptions of these locations in a post-COVID-19 environment.

Treatment of Data

Data collection is to be stored and secured in accordance with Institutional Review Board (IRB) standards of the institution the study is taking place. The data will be located on the researcher's password-protected personal computer in a secured room. The data will be shared with the researcher's thesis committee consisting of the research's thesis advisor and two additional thesis committee members. Data (including video recordings, transcriptions, and coding sheets) will all be in a separate folder away from any other projects to eliminate contamination and confusion. In addition to protect the participants' identity, all names have been substituted with pseudonyms to protect the

participants' identities and maintain confidentiality. Per IRB standards, the data will be safely stored up to three years and then destroyed.

Summary

This qualitative study will be used to gain further insight on how residents perceive and use outside academic learning spaces and to find what factors influences the resident choice and utilization. A phenomenological approach will allow the researcher to collect data from six second year live on undergraduate participants. Upon completion of interviews, the data will be transcribed, coded and analyzed. Chapter IV will contain detailed description of the analyses conducted and what findings will be obtained.

Chapter IV

Results

The purpose of this study is to gather information through conducted interviews to interpret perceived influences in outside academic spaces and gage live on students' reactions to the mitigation's efforts during a pandemic. After conducting interviews of six participants, the researcher identified five major themes: why participants chose to continue to live on campus during a pandemic, reflect on their high school transition in developing their study habits, the various locations they study on campus, identify the Key Influencing Factors within those spaces, and how COVID-19 has altered their academic experiences.

Holly

The first participant, Holly, is a 20-year-old, who identified as an African American/black female. She has lived on campus for three years and pursued a psychology degree with a minor in human services and community leadership. Holly was highly involved on campus as a student athlete on the cross-country team and was a resident assistant. Holly claimed she studied almost every day ranging from five to six hours. She described herself as an over achiever and strived to be on the dean's list every semester.

Continuing to Live On (in a pandemic)

Holly was the only participant who was required to continue to live in the residence halls, as she was a second-year resident assistant. However, the centralized of location Stevenson Hall, where it was close to sports, dining centers, and the library did influence her decision to work and live there.

My freshman and sophomore year I would go to Stevenson Hall more because of the location because I knew that that was like, where everything was kinda closer to work. So, I wouldn't have to keep walking back and forth and would get more time to do the work. Um, so that's why I really wanted to be in Stevenson for my junior year, actually.

Development of Study Habits

When reflecting on her experience, Holly said she, had a "very hard first semester...quickly realized it was the easiest." She claimed it was an adjustment for her coming to college because she really had to learn how to study, as she did not have much need for it in high school.

So, my first year was my gen-eds and it seemed a lot. My first semester was a lot easier than the rest of the semesters. Um, I kinda, I had the, uh, EIU 11 class, where I barely had that much homework and it was more of me just working around learning how to study, because I didn't study that much in high school. And then it kind of started kicking in and with the course load as the years went on, um, I thought sophomore year was the hardest, but junior year it seems like it's just getting harder and harder, but I am getting through it and, um, just trying to maintain that A average.

When discussing the development of her study habits, she reflected on her experiences and wished she had a mentor during her first two years of college. Seeing the need for mentors and role models was a motivation for her to become a resident assistant to support other student in college.

There needs to be more mentors that are from college that can help so many high

schools to get prepared because to me, high school and college are totally

different. It's like, it's three classes less maybe, but still the same workload, like

just two totally different experiences. And I just want to help so many high

schoolers that are going to college and prepare them better than I was.

Locations of Outside Academic Spaces

Holly shared that her choice of outside academic spaces was heavily influenced

by the location in which she lived. Holly, along with other participants, refer to several

spaces on campus known as "bubble rooms." These locations are often defined and

described as conference sized rooms, provide a sense of privacy, often having one to two

large tables with multiple chairs, a white board, and are often surrounded by windows. As

a freshman, she lived in the south part of campus, in Andrews Hall, where she enjoyed

the convenience of the bubble room located in the lobby. She also mentioned how she

frequented other residence halls because they too were close to her academic buildings.

So, when I was taking my gen Eds, I had, you know, like English. So, it was a

little easier to go to Coleman. And when I did have a Coleman class, because it

was near Taylor Hall, so I was studying in Taylor then, but now like everything is

in those two places. And I feel like it's closer to do that either in the library or in

Steve-O.

Holly shared that those first two years she would primarily study in the Stevenson Hall

lobby. She found this location not only convenient geographically on campus, but it also

offered other amenities.

Um, I think I like the lobby because, uh, I can get to the bathroom quicker. Um, the water is there. If I want to get food faster, then I can go straight downstairs. Um, and then like just seeing people come and go and some people can come and join while you're down there. So, it's like, oh, "come join, come study" type situation all the time.

Now living in Stevenson Hall, she has discovered new spaces to study within the residence hall. Holly said on the 10th floor there is a kitchenette, study cubbies, and a conference room, which is now the location where Holly finds herself most productive.

Key Influencing Factors. As stated, Holly has utilized many spaces on campus, primarily in various residence halls. Holly articulated many factors that have influenced her behavior to stay motivated during the hours in which she studies. As a freshman and sophomore when living in Andrews Hall, she frequented the bubble room and found that the 10th floor of Stevenson Hall offered similar features.

It just seems like the perfect spot to do anything…there is also a kitchenette, so, so if you need to take a break and just go grab a snack and do something with the snack, um, you can do that and the same on the same floor. Um, and it has nice scenery. If you look out the windows on the 10th floor, cause then you see the field…we literally will stop doing our work and just watch people play sports.

However, for Holly, this location is not perfect.

Uh, a negative is actually, um, for me personally, I need a lot of water because I am an athlete. So, the bathroom is always an issue and there is not one the 10th floor. So, I actually have to go all the way downstairs to either get some water or

go to the bathroom which just sometimes… sucks, like a lot. Yeah, it's annoying using the elevator over and over again.

An interesting observation about Holly, despite her vigorous study habits and deserved claims of being a high achieving student, she contradicted a common theme that will be seen in other participants by saying that the library is not a productive space.

The library is a little too quiet and I can zone out, but if I'm there with someone else, then …there's like a little study break. I can talk a little bit so that I can relax my mind. But if I'm by myself, sometimes it's kind of difficult because [the library] is like super-schooley I would say, and it makes me lose focus. Like, "Oh, I'm really at school."

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

Due to COVID-19 Holly had a negative experience because of the mitigations in place. She said that many locations had closed and the hours of operations have changed, which deeply affected her eating habits and impacted her ability to stay productive.

I will often miss out on a whole meal because the dining halls close so early…but let's say I'm at the library and I don't want to run to a dining hall. I go to the union and the union is closed. So, I think that food is so important for studying just in general...that was a big factor.

Holly also shared because of the COVID-19 virus, she worried about strangers coming close to her.

I feel like it's always in my mind…if it is someone I don't know, or if it's someone that is just coming up to me, like in my mind, I'm thinking about COVID. And I'm thinking about what if this person who is like coming up too close and they have

it…it's not always just a little short talk. It's like, they might be staying there for a minute. So, I'm like, Oh, you know, when is the conversation going to end? Because I don't know what you have right now. I shouldn't feel that way, but I do. Yeah. That's a little uncomfortable sometimes.

Because of the pandemic this has caused her to stay in one location, the 10th floor of Stevenson.

Yes, because I don't like being around a bunch of people during COVID…And knowing that we have to wear a mask and all that stuff when we're studying and stuff. So, it's like, you know, just personal space and all of that going around…I feel like that's another reason why I'm on 10th floor because it's like, even though I'm still wearing my mask, it's like still away from the outside world in a way.

Holly expressed many factors that she found valuable when it comes to her experience in outside academic spaces and the amenities offered. For her it was convenience and access to basic needs such as water, restrooms, and food. Going further than this, she advocated for more mentor programs to ease the transition of students going from high school to college.

Faith

The second participant, Faith, a 19-year-old, identified as a white female. She has lived on campus for two years and has recently decided to pursue a marketing degree. Faith is a student athlete for the golf team, is an active member at her church, and currently lives in the university-owned apartments. Faith stated that she studied three to four days a week which can range from three to four hours in those sessions. Faith said she put a lot of stress on herself to maintain her 4.0 GPA.

Continuing to Live on (in a pandemic)

Faith said simply and shortly her reasons she continued to live on campus was due to her scholarship that cover the cost of rent.

Well, I'm in UCourt. I don't really interact with anybody outside of my roommates that much. Um, there's not much to say there. Um, our building person seems nice, but I haven't really seen anybody else just kind of passing through with a mask. Nobody really talks that much.

Whereas, her previous year, living in a traditional residence hall was very different.

Last year. Um, it, it was really good. Um, basically the whole floor knew each other. A lot of the girls ended up living together in houses. So, like a bunch, like five, got a house here, another four got a house there, and whatever. So, we kind of like hang out still. So, it was definitely nice to meet people living on campus.

Development of Study Habits

Faith, called her transition as an "adjustment" but because she was a 4.0 student in high school, she shared her adjustment to college was overall, easy.

Um, it was definitely an adjustment. I had heard like," Oh, college is hard. You won't keep your 4.0, through that." …I feel like I put a lot of pressure on myself to like keep up [the 4.0 GPA] and try to, you know, get used to the new environment. I feel like it was overall less stressful than the high school, but it was just the environment. Not knowing people and having to like make friends in every class that was kind of like, oh my gosh, this is way different.

Locations of Outside Academic Spaces

Faith shared during her freshman year she enjoyed the social aspects of living in the residence halls and studying in the lobbies.

Sometimes in the lobby, it was like people coming in and yelling or talking to the desk and things like that. So, I feel like it was a quiet, but a public place. That I could kinda like focus and get to be productive, but at the same time, like I could have friends there and we could all kind of study together and not get too distracted by what was going on and such.

Faith also mentioned that she did a lot of group projects in the Stevenson Hall bubble room and liked the private rooms in the library.

It has a white board and like it's a closed, like we could just shut the door and it's like, you can have a group of people in there and be focused. You don't have to worry about them loud or anything and can kind of go through like lecture and stuff and get the big picture.

Faith was the first and only participant who mentioned studying in an outside academic space off campus. She said she frequented the library at her church, where she found comfort in being part of a faith-based community.

It is a personal kind of thing. It's like, um, just having like a faith community there. So, like I walk in and they are always like, "Hey, like what are you studying for? What do you got to do on this test?" You know, like, "Oh, you're going to do great" … We're like a tight knit like group. So, it's always good to, like, I don't know, just be familiar and be recognized... like, "Hey, like praying for you." Like,

you know, "you're going to do great on this test", kind of thing. Then it is kinda like, okay, you know, I'm motivated now.

Key Influencing Factors. In these various locations mentioned, each offers its own unique amenities. For Faith, the availability of a white board in Stevenson Halls bubble room was important to her. "It was a huge thing to be able to use it, especially taking classes like chemistry. It's like being able to write out equations and draw the diagrams and everything." Another observation regarding this space was the ability to work as a group or independently in bubble room. She appreciated the ability to use the various tables.

> It was just like a big room with different tables, so we could kind of split up, do what we want. Like we could split off into groups and be like, "Oh, you're working on the homework. I'm working on the lab report." And we could kind of split and go back and forth. We didn't have to worry about us being loud in a way really. It wasn't fully soundproof, but it was pretty contained.

The most unique thing Faith expressed was the atheistic of a stained-glass art piece at her church's library.

> They have like this stained glass of like saints and angels and stuff like that down there. And it's just kind of gives me …a good feeling when I'm down there. Cause it's like something that I care about and it's like, I don't know. I just feel like even though it's a library, I feel like I'm still some where more Holy in a place where you can pray kind of thing.

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

Due to COVID-19 alterations, Faith felt with the little interactions she had on campus, it became increasingly more difficult to connect with others on campus and it left her feeling isolated. She said, "everybody's kind of in their own bubble… it's harder to like to reach out and be like, Hey, could you help me with this? Cause you don't know like, are they comfortable me walking up [to them]." Faith reflected on the changes made in the last two years and felt that because of the mitigations there was a decreased sense of community on campus.

I always think of like the freshmen this year, if it would have been my freshman year, I wouldn't have been able to do it. Like the, there were so many events like first week events… where you were like pushed to get to know people and also like the sense of community in the residence halls.

Faith said she did her part in trying to reduce her risks of contracting and spreading the COVID-19 virus. She did this by changing her patterns and plans to access resources, such as free printing.

I try to plan out my trips to the library less. So, like, if I've got to print something, I'll wait till like the end of the week and print it all, you know, or print in large masses. So, I kind of limit my going out exposure kind of thing.

In Faith's interview, she shared her concern for the freshmen and their first year experiences starting college during a pandemic. She also offered a unique perspective in this study by sharing an outside academic space that was not on campus grounds. She shared how important being a part of a community that supported her spiritually had motivated her to be successful in her academics.

Kala

The third participant, Kala, is a 20-year-old, who identified as a black/African American and Latin X female. She had lived on campus for a year and a half and is pursuing a business management degree with two minors in entrepreneurship and Spanish. Kala shared that her freshmen year she was an active member in two different clubs, but for her sophomore year she is chose to work in dining and focus on her academics. Kala stated she studied best during the late hours and followed her self-proclaimed motto is to "not come [back] to my room unless I was done with all my homework." She described herself as an above average student.

Continuing to Live On (in a pandemic)

For Kala, the decision was easy for her to continue to live on campus, especially when her scholarship paid for it. However, she did consider other options.

Honestly, I knew that there are apartments available. Like UCourt how it's included in our tuition and it costs less. What I was thinking about is I don't have a car, so it will be inconvenient for me to live in an apartment and not have a meal plan yet have to go to Walmart. And that's a lot. So, um on top of that. Um, it's very close to where I work. Um, I can literally be in my room until five minutes before I need to clock in…So, plus I love the view. I live on a fifth level, same as my freshman last year, I love the view.

Another thing she appreciated about Andrews Hall was how accessible it was. Andrews Hall was physically connected to where she worked, received meals and also provided a variety of study locations.

I like Andrews Hall, there's a lot of places to study, so I'm absolutely everywhere. In my room um, last year we had a lounge area on the floor… I was in the basement all the time. I was in the lobby and the bubble rooms … So, I liked the advantages of different areas to study in my dorm.

Development of Study Habits

Kala was the only participant who was involved in a college preparatory course in high school.

Like I went to a college prep and I was there from 7:00 AM to 7:00 PM. God, those years of prison. And it was fun though, sort of anyway, um, I noticed it was, it was cold in every single classroom and we could not eat. And we had like one lunch period and it was just like, we couldn't wear any sweaters...we had uniforms and if the jacket or the cardigan, wasn't a part of the uniform, you couldn't wear it.

Once Kala started attending college, she went "all in" to gain the full college experience. She shared that she participated in hall council, a professional organization, and tried to attend as many events as possible. However, she noticed that these extracurricular activities took too much time from her studies.

Last semester I was so involved I had something to do every day of the week… including weekends, but, um I just noticed I was getting a lot of time dedicated to my extracurriculars and not as much time I would like to have towards my academics.

She even had made the decision to remove herself from consideration as President of her organization. She said, "I was planning on being the president of that um, program. But

then I was like, do we need to focus a little bit more my sophomore year?" Although Kala came more prepared than most to college, she still had faced adversity during her freshman year.

> My first year, academic wise, um, I was on top of my game. It was honestly. I can tell how my study patterns have changed since then, because before, um, I was done with all my homework by 5:00 PM and I was ahead. So it was, that was just great my first semester. And then, uh, my second semester, things hit differently because you know, our books are included in on our tuition, but I had to pay for an online book, and I was not financially prepared for that. So, they put me back a whole two months until I can get the money for it, because I need them. I needed more for one class that pushed me back. So, I had to work twice as hard, um, studying wise… and then the whole pandemic thing.

Kala noticed her all work and no play attitude had a negative effect with some relationships with her friends.

> I kind of am social butterfly. You can't really flutter as much as you used to because of the fact that you're studying all the time. So, the downside of studying is that you're creating a distance between you and your group, your friends.

Locations of Outside Academic Spaces

Kala was observed to be the most adventurous participant in this study. She mentioned using over eight locations around campus to study. She said, "As much as I liked the library, and kind of live there. You get tired of it. You know, sometimes you wanna change things up a bit." Kala elaborated on her all but "living" at the library.

The library, like I said, I used to live there, so it was like, um, one thing I wouldn't have done in the library was take shower. Like I was sleeping there, I eat in there and whatever. ... [I slept] on the floor. That sounds very horrible, but you know, probably like a little quick power nap will do, just to give me a ride back to focus, because I believe in like, people have to actually, when people are done eating usually tend to fall asleep.

When asked to compare all the spaces she used while studying and choose one that was the most productive for Kala, she said she preferred staying home.

The lobby of Andrews. Yeah. Uh, I guess it kind of mocks the library a little bit. I will say this to upgrade because it's swirly chairs… that rolls around, like the one you are in now…There's one wall that does not have a window and it has a wall with the whiteboard, and the other one is just completely like you see everything that walks by… And the bubble room was like, you can see like how time's going, see where it's going. And it's like, you see everyone, what they're doing and then the windows aren't necessarily soundproof. So, you kind of to hear everyone that's coming down the stairs on that side, you see people like, if it's raining and storming looks very cold, you can hear people running from Andrews into Lawson. And it's like, this would be great if it was recess for me.

Key Influencing Factors. Kala was a very vocal participant who offered a lot of insight into her experiences studying at various locations across campus. When it came to the library, she had a lot to share. She said, "They do have snacks still. Like, I kinda like depended on that because I would not eat anything in the morning. And I don't feel like breaking my focus, going into a dining hall to get food." Kala said at the library, in the

private rooms, there was a lot of technological resources were great for collaborative group projects.

> As a study group we can go to the library and it was convenient because there was a whiteboard. There was an outlet for everyone to use. If we had a presentation, we could view it on a screen instead of looking at everyone, looking over each other's shoulder for, um, the screen...like the conference room does have a whiteboard…the library is in center of campus. So, it didn't matter if you live in LSD, or if you lived in, uh, Pemberton and living in South quad the library is a great spot to meet. Whereas in, if you have a project and you live in Pemberton and I live in Andrews, I'm not walking Pemberton. So, uh, it's just, uh, it was very convenient at the time,

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

Like many students, struggling to adapt with online learning during a pandemic, Kala was no exception.

> Then the whole pandemic thing. Straight to online… I wouldn't say that hindered my studies, but I would say that basically it was just getting a jump before the deadline and that's not necessarily engaging in the class material or really grasping the concept… as for this semester, I would say it's like one of the most difficult semesters for me because all my classes are hybrid. So, it's online and in person, and like my professors have been throwing two chapters at me per week per class.

Kala also experienced a lot of changes in her study locations and expressed her frustrations with the mitigations in place. These efforts included socially distanced

environments, where furniture was removed, outside academic spaces being repurposed into classrooms, or all together closed to the public.

> Twenty-four-hour lounge. Now that's a classroom. Can't do that. Say the basement of a seventh street underground. Can't do that anymore. I also use to study in the upstairs area at the union. Can't do that anymore...mainly I do study in my dorm hall. Now seeing how everywhere else is pretty much closed...I mean, the library used to be another meeting place, like another hangout spot for me. And now I can't necessarily do that.

Kala was the only participant who felt she had an advantage entering college through her prep program she had in high school. She also offered great insight to eight different locations on campus and provided detailed examples of productive and distracting environments.

Anthony

The fourth participant, Anthony, is a 21-year-old, who identified as an African American or black male. He had lived on campus for three years and is pursuing an accounting degree with a minor in finance. Anthony was involved in his residence community, where he held an executive position in hall council and worked as a desk assistant. Anthony stated that he studied any time he was free, often during work, ranging from one to four hours. He described himself as a "books first kind of person."

Continuing to Live On (in a pandemic)

For Anthony, Lawson Hall is home. As a junior, he had lived there for three years and described it as a welcoming place for a lot of students.

It's a chill community, in my opinion, it's very diverse. So, you see like the

different people with different, uh, ethnicities and different genders and stuff like

that…It's a lot of, uh, underclassmen too, so like freshmen, but it's pretty all right.

Development of Study Habits

Anthony shared when he first came to college, he thought it was going to be

difficult for him to balance academics and other school activities, but to his surprise he

said it was not as demanding as he anticipated.

I had enough time to study, do my homework, get, maintain good grades, and then

like play my video games or like do extra stuff. So, it wasn't really hard for me for

the first two semesters last semester, [sophomore year] the first semester was

pretty alright. Like it was a similar to my first year, but then second semester, I

guess, uh, some of the classes that I were taking, it was starting to get a little

harder.

Anthony shared that he was a "books first kind of person" and would put his academic

first before all else. He said, "So, like I play video games in my free time when I'm

finished with homework and everything else, or, uh, chill with a couple of friends, like

close friends. But other than that, um, school first."

Locations of Outside Academic Spaces

Anthony described three main locations on campus that he felt most academically

productive to study was either at the library, the bubble room in Lawson Hall, or his

bedroom. When Anthony was looking for a place to study, he often sought out a space

that was quiet, offered a large surface area, and was secluded to help him keep his focus.

It is very quiet, um, um, really, I guess not around like a lot of people or like, I guess a lot of people don't go to that section of the library, but ... some of the books that I was around, I was like close to like different accounting books. Cause I was sitting, I think. [near], A and D areas kind of like that. So, I kind of thought this is my major and it's kinda cool.

Key Influencing Factors. Anthony found these locations to be convenient and close to home. Anthony said for the bubble room in Lawson Hall provided a lot of amenities to support him as he studied.

Positives is the big table, uh, dry erase board in there I know sometimes, um, it depends on what I'm studying or if I'm studying for a test. I use that to write like my notes and stuff on it, so I could look up and see it. Uh, also. I guess I, the room it's like home kind of, because I like looking out and seeing like other buildings and stuff like that sometimes like when I'm stressed or whatever.

Anthony also stated he spent a lot of time in his room studying.

I sit at my desk. Uh, I don't usually say like to be on my bed or anything like that because I can't focus like that. And, um, when I sit at my desk, usually I do homework for the most part, but like some negatives are, if I turn on my TV or something like that, I might get distracted. So usually, I try to turn it off and like open the window or something like that. So, I can like look out if I get too, I guess, stressed out or too bored or whatever, like that. Look out the window for a second and then try to refresh my memory and stuff like that.

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

In March, when the pandemic greatly affected the United States, many institutions sent their students home to limit the spread of COVID-19. Anthony, like many other students was negatively impacted by this drastic change.

I guess the pandemic started at, um, we had got sent home and it was pretty bad for me at first because, um, I wasn't used to like doing online classes and stuff like that. So, uh, it hit me pretty hard. And, um, when I went home, I was studying and like doing schoolwork, I think six days a week for at least probably eight or ten hours a day. So, I was sitting at my front room table and, um, study, take notes, all of that, and try to like to maintain my grades. But, um, it took a, uh, took a little hit. So, uh, my GPA went down a little bit, but, um, it was pretty bad. And then this semester, since I was kinda used to doing it, uh, last semester and, um, in the summertime I had a summer class, um, it started to rise slowly. So, it's getting back up to where it used to be. Um, that's how it affected me."

While Anthony was able to adapt to this new form of hybrid learning for the fall of 2020-2021 academic year, the pandemic did directly effect the choices he made when it came to studying. He reflected on his freshman year, where he primarily studied every day in the library, but now during the pandemic, he guessed he had only been there twice since coming back to campus.

Yes, it did. Um, well I guess one of them, I mainly study here in my room, probably during the day. Um, but usually I used to study in the library a lot, but, um, now we all liked the, uh, the precautions and like, uh, the new rules and stuff like that. I usually don't study in the library anymore. Uh, sometimes study in the

bubble room of, uh, Lawson Hall. That's usually where I'm at, if it's open and free to us, to study, but mainly I'm in my room.

Anthony said he was not the only one who had changed locations to study because of the pandemic. He said the library did not "feel right" anymore due to the socially distanced alterations made.

I know some of my friends, they, um, they used to study in a library as well, but not like at the same time as me, but they used to go to the library to like the study and get everything done. I know. Um, now I guess their feelings are somewhat similar to mine. They don't like how the setup is or, um, they don't, I guess, to like how it looks or anything with it, so I feel like a lot of us have the same I guess the reasons or feelings towards the, uh, towards the like precautions and stuff like that.

In Anthony's interview he expressed he would seek out spaces that were quiet, private, or at times secluded from others. He also shared how he found inspiration and motivation while being surrounded by the textbooks of professionals in his field of study while in the library. He also indicated strong feelings towards windows to help him reset and clear his mind when he felt stressed or needed a break.

Jayne

The fifth participant was Jayne, a 20-year-old, who identified as a Mexican American female. She lived on campus for two and a half years and is pursuing a double major in criminology and sociology with a minor in Spanish. Jayne's involvement around campus included her work in the Office of Inclusion and Academic Engagement and past membership with Pride. Jayne stated that she studied and did homework every single day

for about four hours. She described herself as a good student, despite struggling her freshmen year.

Continuing to Live On (in a pandemic)

Jayne shared that she had a great experience living in the residence halls. She said, "I felt like my friends that I found were through the dorms and like people they knew. So that's how I made my like, personal connections. So that's just why I chose to stay there." Jayne said, her reasoning for continuing to live on campus during a pandemic, was that she was already comfortable with her living situation and honestly did not think about it.

Development of Study Habits

Jayne's freshman year in short, was a learning lesson for her. She claimed she found "college freedom. And I did [pause] like just party a lot. So, I wouldn't do my homework. I wouldn't study." After her freshman year she turned her life around.

So, I struggled my freshman year. It was really bad. And then I ended up like having to retake all my classes again, my like sophomore year. So, like credit wise, I'm technically still a sophomore, even though I've been here three years, which like, it really made me reflect and like get my stuff together. And like, at the end of last semester, I ended up getting like a 3.36 GPA, which I was like, "Ooh, this feels good. I'm a good student." So, then I'm like really like trying, because it, it just motivated me to like get a GPA boost, I was like, okay, this is who I am. Like, I don't want that 1.5 anymore. I want it to go up.

After seeing the effects on her GPA due to her decisions during freshman year, Jayne decided to reevaluate her priorities in college and focus on her academics. She learned to become organized and how to set herself up for success.

> Hmm, no, this isn't what I want to do. Like I need to get it together. So, I started paying attention to my classes. I started going to class. Um, I became a really good note- taker, color coding and stuff. Cause I realized that that helped me a lot.

Locations of Outside Academic Spaces

In Jayne's experience with outside academic spaces, she shared that the locations of her classes influenced where she studied.

> In a way yes, because I know some people like business majors, they tend to like study in Lumpkin and stuff like that. And like, um, I know there's like a little lab in Blair that we can use, but I don't know. I just felt like really claustrophobic in there. So, I felt like I had to find my own, my own space, which, um, was the library.

When finding her "own space" there was primarily two locations that she felt academically productive, the library and her room. For the library she had a lot to say.

> [In the library there is a] Bridge that connects the like old and the new, it said like at the basement and, um, it's that one, like long table with the tall chairs. And even though I get distracted by people walking by, like, I like to be focused on my homework and then like, look up. And then I was like, okay, homework. And it's like, I use it as my break kind of. Um, but I dunno, it's just cause it's like, it's more open and like it's like the high ceiling. So, like going back to the Blair thing, I don't feel claustrophobic there. Um, I really liked that spot and then it's the big

table, so I could like... lay out my stuff and really like organize my stuff for the week.

Key Influencing Factors. Jayne offered insight to many different aspects that influenced her decision in outside academic spaces. She mentioned the physical dimensions of certain spaces and how it caused her anxiety and led to claustrophobia while in an enclosed space.

This is going to be like silly, but the high ceilings really helped me because I feel like it's just like so open and I can, like, I feel like relaxed somehow, um, compared to like feeling trapped and like one of like the study rooms that they have, ooo I cannot do that. I feel so like trapped, but that's like the main thing.

Another note she touched on, are the amenities in the library and her own bedroom that were important to her.

The main positive for the library would be being able to print something right away and like, cause I'll print out my articles and like highlight and annotate. Um, so that was like the big plus. Um, the good thing about studying in my room is, I mean, I guess I'm at like my own comfort and I can like take my break, I can like lay down in my bed or something compared to at the library. I just like to take a trip to the bathroom.

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

Jayne expressed her concerns about COVID-19 and her safety when being in outside academic spaces. She said the pandemic had influenced her decisions on where to do her studies at times.

I tend to do my homework more in my room now. Um, and another thing that impacted that was, uh, a lot of the times, the little like, um, paper things at the library that say like clean or not clean they'll, say like not clean and I'm like, "Hmm, maybe not." So, I just stay in my room cause I feel like safer.

Another COVID-19 alteration that has affected her is limited time and interactions with her professors. She said, "I think I'm only struggling because of the semester because of like the COVID stuff. Cause I'm like I can't meet with my professors, so it's a lot harder for that, like online classes."

Jayne provided many valuable insights to her success and development as a college student. She showcased how to become a self-directed learner by creating her own practices, using various tools to assist, and utilizing her resources like her professors. Jayne's awareness of her surroundings for her to feel supported is clearly shown in key points she shared, whether it be the physical structure, or the environment and space was inclusive for all.

Matt

The sixth participant, Matt, is a 19-year-old, who identified as a white, transgender man. He lived on campus for a year and a half and pursued a journalism degree and a sociology minor. Matt is involved on campus with two jobs, one in his residence hall working as a desk assistant and the other for the school newspaper. Matt stated that he studied best in the afternoon and often did his homework five to six days a week for two to three hours per session. He described himself as a good student.

Continuing to Live On (in a pandemic)

For Matt, there were a couple of factors to him living on campus. He considered Taylor Hall home because of the friendly community. He also said it provided a convenient location near classes and to his work, but ultimately it was his scholarship the paid for it.

Um, I think, well, it has a lot to do with the people like the ARD. In my building. Um, people here tend to be really welcoming and open. Um, usually if you're just in the building and you run into somebody, you can start up a conversation and they're cool with it. Uh, I think it's easy to make friends living on campus because you just run into people all the time.

Development of Study Habits

Matt was the only participant who had mentioned they were homeschooled in this study. He was homeschooled from kindergarten to eighth grade and felt because of this experience it influenced his success in his academic transitions from high school to college. However, Matt did realize he had to maintain his GPA, so he worked a little harder on his school work to keep his scholarship.

Uh, I was homeschooled as a kid and then I went to public high school. So high school was super easy for me. So, I was really lazy when I showed up [to college] and then I realized I had to actually work at school. Um, so I definitely had started studying harder and studying more.

Locations of Outside Academic Spaces

Unlike other participants Matt did not find the library to be a convenient place to study. He preferred to stay in Taylor Hall in either his room, the lobby or basement.

When he compared his experience in the basement between the last two years, it really shows the changes made.

> Um, the basement, it was good because I would have like two to three friends with me. Um, so it was like, "Oh, like we can have fun, but then we all had to get stuff done" ...[now] they, aren't letting people use that space... they put all the tables together and put the chairs up on them and they're like, signs. Like, don't move it.

> **Key Influencing Factors.** For Matt, the setting itself seemed to not be the key factor when he made his decision to study in outside academic spaces, rather it was the human interactions he seemed to seek out.

> Um, when I'm by myself and I get distracted, it lasts longer because I don't feel pressured to stop being distracted. Um, I also know I tend to get like bored or lonely after like two hours by myself. Um, and then it's like, well, I don't want to do any homework now because I'm not in a good mood. Um, So, I guess that's, that would be a negative.

Matt brought up that people can be distracting at times when he was trying to study, but acknowledged that it was possible him and his friends could be the distraction too.

> Uh, um, people were always walking through there because they were trying to do their laundry. Um, and well, it wasn't really set up ideally for studying, I guess… I know there are stairs that go up to the lobby and we were definitely so loud. They could hear us up there.

Even though it was noted by Matt, who felt human interactions were a key motivator for him, he said he does not seek out human resources in outside academic spaces.

> I think it's good that that's available on campus because it sucks like for people to just be kind of left to their own devices. Um, but I also never ask for help. So, I kind of, I'm just sort of neutral on it. Like if there is somebody there, I probably wouldn't talk to them.

He believed because he was homeschooled, he was self-sufficient and does not need human resources when studying, but thought it should be accessible to others.

Socially Distanced Mitigations/COVID-19 Alterations to Outside Academic Spaces

When reflecting on the changes made due to the pandemic, Matt had mixed feelings regarding the mitigations made by the university to limit the exposure of the virus to its students. One of the main changes within the residences was a requirement rooms be at single occupancy.

> Um, well, I don't have a roommate anymore, um, which I was super broken up about at the beginning of the year, because one of my friends was gonna be my roommate. But, um, at the same time, it's kinda nice just being in the room by myself and just being able to work at my own pace... Having single rooms because of social, social distancing has been an improvement.

These mitigations and efforts have affected the location where Matt chose to study.

> Yes. Um, I used to spend a lot of time studying with my friends in the basement. Um, there are like tables down there. And now that, um, with COVID, we're not even allowed to use those tables. So now I tend to study by myself in my room.

> Matt offered a different perspective by being homeschooled and defined himself as self-sufficient, but often sought out others to keep himself motivated. Although he

shared his feelings of loss, he has also found some benefits in mitigations required by the university.

Summary

This chapter explored the narrative of all six participants and provided insight into their backgrounds and experiences of being a college student during a pandemic. In Chapter Five there will be an analysis of these interviews that relate to the research questions presented in this study.

Chapter V

Discussion and Recommendations

The purpose of this phenomenological, qualitative study is to understand live on students' perceptions of study spaces located on campus grounds at a public, 4-year, rural Midwestern institution. In addition to analyzing student experience, this study will allow for the exploration of the current needs of students in outside learning environments during a pandemic. The focus of the research questions refers to the participants' academic productivity, camaraderie, and environmental adaptability found on campus. The researcher is interested in understanding the social and physical structure dynamics offered at midsized universities that affect the time and energy of a resident's choice in finding a space to study. In this study, six students who have lived on campus for two or more years were asked about their perceptions of campus academic spaces. The findings from the interviews will be used to conceptualize what is needed in these spaces for students to be successful in college.

The following research questions were used to guide the study and analysis:

RQ1: Pre-COVID-19, where do live on residents spend their study hours on campus?

RQ2: Why do second year, live on students choose to study in outside learning environments?

RQ3: Post COVID-19, how has socially distanced space changed and what perceived influences has altered in those spaces if any? Have these changes impacted your study habits? Have these changes impacted your study habits?

Referencing Hall's (1996) proxemic theory and concepts concerning classroom and facility designs will help guide the analysis and evaluation for the following research questions.

RQ1: Pre-COVID-19, where do live on residents spend their study hours on campus?

To gain insight on residents who choose to live on campus during a pandemic and understand the various locations they frequented to study and were asked to reflect on those experiences. The interview questions used referred to study locations that were associated in proximity to where participants live, their involvement on campus, and other factors that impacted their decisions. Participants were also asked to reflect on their study habits, which included the number of hours they study, how they adjusted to college level courses and expectations of being a self-directed learner.

Convenient Location

All six participants chose to continue living on campus during a pandemic. However, only three participants, Kala, Faith, and Matt, attributed this decision to the financial aid they received through academic scholarships. However, Jayne, Anthony, Holly, Matt and Kala found it to be convenient to continue living on campus due to their work at the university. Many of the participants reflected on the changes over the years of where they studied and the proximity of those locations to their personal residence and their classes. According to Ibrahim and Fadzil (2013) outside academic spaces should be accessible, dynamic, and found in central locations around campus to help create a sense

of belonging. Almost all participants frequented the library for group projects before

COVID-19, and this was Faith's thoughts.

> Last year? Um, last year I feel like there was a lot more like group projects, things
>
> like that. And my gen ed classes. So, I would meet at the library a lot for this.
>
> Yeah. At the Booth library.

Before the pandemic, Matt said he went every other week, Faith said she would only go

for printing, whereas Anthony, Jayne and Kala would stay until they were told to go

home. All but one claimed that the library was a convenient location to meet for group

projects or to study because of its centralized location. Between the six participants the

word "library" was said 100 times, with Kala using it 42 times.

> Like I used to live at the library, not gonna lie. I would stay there till the library
>
> kicked me out and still be up doing homework. And I will have a private room to
>
> myself all the time or have my friends come over or group projects.

The other primary location that was mentioned 12 times between Holly and Faith was

Stevenson Hall. They found this to be another central location to work on various

projects. Holly reflected on her times in this space where she worked and lived.

> My freshman and sophomore year I would actually go to Stevenson Hall more
>
> because of the location, because I knew that that was like where everything was
>
> kinda closer to work. So, I wouldn't have to keep walking back and forth and I
>
> would be getting more time to do homework. Um, so that's all I really wanted to
>
> be in Stevenson.

Community Factors

When developing community and creating a sense of belonging, it is necessary to look at the whole of a student's experience while in college; from the structures built around them to the community that is developed from within (Barkley, 2016; Booker 2016; Modell et al., 2009). The researcher recognized this as a major factor for the participants, but found the use of the word "community" only occurred eight times between three participants. However, the researcher observed all the participants referred to studying in the residence halls where they could work, be with friends, and stay close to home. Holly described how she liked to be in spaces where it was accessible to others.

> Um, I think that if the space is accessible to others, like it, even though they're around it it'll make me feel like it's more of a community thing. Like, Oh, we're all studying together even if I don't know you, so I'm like, I don't know the scenery. It's just more comfortable... the location, the, my coworkers. Um, we're always spending time together and I think just actually living in the building is more accessible to the things that I need. Like if I forget something, I don't have to go all the way, 10 minutes back to go grab something from a place. Um, it, it just seems like the perfect spot to do anything.

Self-Directed Learning

Knowles (1975) defined self-directed learning as the "process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 18). During their interviews, participants shared that their credit

hours ranged from 12 to 19.5 and dedicated anywhere from 12-40 hours a week to studying and homework. In addition to this, five of the six participants had jobs. Matt and Jayne worked two jobs, while Faith and Holly were student athletes. While maintaining busy lives and being academically productive, these self-directed learners established strategies to be successful. Jayne, who had turned her academic career around, shared how she prepares herself to be successful in college.

> Um, I became a really good note taker, color coding and stuff... I'll print out my articles and like highlight and annotate... [I sit at] the big table, so I can like lay out my stuff and really like organize my stuff for the week.

After analyzing the experience of the six participant the researcher found the research in this study does support the andragogy theory. These student learners shown their ability to gather the tools, create their own practices, and find resources needed to support their academic career (Henschke, 2016; Merriam, 2001; Ozuah, 2016).

The highlighted takeaways from the first research question include students seeking areas that are central or convenient to their daily activities. It was found they prefer to use outside academic spaces that provide easy access to their school, work, and extra-curricular activities. They seek areas that provide a sense of community, even if surrounded by strangers, in order to stay motivated during the hours in which they study. However, the most significant finding in this section is the support in andragogy theory, showing college students have the capability to be self-directed learners in outside learning spaces.

RQ2: Why do second year, live on students choose to study in outside learning environments?

In the research question, it is to be noted half of the participants lived on campus more than two years, but all participants chose to continue to reside on campus during a pandemic. These interview questions referred to connections made in those spaces, such as people, technology, or other features; along with any motivations or distractions found within those spaces. In the interview the researcher continuously probed participants to better understand their experiences in outside learning environments.

Motivation Factors

Each participant offered their own unique perspective when it came to finding motivation to study. For some it is their friends, for others it is strangers. However, it is clear the design and layout of these outside academic spaces offered a variety of ways to support these students. Kala used the example of the library, where she said it was "great" because of the location, printing, and often free snacks. The other participants agreed with Kala by mentioning printing (37 times), food (23 times) and beverages (14 times) as important features to assist students to be academically productive.

> There wasn't a lot of distractions [in the library] and, um, it kept you like
> motivated to stay where you're going, because when you think about it if you're
> like far from your room, you don't want to go back and forth in your room. Cause
> now you are continuously breaking your focus. Whereas at the library, I'm going
> to get all this done because the library closes at midnight.

Other participants mentioned different physical features that inspired them. For Anthony he enjoyed being surrounded by his profession's publications, Jayne found her "break" by

looking at the high ceilings in the library, and with Faith, she felt the support of her faith when she viewed a stained-glass art piece.

Another motivation many of the participants found to beneficial was to be surrounded by people. Four of the participants mentioned they like studying with friends, but all of them followed this by saying, "it depends." Anthony said, "It depends on the day or like depends on a homework assignment sometimes...but if I'm studying for like a test or something, no." When comparing the observations of the six participants, they had mixed feelings regarding studying around people. Four of them enjoyed the distraction of others, they considered it as "people watching" and helped to take their mind off things. However, Faith, Matt, and Holly believed there was a group mentality to stay motivated in public spaces with strangers. Faith said,

> I feel like if other people are around, within like a watching sort of distance than I do more. Cause I'm like, okay, now let's focus. Like I've been on my phone for a minute, all right, get back onto the book's kind of thing.

Matt made a similar comment as Anthony and Faith.

> If you're in the library and you don't know anybody that again kind of stops you from getting distracted or dropping off because there are other people around me and we're all just studying. So, I tend to study with people. I tend to stick with my friends, but I can see either one being good.

Distraction Factors

As stated, there was a mixed view when it came to being in shared spaces with others while studying. It was said over 21 times that distractions often involved other people. For Matt it was people going by to do laundry, Anthony said students would play

the piano in the lobby, Jayne mentioned individuals would walk overhead on the bridge and talk on their phones, and with Kala she would prefer at times, not to see a single soul.

> Like the more secluded, the more private it is, the more the focus is there, the more, um, the accomplishments, the things you can get done...less distractions... is more effective. It will be in my opinion, when it comes to studying. But also, I like to have it as an option. Just some people who likes windows, that they can go and have a window. I try to go back and forth with that, but I noticed I get more of my work done with a room without any windows.

Although Jayne found "her spot" under the bridge in the library, she still found there were distractions.

> I have like my spot in the library, like the only place that I like to work and... a lot of times it'll be like other people are there and I am like, "Oh, I can't like focus" in other spaces because I get too distracted by the people walking by and stuff.

> Another key distraction brought to light by participants was accessibility to basic

needs such as restrooms, water bottle stations, and other resources such as printing and pens. James (2002) suggested that institutions need to upgrade resources and infrastructures to meet the demands of the students' ever-evolving needs. An example of this, five of the six mentioned their need for printers (37 times). Kala said, "In Andrews you need to print something out, you have to go to the library. There are no printers at your disposal. That makes you break focus as well." Holly brought up basic needs, such as restrooms and water, which are not accessible on the 10th floor of Stevenson Hall.

> Uh, negative for me personally, is I need a lot of water because I am an athlete. So, the bathroom, it's not on the 10th floor. So, I actually have to go all the way

downstairs to either get some water or go to the bathroom which you know, sucks

like a lot. Yeah. It's like using the elevator over and over again.

The physical layout of academic spaces can cause negative effects on individuals who frequent these environments.

[There is a] little lab in Blair that we can use, but I don't know. I just felt like

really claustrophobic in there... because it's like, it's this like really small room.

It's almost the size of it's a little bit bigger than the dorm rooms, but it's just, I felt

like it was very like crowded. It was just like these like tables along the walls and

then just chairs, chairs, chairs. And I was like, I'm going to be like rubbing elbows

with people in here.

This example supported Barret et al. (2015) that traditional classroom designs are dated, and yet still prevalent in our academic spaces.

Holistic Support

Han and Cheng (2017) believed holistic support should be provided in outside learning spaces that inspire a sense of community, assurance of safety which will encourage, challenging, and supporting students. When these environments are created it will provide opportunities and safe spaces for those individuals to grow (Barkley, 2009; Hall, 1996; Tor, 2015). For Kala and Faith, they felt so safe and secure in the spaces where they studied, they were able to take naps in public settings. While Faith slept on a couch at her church's library and Kala took a different approach in using the private rooms in the library.

[I slept] on the floor. That sounds very horrible, but, you know, probably like a

little quick power nap will do, just to give me a ride back to focus, because I

believe when people are done eating usually tend to get the tendency to fall asleep.

A main factor to student success is sense of belonging and students feeling ownership in the spaces they frequent. According to Ibrahim and Fadzil (2013) the university should have environments that provide strong connections to support people's lives, performance, health and well-being.

Access to Resources. To best support students, access to resources should be a priority (Bosch, 2003; Oliveria, 2016). Resources in outside academic spaces are provided to optimally assist students, these include availability of the space, technology, and human resources. When asked about the importance of spaces being available all participants agreed this was high on their list and would determine where they would study based on the hours of availability. In her interview, Jayne brought up a valid point about various schedule and conflicts when study spaces are closed.

> Like my friend doesn't get off work until 10. So, like where does she have to go print now? You know? And like, sometimes I work until 10 and I'm like, "Oh shoot. I didn't print my like thing out. What am I going to do?" Um, so I think they should definitely be open a little bit later just because some students do work.

All the participants agreed with this statement, there needs to be more spaces made available with longer hours to accommodate to student's schedules. Anthony said,

> Sometimes I study in the bubble room of, uh, Lawson hall. That's usually where I'm at, if it's open and free to us, to your study, but mainly in my room... I'm not like a person that sets like a certain day or a certain time period. I study like when

I'm free or like when I have time to do things. So usually, it's just like when I'm

free and [the space is] open I'm going to it.

Arguably, the advancement of technology is the greatest resource for self-directed

learners in college; more so now, due to the pandemic and the increased utilization of

hybrid learning (Bates & Sangra, 2011; Fischer & Scharff, 1998). However, in this study

the technology that was identified as being needed for these participants were outlets (12

times), printers (38 times), and a reliable internet connection (2 times). Holly and two

other participants described how the location and access of an outlet will determine

where they physically sat while studying.

I find that outlets, like you said, are very important because it will

actually...change my location depending on where the outlets are located. Because

like I know, like an issue on the 10th floor...I have to sit on this side of the room,

um, versus all, if I could sit right here and if it was just like connected right here,

it would be perfect. Um, and then wifi. It's a bigger, it's a big one.

All the participants, but Holly, brought up the use of printers and the support it provided

them when studying. Kala, Jayne, and Faith shared it helped them to print assignments

and articles to high light notes and annotate their thoughts. Faith said, "if I've got a 30-

page packet, I've got a printout of notes, then I'm like, yeah, I'm just going to go to the

library. It's just, boom, boom, boom done. It's free." The only participant who mentioned

the use any other technologies was Kala.

We all like to study in a group; we can go to the library and it was convenient

because there was a whiteboard. There was an outlet for everyone... If we had a

presentation, we could view it on a screen instead of looking at everyone, looking over each other's shoulder for the screen.

When it came to the interview question about human resources, the response provided by participants was not what the researcher expected. Many of the participants seemed confused by the language of the question. When the researcher defined it as "people who are paid to be there" they all agreed it was a great resource, but not a resource any of them would ever use. Matt articulated this the best.

Um, I tend to not seek that out. Um, I think it's good that it is available on campus because it sucks like for people to just be kind of left to their own devices. Um, but I also never ask for help. So, I kind of, I'm just sort of neutral on it. Like if there is somebody there, I probably wouldn't talk to them.

Jayne said, "Um, it's not really high on the list. Um, I usually do my homework with my friend...but other than that, I like, I do everything by myself." Anthony echoed this theme of working and studying with friends.

When I study, like for tests and stuff like that, sometimes I have like a different person in there so I can, um, they can ask me questions and I like to reciprocate the answers to them... I usually when I'm in places like those. I don't like ... use like human resources there, unless like, I have a question. I remember one time I was looking for, um, a book in the library, but other than it, not for like studying or anything.

Holly interpreted the question as staff who work the desks in lobbies of the residence halls.

Um, I think it's great because, um, sometimes I feel like people in general can be

lost and if that resource is like right downstairs or right on the same floor...I'm a

person who loves to ask questions. So, I think that someone who knows the

answer should be around.

The last human resource that was acknowledged was professors and their office

hours. Only two participants, Jayne and Kala, mentioned this during their interview. Kala

said, "I kind of felt like their office hours should be in a more open area... if one of the

professors saying, 'Hey, we're doing a study group seminar and the library'...Of course,

I'm going to go." The interesting observation made by the researcher regarding this

theme, is most of the participants referred to various housing staff, and faculty as great

resources for community and feeling connected, but did not fully attribute these

professional positions as key factors in their study habits.

Design. Hall (1966) stated environments built with the purpose to support

students should be created to enhance interaction between people that will enable

educational opportunities. When creating spaces as such, features used should be of semi-

fixed design to offer mobility such as adjustable chairs, tables, and white boards; items as

such, should be easily altered by the user (Sommer, 1969; Rands & Gansemer-Topf,

2017). By using holistic designs, encompassing all factors that effects the senses, will

keep the individual in a state of peace, inspiration and find a sense of ownership to the

space (Barkley, 2009; Ibrahim & Fadzil, 2013; Oliveira, 2016; Sommer, 1969). During

the interviews there was a lot of focus on the open spaces, private rooms, furniture style,

resources, and aesthetics displayed by those who inhabited the space.

When the researcher conducted the six interviews, there were some clarity issues defining the words "solidarity and privacy." The researcher described it to the participants as,

> Privacy would be like, I consider kind of like those study rooms in the library where you could have the door shut and it's like, kind of your own bubble. Whereas solidarity is...you don't want to see anyone. You don't want them to see you and it's you, by yourself.

Matt, who never mentioned using a private styled room he said, "Being productive? Um, privacy is probably better for me, but I like people, so I tend to want solidarity." As shown in this response, the question was not articulated well or clear in definition, and thus caused confusion. Even though there still was some confusion, the researcher was able to decipher the answer as it "depends." Jayne shared enclosed rooms, like the bubble room, caused her stress, and with Anthony he said, "I'm usually [studying] in an empty area." However, an important note to this study term bubble room or conference room was mentioned 23 times. Many felt the benefits to these private styled rooms offered a sound barrier, a space to collaborate, or a location away from other distractions. Faith described this the best.

> It was just like a big room with different tables, so we could kind of split up, do what we want. Like we could split off into groups and be like, "Oh, you're working on the homework. I'm working on the lab report. And we could kind of split go back and forth." Uh, didn't have to worry about ... it wasn't soundproof, but it was pretty contained.

Another space that was frequented by the participants were lobbies, basements, and other open areas, these were mentioned 41 times. Faith said this is where she spent a lot of time her freshman year. Holly enjoyed it because allowed her to see people and catch up, and Matt too found this a space where he frequented with friends. Participants found open spaces to be a fun and social settings, but they all did agree it could be distracting.

In outside academic spaces, what may be the biggest draw for participants, was the physical features provided in these spaces. The key findings in this area were the style of tables, chairs, and other resourceful items like white boards. Faith described it was beneficial when there were multiple tables in the space which could come together to work on a project, but then could divide up into smaller groups. Anthony, Jayne, Matt, and Kala all appreciated the use of long tables that allowed them to spread out their work. Kala said,

> Honestly at a big table, because I'm not gonna lie the desk and our rooms are not big enough for my work...especially doing accounting. I have different sets of sheets of paper that I need to look. There's a whole different cycle of everything. And then it's just, I need space. So definitely the big tables. I can't be at a small table with like a two people. Cause I'm going to need the table space.

Chairs and couches were identified as a key feature that all participants brought up during their interviews, in total 49 times. For Faith, she appreciated having a couch because she could take study naps. Whereas Anthony, Kala and Jayne enjoy chairs that offer mobility. Jayne liked how her chair was able to rock and said, "I like to play with the chair. So, I

feel like, I don't know. I feel like it helps me in somehow, but it can also distract me." As for Kala, she believed office chairs could provide new perspectives.

> Definitely the swirly chairs, like the rocking chairs, no one really uses those... But whereas to the swirly chairs...I guess the idea of panning, like the room is also as like seeing different like options of solutions throughout, like, whatever problem you're going through.

The last appreciated resource was white boards. This feature was mentioned 17 times in four of the six interviews. The students found it to be a great tool when working in groups or solving complex problems.

For aesthetics, Jayne shared the relief she found looking at the high ceilings in the library, with Faith she found peace and self-assurance when looking at the stained-glass art piece of saints at her church, and Anthony said he found himself inspired when surrounded by publications from professionals in his field. The one aesthetic the researcher found to be unexpected was how highly valued students found windows to be. This fixed feature was mentioned 27 times by five of the participants. With Anthony and Jayne, they said windows gave them a sense of relief from the stress of studying. Jayne said, "I just find it like relaxing when I'm like stressed about an assignment or just look out there and be like, okay." Anthony agreed with that statement and shared, "I like open the window...so I can like look out if I get too stressed out or too bored ... I look out the window for a second and then try to refresh my memory and stuff like that." Holly watched people from the 10th floor, Matt appreciated the natural lighting in his room, and Kala said it just depends on the day whether she found a window to be helpful or distracting.

One like note that private rooms that aren't necessarily no distractions. There's like one window in there...I will go sit all the way with my back to the [window] to see less people walking back and forth...So it was like less distractions... And then another perk was that's at the top, like I was top floor. So, there was no people walking by to like, take your focus off whatever you're doing... So that, that was very beneficial towards me.

The last factor that plays into these aesthetic settings of outside academic spaces is the influence of lighting and temperature. For Jayne and Holly, they liked bright lighting, Matt and Faith shared they prefer natural lighting, but admits it really depends on the day and space, but for Anthony and Kala, they mentioned using personal lamps to assist in their studies. When it came to temperatures the participants really ranged in opinions. Anthony said when he is hot, he is easily irritated, but if it is too cold he wants to fall asleep. Jayne had strong feelings about being cold and said, "not too cold because I remember in the library, I used to get really cold and I couldn't concentrate cause I'd be like, 'I'm cold, I'm cold. I'm cold.'" However, Kala offered a solution to being cold and her shared own thoughts about the temperature while studying.

You know, I find this very odd and I kind of noticed this. It has to be cold because I'm looking back like I went to a college prep and it was fun though, sort of anyway, um, I noticed it was, it was cold in every single classroom...But I understand now, because if you're warm, you're comfortable. If you're full you're sleepy. So, you're not necessarily like paying attention, you're not alert... if I'm feeling a little bit cold, I wouldn't have like a blanket with me cause obviously I'm

going to sleep. So, I would drink a hot beverage to keep me more alert in the awake.

This research question provided a lot of great details into the needs of students to be supported in their academic activities. The key findings observed by the researcher included human interactions, the level of focus needed for studying determined which space participants would use, if the spaces was accessible, and the constant need for reliable technology, especially in a pandemic. These participants shared the need for human interaction, whether it was friends or strangers, but not in the form of human resources such librarians.

RQ3: Post COVID-19, how has socially distanced space changed and what perceived influences has altered in those spaces if any? Have these changes impacted your study habits?

Participants were asked to focus on the mitigations required by the university and provide their perceptions of the socially distanced changes during the pandemic. The primary focus of these questions was to see if participants changed any study patterns in locations due to COVID-19. Additionally, they were asked to reflect on the socially distanced environments and where they found discomfort around people, and other major observations they could compare from years past. In this research question, the most common themes were feelings of change, the toll the COVID-19 virus had, and the safety concerns participants felt.

"Not the Same"

The most common phrase when comparing pre-COVID settings to post-COVID times was "it is just not the same" or "it doesn't feel right." Many of the participants felt

that the first-year experience was really missed due to the pandemic and many

participants felt bad for the freshmen of the 2020-2021 academic year. Kala said this,

> I also noticed that, you know, people felt alone, especially freshmen. Like they
>
> missed out on a lot. Like I remember there was PROWL, and last year hall
>
> council, we actually had like programs that were fun and entertaining. They
>
> definitely missed out on all of that. So, when I talked to some people at work,
>
> they're like... freshman. And it's so boring. [They said] "I was looking forward to
>
> everything, new friends, having those odd roommate stories." And I was like,
>
> yeah, that sucks. It really does for them.

The most common change participants experienced in their study habits was no longer

frequenting the library. Matt said, "This year with the library being closed a lot more. I

don't think I've studied in there, I guess. Not even there once this last semester. And I

used to go like every week or two last year." Kala echoed this and said, "Now since with

COVID going to the library, like it's not the same environment, so I don't go there as

frequently I used to, I tried to go back, but the system changed, I don't know." Anthony

elaborated more on the changes made by the library.

> I know they close some tables or whatever like that, and the table that I sit at, uh,
>
> it's open, but it's like, it's kinda weird because it's like, I don't know. It looks
>
> different to me and I don't really like, I guess look different looks, I guess. I don't
>
> know.

These changes were felt across campus. This has affected Holly's eating schedule,

increased Jayne's anxiety and Kala noticed other study locations closed, had been

repurposed, which has affected where she went to study.

Twenty-four-hour lounge, now that's a classroom. Can't do that. Say the basement

of a seventh street underground. Can't do that anymore. I'm also used to study and

the upstairs area at the union can't do that anymore. Um, yeah, but I would say

like a perk to it is that Doudna has the red room that everyone likes to study, that's

still available. So, I go in there sometimes, but mainly I do study in my dorm hall.

Now seeing how everywhere else is pretty much closed.

Taking a Toll

Billy (2020) said nearly 91% of the world's population of students were sent home

due to the pandemic. This research site was no exception, but in Fall 2020 it reopened

and offered in person classes, virtual classes, and a number of hybrid courses. By Spring

2021 many courses were converted to hybrid where professors had limited hours of face-

to-face contact with students, were required to follow safety protocols, and be socially

distanced. Many participants expressed the mitigations had taken a toll to their studies,

and thus impacting their grades. As Murray et al., (2020) expressed, the full implications

COVID-19 are still unknown. Jayne shared her experiences to these changes made for

public safety.

I hate it that [the library] closes so early because sometimes like, what if I like

need to print something? And it's closed and I'm like, "ah, but I need to do this."

So, I feel like in a way it kind of added onto my anxiety because I feel like now, I

have to be even more on top of my things to make sure I have everything that I

need, um, before they close. ...I just feel like even like for hours, I can't

concentrate because I'm like, "Oh, I have to finish this before they kick me out."

Like, I feel like I'm rushed... I think I'm only struggling because of the semester

because of like the COVID stuff. Cause I'm like I can't meet with my professors,

so it's a lot harder for that, like online classes.

For Kala, going online has made it hard to figure out the material in her courses.

I would say it's like one of the most difficult semesters for me because all my

classes are hybrid. So, it's online and in person, and like my professors have been

throwing two chapters at me per week per class... [I'm] not necessarily engaging

in the class material or really grasping the concept...I had to drop a class just so I

can maintain like I'm on an academic scholarship.

Another hardship these participants felt was the lack of interaction with others and has

limited their time with their friends. Matt said,

I used to spend a lot of time studying with my friends in the basement. Um, there

are like tables down there. And now that, um, with COVID, we're not even

allowed to use those tables. So now I tend to study by myself in my room.

Distrust

Due to the COVID-19 virus, the increased anxiety, extra effort of hygiene and

sanitation, and the new norm of social distancing, had changed the way people interact

with one another. Feelings of isolation caused by the pandemic, contradicts the necessary

environments to have human interaction that is known as a crucial element for student

success (Hall, 1996; Han & Cheng, 2017). A theme found in this research question was

distrust in others, cleanliness of facilities, and hyper awareness of safety practices and

protocols. Jayne shared her distrust in the sanitation efforts and the accuracy of signs

posted.

Another thing that impacted [my decision not to be in the library] ... um, paper

things at the library that say like clean or not clean they'll, say like not clean and

I'm like, "Hmm, maybe not." So, I just stay in my room because I feel like safer.

For many, they now consider their personal rooms to be the safest space to study. Faith

mentioned she intentionally planned her limited trips to the library to lower her exposure

and Holly expressed her distrust when people approached her. She said, "even though

like in my mind, I'm thinking about COVID and I'm thinking about what if this person is

like coming too close and they have it... I shouldn't feel that way, but I do...That's a little

uncomfortable sometimes." What was most interesting to the researcher, was the lack of

the word "mask" being used by participants. Only three students mentioned it a total of

11 times. Although, Holly was the only participant who mentioned actively wearing a

mask while studying, said, "I feel like that's another reason why I'm on the 10th floor

because it's like, even though I'm still wearing my mask, it's like still away from the

outside world in a way." Kala brought up a different viewpoint when it came to her

reactions with masks.

Like if there's a party now, with not one face mask on I'm like the social anxiety,

like, "Oh my God, not one mask in sight." Oh, and she just sneezed, and she was

just like, bless you. Like she didn't even cover her mouth. Oh my God ... bless

you, but from a distance.

As for Faith, the focus point when she mentioned for masks, was the limited visibility of

people and it made her feel even more distant from them.

One thing everyone can agree on, no one saw this pandemic coming. It greatly

affected the world, causing unimaginable pain, loss, and suffering and changed our

everyday lives. These students who are trying to do their best to succeed in college are facing challenges no one was prepared for. In this research question it was found they felt a sense of loss, to people, to spaces, and have faced barriers they never expected. Socially distanced environments are designed to provide safety, but has led to isolation, caused fear, and forced acclimate. However, in these interviews, the researcher had seen resiliency, adaptability, and the student's ability to be resourceful during these unprecedented times.

Implications

The participants in this study expressed their opinions, perceptions and recommendations for outside academic spaces. Their suggestions are impactful and reflective of the values they articulated and their suggestions demonstrated a clear importance to having supportive environments. Additionally, the researcher has created a diagram utilizing these recommendations and findings that will best support students by creating holistic environments that will lead to academic success and retention.

Student Recommendations

During participant interviews there were opportunities to express any supportive or inconvenient features that were found in the various outside academic spaces on and around campus. Many participants shared their feelings, observations, suggestions, and provided specific examples and recommendations.

Holly. When asked to reflect on the spaces where she studied and offered an opportunity to use creative measures to add specific features to those spaces she said, "I would add a bathroom... if it's a chalkboard, I'd rather do a whiteboard, and more outlets...And snack bowl. Yes. Snack bowl. People could just donate to the snack bowl or

something like that...maybe even a speaker for...study breaks." At the end of the interview Holly was asked if there was anything she would like to add to this study. She reiterated the importance and value of mentoring students before college to help prepare them for the transition they would experience.

Faith. When asked to reflect on and use creative measures to enhance the spaces where she studied, she suggested this.

We will go every Wednesday night to work on our lab reports... and then there's people in there... so maybe like some sort of system for like, reserving it... I would like to use the whiteboard kind of thing... and add some computers in there.

Kala. When given the opportunity to provide suggestions or ideas for the spaces where Kala studied, she offered a lot of different perspectives. She suggested an additional space to the basement of Andrews Hall, where she "highly suggest they like invest in private rooms available in the, uh, basement." As for the library, Kala stressed the importance of multiple spaces during finals for students and strongly believed the hours of access need to be increased.

The major thing, private rooms in a basement, more hours and individual printers in the private rooms. I'll also suggest a little bit more in private rooms because of the fact I know during finals week, it just gets so hectic. It's like war finding, a private room for finals. So, invest in private rooms instead of having a lot of open, odd areas to study, not odd, but like those like little cool nooks and crannies in the library... just so you can maintain your study, maintain your focus and...have a better outcome of your grades.

Anthony. When asked to reflect and provide suggestions to change the areas where he had studied, Anthony emphasized key things he found important. For the library, he preferred bigger tables and would like to have, "a nice view out of the window." For the bubble room in Lawson Hall, he noted the temperature tended to fluctuate throughout the year and would appreciate if he could be able open and close the windows. He also added that he would like a different style of chair because the current ones are too firm. Anthony suggested office chairs and felt it would be great in that space.

Jayne. It has been made clear; Jayne needs wide open spaces with view. She would appreciate windows at eye level so she easily could look out when she needed to relax. Jayne shared her concerns about whether these learning spaces were inclusive and declared it should be accessible to all.

> I feel like I would add a gender-neutral bathrooms and I would make it more accessible for students...I would also, um, I would fix those stairs. They're so steep. I always feel like I'm gonna fall or like, just like make them bigger or something, something about those stairs... and like wheelchairs and stuff, because ... you never really like, think about it because you're not in that situation, but I've noticed that like, there's like one elevator it's like, do you really need, but. I feel like we need to be more accessible to like other people.

Matt. When reflecting on spaces and thinking about the changes he would make in the basement of Taylor Hall, Matt said, "The lighting isn't great. Um, I honestly think they just need to like change to a different kind of light bulb... and a lot of the chairs are really unsteady, um, just cause they're old."

These six participants believed that the basic needs should be accessible for all in outside academic spaces. Theses learning spaces need to have proper amenities such as good lighting, holistic measures, and functional furniture.

Researcher Recommendations

Through the data gathered and basic knowledge of design methods, the researcher, using experience and knowledge, recommends the following considerations to be offered in outside academic spaces: accessibility, allow for flexibility, holistic amenities, and ultimately the ability for students to create a sense of ownership which will lead to sense of belonging.

Designing Outside Academic Spaces. When considering these designs and spaces, the first and foremost thought should be: is the space accessible, safe, and open to all? The researcher agrees with the Commission for Architecture and the Built Environment (2008) and their statement about inclusive designs.

> The quality of buildings and spaces has a strong influence on the quality of people's lives. Decisions about the design, planning and management of places can enhance or restrict a sense of belonging. They can increase or reduce feelings of security, stretch or limit boundaries, promote or reduce mobility and improve or damage health. They can remove real and imagined barriers between communities and foster understanding and generosity of spirit (pp. 1).

Students should be provided multiple safe spaces on campus, where they could enter with any identity and be supported in their academic experiences. To encourage this success the researcher agreed with participant suggestions to have gender-neutral

bathrooms and access points for students with physical disabilities on the same floor as the outside academic spaces.

When designing, revaluating, revitalizing, or reimaging outside academic spaces there are a lot of things to consider. The researcher recommends creating a variety of spaces that offer public settings, privacy for small groups, and opportunities for solitude to provide isolation from others. This is taken in consideration because student study habits are greatly influenced by the type of homework or studying they need to do. This was indicated in the literture and was supported by the interviews conducted in this study. The researcher believes when students have simple homework they like to be in open areas where they are surrounded by either strangers and/or friends. In spaces as such, they feel they are all working with the "same purpose." The researcher and participants observed this as a "group think" environment that maintains productivity when studying in open and public settings (i.e. library, lobby, or basements). Whereas, when students need to work in groups, they often seek spaces that offer more privacy. This is done in effort to be collaborative, limit distractions, and provide noise control from outside and inside that space. Lastly, when students are needing to be hyper-focused, they often find themselves in spaces that offer solitude. They focus on the task at hand (test, finals, etc.) and seek quiet, closed off, and distanced environment from all distractions. Because of the pandemic, this research has found the best isolated space is in student's personal rooms.

The researcher strongly encourages access to current technology and other supportive features in outside academic spaces. The first consideration is ensuring there are enough outlets available for students. It is suggested an outlet should be placed six

feet away from on another (Andrews, 2020). However, due to the increased amount of personal devices a student may own the researcher suggests outlets be installed in locations of four to five feet from one another (Smith, et al., 2020).

A creative suggestion to allow for mobility and collaboration is wheeled tables that can be connected to an extension cord and offer multiple outlets at the center for students to work next to one another. Other supportive features should be included in these outside academic spaces are free printers and access to one to two computers. According to Smith, et al., (2020) 88% of undergraduate students personally own a laptop, as does 93% of graduate students. Therefore the researcher believes one or two computers should be sufficient. Additional supportive features that should be provided in these spaces are whiteboards, accessible sound systems, and perhaps a projector. If using creative design, the researcher would suggest having the sound system and white boards in the private room to offer a controlled setting and provide collaborative access. With continued consideration to the students, there should be additional provided amenities, such as dry erase markers, so students do not have to bring their own.

Sensory Considerations. Through experience, the researcher advocates that no detail is too small when considering the various elements that affect the senses. These senses; sight, sound, touch, taste, and smell, influence behavior and may even dictate which spaces a student will use when studying. Confirming the researcher's findings, a survey by Lambert (2020) was completed by over 300 students which found that the paint and color in a space were not as important to the students, but discovered that,

Students were more interested in the design and comfort level of the furniture.

Students also preferred community spaces that provided furniture they could

rearrange and was comfortable for different activities... also found students

preferred spaces that included natural light, inviting colors, and comfortable

furniture, as well as a sense of ownership of the space (p. vii).

However, the researcher does propose using cool color schemes. Colors such as blue,

purple, and greens offer various behavioral responses to support students while studying

(Gutierrez, 2015). Shown in Appendix C for diagram for this concept.

Other ideas to consider when creating a holistic space are seat level windows.

This feature brings in natural light, offers a change of scenery, and had been observed to

bring a sense of peace to students while studying. However, when doing so the designer

needs to be cognizant of the fluctuating temperatures, glaring reflections, and maintaining

the cleanliness of the window. The researcher feels that 70-75 degrees Fahrenheit is a

productive temperature for students to study at, and if possible, offers the suggestion of

having an adjustable temperature control in the private room. This feature would be

appreciated by students when using the outside academic space.

Another opportunity to enhance these spaces is providing access to water,

preferably water bottle refill stations. Not only is this sustainable option, but provides

hydration to the individual and helps to maintain the productivity of students. The

researcher personally believes that adding plants to these learning spaces will provide a

holistic element, provide cleaner air and bring life to the room.

The last suggestion offered by the researcher findings and experience in using

supportive and adjustable furniture to enhance the experience of students. In the private

room there should be one or two large tables and multiple office chairs. The researcher

believes the chairs should be adjustable, provide motion, offer support, and

comfortability. As for the open space that is accessible to many, it should provide multiple styles of seating, tables, and offer various access points for collaboration, manipulation, and coordination. An interesting observation, but one that should be considered strongly when designing spaces, is providing furniture students can nap on, such as giant bean bags and large comfortable couches. By using this design, it ultimately will create opportunities for students to connect with others and assist in students feeling a sense of ownership, leading to sense of belonging.

Supportive Suggestions. If the designer is considering where to place a new or repurposed learning spaces, it is best to look for central locations. By doing so it will allow for an easy entry on all sides of campus. However, if possible, students would greatly appreciate having 24-hour access to these spaces. Through observations, the researcher suggests this because students have varying schedules and require flexible hours of operation. Other enjoyable amenities students look forward to are free snacks, as well as hot and cold beverages.

The researcher suggests providing human assistance in outside academic spaces, even though the participants in this study did not prioritize this feature, this was an observation made through context and experience by the researcher. The reason is to assist in creating a sense of belonging, provide support, and provide a safety mechanism. The researcher encourages hiring student staff who are socially driven, resourceful, and considerate of others. When genuine connections are made this enhances the experience within the space. Examples of this can be seen from the friendly cashier, the kind desk attendant, or even the considerate janitor. When there is a human connection to a space, people feel more inclined to access those environments where they felt they were cared

about. Another consideration to the human element is providing mentors, tutors, or even hosting professor's office hours.

The researcher strongly agrees with Churchill, "We shape our buildings; thereafter they shape us" (1943). There are many approaches one can take when designing supportive environments for students to study, interact, and grow. There needs to be considerations to location, design, and sensory stimulation, variety of spaces, supportive features and open access for students. The input of the students is invaluable and necessary in understanding the current needs of students. As shown throughout the research they prefer semi-fixed features that allow them to manipulate and alter to their activities. When this design is offered it allows for sense of ownership in the space which will lead to sense of belonging on campus. When this is found, the researcher believes it will allow for the student to find success in college and thus an increase in retention.

Recommendations for Future Research

Although the data provided was generous from the six diverse participants, this research only represents a single mid-sized institution in the Midwest. There are many forms of research that should be considered to further understand the students' perspectives in outside academic spaces and how to best support them while studying, along with the impact COVID-19 has had on various populations. The researcher hopes with additional information to gain further understanding to what the future holds in designing spaces that will be beneficial in restoring, retaining, and redirecting students' study habits, as well as seeing what safety precautions needed during and after a pandemic (Akyıldız, 2020; Stein & Wanstreet, 2006).

A recommendation for future research is conducting a quantitative study asking participants similar questions and inquiring to which learning spaces they use the most. By gathering this data at a single site and comparing the various study locations by cost and utilization could provide insight to what students find important. An established study one could use is the Indoor Environmental Quality (IEQ). The IEQ is used to see the impact of facilities and the related effects it has on participants' (students, staff and faculty) health, satisfaction and performance (El Asmar, et al., 2014).

The researcher also encourages the replication of this study at other institutions. It would be beneficial to compare student's experiences from larger institutions with greater budgets, or that of community colleges who have large commuter populations, to understand which spaces those students frequent. Lastly, the researcher would personally like to further this study and expand on this topic by having students create their own personal spaces using an online design tool.

Conclusion

The purpose of this study was to examine the experiences of live on student's ability to be self-directed learners during a pandemic in outside academic spaces. The research was done to provide insight into the motivations, distractions, and the social behaviors that are influenced by structural and intentional environments universities provide (Guthrie, 2010). It was found that students often have a transitional period in learning how to be academically successful, the community is an important factor, and holistic measures should be taken into consideration when redesigning outside academic spaces.

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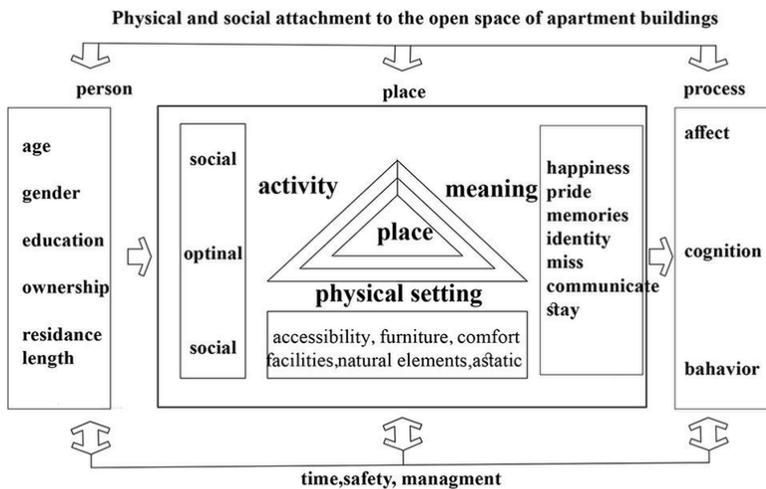
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Appendix A

Diagram of Place Attachment

Developing model of place attachment for evaluating residential open spaces (Habib, 2019).

Physical and social attachment to the open space of apartment buildings

person — place — process

age, gender, education, ownership, residence length

social, optinal, social

activity — meaning

place

physical setting

accessibility, furniture, comfort facilities, natural elements, astatic

happiness, pride, memories, identity, miss, communicate, stay

affect, cognition, bahavior

time, safety, managment

Note: This figure shows the model of a holistic view of physical and social attachment to living spaces. This model is not exclusively limited to living spaces, but helps to understand the various comments that impact the senses and feelings while inhabiting the space.

Appendix B

Diagram of Personal Space

Personal space (adopted from Design Observer, Rapp, 2019).
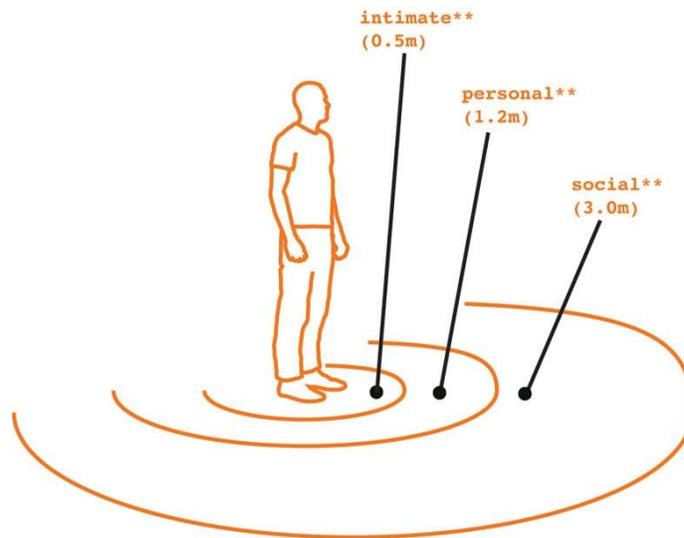

Note: This figure shows the distance in which people find comfortable sharing space with (0.5m is intimate space, 1.2m is personal space, 3.0m is social space). This figure provides a visual of influences required to create a space for the student to feel attached in a place.

Appendix C

Diagram of Personal Space

Color Psychology: Use Cool Colors to Set Just the Right Mood for Learning (Gutierrez,

2015).
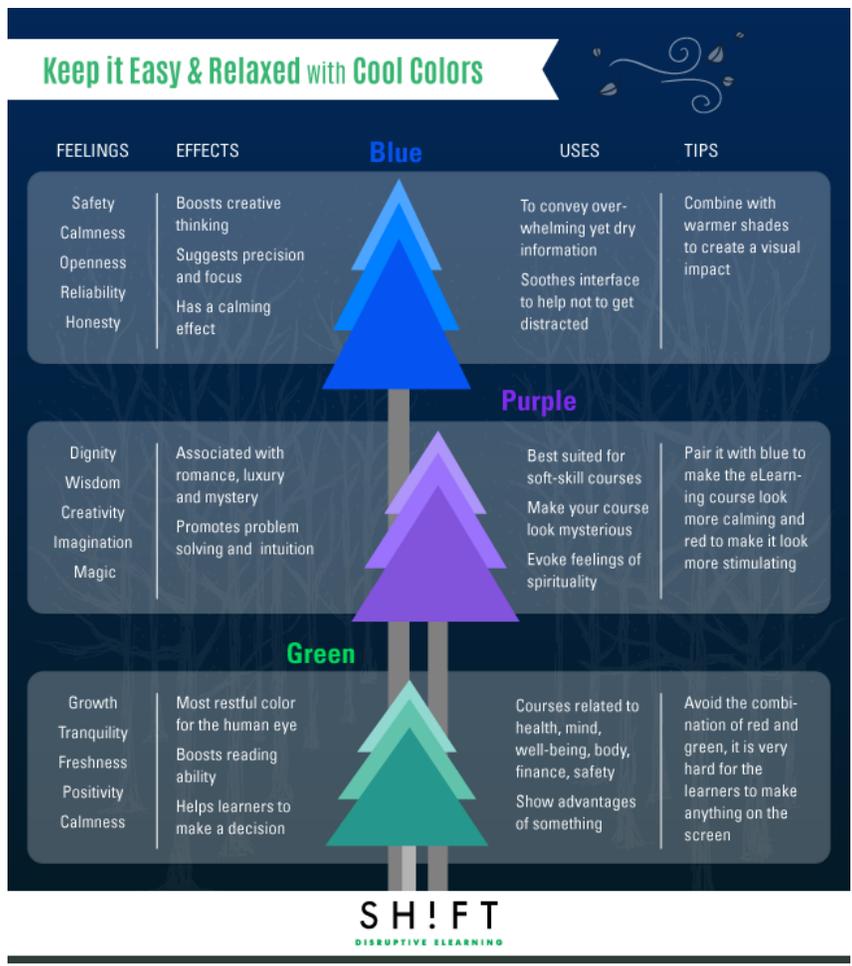
Note: This figure shows the feelings and behavioral changes individuals have when

spaces are painted a specific color. This figure provides a visual and detail to each cool

color and the direct feeling individuals feel.

Appendix D

Email to Participants

Hello Students Name,

My name is Beccah Maley and I am a Graduate student in Eastern Illinois' Student Affairs program.

I am completing my research over effects of social distanced space on students' study habits. I was hoping you would be interested in discussing your experience about your locations for studying and the changes you have noticed between Fall of 2020 and last year.

If you would be interested in participating, please let me know and I can send a Doodle with dates and times. We will be meeting over Zoom for our discussions.

Hope to hear from you,

Beccah Maley

Appendix E

Interview Protocol

Introductory Script

1. The interviewer will thank the participants for their time and consideration to be a part of the study.

2. The interviewer will provide the participant with the informed consent and will provide the definition of informed consent.

3. The interviewer will then ask if the participant has any questions regarding this or the study.

4. The interviewer will ask for permission to take a video and audio recording of this interview via Zoom.

Introductory Questions

The following questions are to be used to gather demographic information about all the participants in the study.

1. What name would you prefer to be called in the study?

2. How do you identify racially?

3. What gender do you identify with?

4. How old are you?

5. What is your marital status?

6. Do you have any children?

7. Where do you consider home?

8. Are you a current resident?

9. Are you an undergraduate?

10. How many class credit hours are you enrolled in this semester?

11. Are you currently employed? If so, where and how many hours per week do you

work?

General Questions

Previous Experience

1. What made you choose to live on campus for a second year?

    a. Can you tell me more about your residence community?

2. Are you involved extracurricular on campus?

3. What kind of academic student are you?

    a. How many days during the week do you study?

    b. How long do you study in a single session?

    c. What times do you typically study during the day/week?

4. Tell me about your academic experience at this university. Starting with the first

    year.

    a. What was your major when you started school? Did you ever change

        majors?

        a. In the last two years did the core amount of your classes change

            locations across campus or virtually?

        b.   Did the possible locations of your classes, did it change the

            location of where you studied?

        c. Did the pandemic change the location of where you studied?

5. What are some key impacts do you feel influences your experience in these

    locations?

Designing the Space: Guided Questions

6. Where on campus do you find yourself most academically productive?

    a. What are key impacts do you feel influences your experience in these locations?

        a. Are there any positives?

        b.   Are there any negatives?

    b. What is offered in this space?

7. How do you like to study?

    a. Can you tell me how you like your lighting to be while studying?

    b. Can you tell me how you like the temperature to be while you are studying?

    c. What resources do you need?

        a. Human assistance- do you prefer having access to employees of that location to assist you?

            1. Do you prefer a space that is social and typically caters to people you do not know?

            2. Do you prefer a space that is social that typically has your friends there?

            3. How do you feel about spaces that provides privacy?

            4. How do you feel about spaces that provides solidarity?

        b.   Technology- do you need access to technology?

            1. If yes, what is that you require? (outlets, printers, computers, smart boards, etc.)

      c. Availability- How important is the hours available to you? If so,

        what times do you prefer this location to be open?

8. If you could make any changes to that learning space what would it be? (the

   researcher will focus on follow up questions on "why")

     a. What are some of the characteristics that you feel stands out in that space?

9. Due to COVID-19, has this affected your decision on locations for where you

   study now?

     a. How do you feel about this location being socially distanced?

     b. The CDC guidelines suggests a 6-foot distance between people, at what

        distance do you find discomfort. If in an enclosed room, 50-foot square,

        how many people is too many people?

     c. During a pandemic, how do you feel when you interact with others while

        you are studying?

     d. What major observations do you see and feel when you look back on last

        year to this year?

10. Is there anything you would like to add to this study?

Appendix F

Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

A Qualitative Study of Student-Centered Learning Spaces During a Pandemic

You are invited to participate in a research study conducted by Rebeccah Maley and Dr. Heather Webb from the Department of Counseling and Student Development at Eastern Illinois University. Your participation in this study is entirely voluntary. Please ask questions about anything you do not understand before deciding whether to participate.

You have been asked to participate in this study because you have been identified as a second year, live on student during the 2020-2021 academic year.

PURPOSE OF THE STUDY

The purpose of the proposed study is to investigate the perceptions of live on students' in study spaces located on campus grounds at a public, 4-year, rural Midwestern institution and the alterations made due to COVID-19.

PROCEDURES

If you volunteer to participate in this study, you will be asked to: 1. Answer demographic questions. 2. Agree to the Zoom meeting that will be recording video and audio during the interview. 3. Answering several open-ended questions about your experience in spring 2020 in outside academic spaces 4. Answering guided questions regarding the design of the space you have inhabited during study hours.

Your answers will be collected in an individual, private meeting set up between yourself and Rebeccah Maley. The interview will be conducted over Zoom.

CONFIDENTIALITY

Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by the principle researcher who will have complete ownership of all information shared by the participants. Only pertinent findings of the research will be shared with the thesis committee members. Questions will be asked within an individual meeting. Confidentiality will be asked of all members who participate as well as the researcher.

The researcher will be the only person who will have access to the video files of the interview. All interviews will be transcribed, and the original tapes will be destroyed after the approval of the master's thesis by the committee members.

PARTICIPATION AND WITHDRAW

Participation in this research study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University or any other organization sponsoring this research project. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind or loss of benefits of services to which you are otherwise entitled.

You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.

POTENTIAL RISKS AND DISCOMFORMTS

As a volunteer, you agree to any potential discomfort when discussing personal views within the interview. The researcher will provide an open and safe forum, to the best of his ability. By agreeing to participate in this study, you are aware of the potential for discomfort with sharing ideas and feelings about your personal experience with recruitment. Additionally, there will be no personal repercussion if you share information with the researcher about potential recruitment infractions or other punishable information.

POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY

As a participant in this study, you will not directly benefit from participating in this study. However, the results of this study will provide many benefits to universities for future use. This research will be valuable to Universities and Colleges who are looking to make an educated decision involving facility updates. The intent of this study to help bring to light some focus area's for future researchers to investigate in relation to study habits and facility design. **RIGHTS OF RESEARCH SUBJECTS**

If you have any questions or concern about the treatment of human participants in this study, you may call or write:

Eastern Illinois University

600 Lincoln Ave.

Charleston, IL 61920

Phone: (217)-581-8576

Email: eiuirb@eiu.edu

You will be given the opportunity to discuss any questions about your rights as a research subject within a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

I voluntarily agree to participate in this study. I understand that I am free to withdraw my consent and discontinue my participation at any time. I have been given a copy of this form. _____ Printed Name of Participant

_____ Signature of Participant _____/ 2020 Date Signed