

SENSE OF PLACE AND SOCIAL CAPITAL IN  
COMMUNITY CENTERS: THE ROLE OF THE  
PHYSICAL ENVIRONMENT

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the Faculty of the Graduate School  
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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

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by  
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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

SENSE OF PLACE AND SOCIAL CAPITAL IN  
COMMUNITY CENTERS: THE ROLE OF THE  
PHYSICAL ENVIRONMENT

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and hereby certify that, in their opinion, it is worthy of acceptance.

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Emeritus Professor Stephen Jeanetta

## **DEDICATION**

I dedicate this dissertation to my dearest parents. You have been my most fervent champions and supporters since my first steps and have helped me realize my potential. For the innumerable sacrifices you have made over the years, I can't thank you enough. My sister, Shilpa, you have, through the years, put up with me and let me shadow you around. I have learned so much from you. You make me laugh and keep me grounded. My spouse Irfan, your advice, concern, and encouragement over the last 25 years cannot be understated. You truly are my partner and most ardent friend. To my older son, Kazim, you have matured so much these last few years. May your thirst for knowledge take you on beautiful journeys. To my little one, Saaqib, your bubbly and vivacious personality has kept me cheerful throughout this process. Keep it going, my Messi!!

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## LIST OF ABBREVIATIONS

PA	Place Attachment
PD	Place Dependence
PI	Place Identity
PS	Place Satisfaction
N	Neighboring
SC	Social Capital
SOC	Sense of Community
SOP	Sense of Place
SN	Social Networks

SENSE OF PLACE AND SOCIAL CAPITAL IN COMMUNITY CENTERS:  
THE ROLE OF THE PHYSICAL ENVIRONMENT

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**ABSTRACT**

While previous studies address the social viability of community centers, research has been scarce on the physical design and spatial quality of these "third places" contributing to social factors. Hence, this study explored how the physical environment of an essential third place—community centers—fostered the feelings of connectedness to place and the development of social capital for its users. Four research questions guided this study: (1) What design features attract patrons to the community center and why? (2) How does the environment of the community center support the psychological processes of place identity, place attachment, place dependence, and place satisfaction? (3) How does the environment of the community centers support the ways in which users develop a sense of community, social networks, neighboring, trust, reciprocity, and cooperation? (4) What is the relationship of the process of developing satisfaction of place to the process of developing social capital in the context of the physical environment of community centers? For this study, sense of community, social networks, and neighboring were considered the dimensions of social capital. The dimensions for sense of place were place identity, place attachment, place dependence, and place satisfaction.

Conducted in two regional community centers in a diverse metropolitan area of a southern state, this qualitative multi-case study included 34 semi-structured interviews,

observations, and photographic documentation as methods. Participants were primarily female, African Americans, and over 55, providing unique perspectives and adding depth and richness to the study.

Results showed that physical attributes influence place identity, place attachment, place satisfaction, and sense of community. Aspects of cleanliness, safety and security, openness and transparency, natural lighting, adequate spaces, and furniture and fixtures were essential considerations for users. Physical and social factors were inextricably linked. Place attachment was related to all dimensions of social capital, and sense of community was related to all dimensions of sense of place. Implications of findings contribute to the design of community centers and the literature on African American seniors' participation. The study brought to the forefront how the design and quality of the built environment support the development of social capital and sense of place.

**Keywords:** Community Centers, design, physical environment, sense of place, spatial quality, social capital, African American seniors, place attachment, place dependence, place identity, place satisfaction, sense of community, social networks, and neighboring.

## CHAPTER 1 – INTRODUCTION

### Background

Community centers play an essential role in community building; they bring people of different age groups, socioeconomic statuses, and genders together for health and education-related services and after-school programs. They socially connect people through recreational activities (Hickman, 2013; Peterson, 2015). Ray Oldenburg (1999) refers to community centers and other informal gathering places such as cafes, gardens, post offices, libraries, and recreational facilities as the “third place,” with the first place being home and the second place being work. These third places increase social interaction and provide a place away from work and home to relax and break the rigor of the home and work schedule (Oldenburg, 1999). Community centers encourage diverse groups to network with each other occasionally or repeatedly through structured interactions that can become more profound and meaningful over time, leading to deeper relationships (Peterson, 2015). Studies by Mazumdar et al. (2017) and Medved (2016) highlight community centers as catalysts for social interaction, cohesion, and capital.

Social capital (SC) is the connections people make, the networks they develop, and the relationship of trustworthiness fostered by these associations (Putnam, 2000). There are many positive contributions of social capital, economic affluence, the general well-being of individuals and the neighborhood, civic engagement, and efficient administration. Socially connected people can develop and maintain better relationships; they have increased tolerance and empathy for others. The networks formed due to social capital also enable people to connect and improve economic prospects (Putnam 2000).

According to Kingsley and Townsend (2006), social capital between individuals in communities results in “material and social benefits such as social support and mobility” (p. 526). According to Forrest and Kearns (2001), social capital is not “exclusively spatial” (p. 2137), but “it tends to take on a strong sense of local space, albeit with ambiguous and fluid boundaries” (p. 2137). Hence, in trying to understand the “spatial component of social processes” (p. 555), it is imperative to recognize “people’s beliefs about, emotions for, and behaviors in a place” (Jorgensen, 2010, p. 555). Sense of place (SOP) describes the relationship of people with places they visit and interact in (Jorgensen, 2010, p. 555); in other words, “a multidimensional construct comprising cognitive, affective, and behavioral components” (Jorgensen, 2010, p. 556).

As a building typology, community centers provide programs and services for people. They often have a variety of amenities, such as a fitness center, studios, a gymnasium, a swimming pool with lockers, multipurpose rooms, and a walking track. These centers also offer a wide range of programs focusing on health and wellness for all age groups and sometimes provide after-school programming for children of the surrounding community. Through both their structured programming and casual interactions supported by spatial patterns, these centers facilitate and create opportunities for communication among their users. The physical existence of community centers sets a tone for the surrounding neighborhoods. As neighborhoods become increasingly diverse, community centers act as a unifying presence, drawing in people from different socioeconomic backgrounds, races, ethnicities, and cultures to use the facility. Its users identify with the structure; to many, it provides a safety net. While the benefits of community centers have been widely discussed in terms of programs and services, there

is limited evidence that highlights the role of the built environment and the importance of the facility's design, quality, and architecture in increasing users' sense of place and social capital. Research in this area has instead focused on neighborhood characteristics of safety and accessibility to community centers by residents. Hence, this study aims to understand the role of physical attributes of the community center in contributing to sense of place and social capital for its users. The qualitative research approach utilizes an adapted sense of place and social capital framework developed by Acedo et al. (2017). Through semi-structured interviews, observations, and photographic documentation, this study explores users' perspectives of two community centers located in a Southern city in the United States to describe the ways in which the physical attributes of community centers impact users' sense of place and social capital.

### **Statement of the Problem**

The advent of industrialization and urbanization has led to a decrease in place-based communities. The decline in place-based communities has been exacerbated by globalization, which has fast-tracked the reduction of the localized community. People are connected less with their immediate neighbors and community due to the ease of movement. There is a growing sense of isolation among people. Social networks, neighboring, and trust among people have declined (Putnam, 2000). Also, since the early 1980s, the United States has experienced a steady decline in civic, political, and religious engagement (Jones, 2021; Putnam, 2000). Informal engagement (Marsden & Srivastava, 2012) and engagement in the workplace have also experienced significant waning (Putnam, 2000). In his groundbreaking book *Bowling Alone*, Putnam (2000) examined formal and informal engagements and noted a drop in memberships to national

organizations, going so far as to point out that very few of these organizations have local chapters where members can meet each other and socially interact. In addition, he observed a drop in memberships to Parent Teacher Associations and churches. A 2021 Gallup poll highlighted how, for the first time in eight decades, American church membership dipped to below 50% (Jones, 2021). According to surveys and studies reviewed by Putnam (2000), even “informal socialization” (p. 107), which included activities such as visiting friends, going to restaurants and bars, attending parties, and engaging in conversations, has seen a decline. The General Social Survey data between 1974-2008 showed a downward trend in neighborhood socialization and a drop in the frequency of visits to bars and taverns (Marsden & Srivastava, 2012). This decline in formal and informal engagement has been linked to a decline in social capital (Putnam, 2000). At the same time, the loss of local communities has led to a loss of sense of place. Studies have highlighted that a feeling of belonging and place attachment contributes to the well-being of children and improved mental health among adults (Grimshaw & Mates, 2021; Williams & Kitchen, 2012). Bridger and Alter (2006) opine that social networks enable people to interact and accomplish “specific tasks and pursue various interests” (p. 14). Being socially connected is crucial for one’s well-being and aids in creating a sense of community (Weijts-Perree et al., 2017). Manzo and Perkins (2006) explain that place attachment, place identity, and sense of community are “critical parts of person-environment transactions” (p. 347) that enable community development and that attachment to places leads to action and motivates people to protect places that are important to them. Involvement and participation by individuals in formal and informal groups positively affect the individual and the community, which in turn helps create

relationships that generate productive and successful activities (Portes, 1988; Putnam, 2000; Western et al., 2005).

### **Purpose of the Research**

Community centers form important places for patrons to fulfill physical goals and achieve overall well-being. The primary purpose of the research is to understand the influence of the community center's built environment on the development of sense of place and the generation of social capital among users. The study also seeks to understand which physical attributes of the environment and spaces users most appreciate and utilize. The conclusions from the study aim to guide decision-makers and designers in designing future community centers. In addition, this study also seeks to clarify the relationship between the dimensions of social capital and sense of place, adding to the growing body of literature in the field of environment and behavior.

### **Significance of the Study**

This qualitative multi-case study was undertaken to understand how a community center's built environment can create a sense of place and social capital. There is a scarcity of literature that connects the domains of social capital, sense of place, and community center's built environment. Existing literature has highlighted community centers as necessary “third places” for users to provide social connections and physical activity opportunities. This study aims to form connections and linkages between the physical setting of the community center and the outcomes of sense of place and social capital, thereby adding to the body of knowledge. Finding these connections can give planners and designers a road map for designing future community centers. Conducted towards the end of the restrictions of the COVID-19 pandemic, the findings of this study

provide insight into users' perspectives of the physical environment and how they utilize the facilities. These findings highlight which physical attributes are most important to users, contribute to SC and SOP, and should be prioritized in the planning process.

Several older community centers need renovations, and the results from this study can be used to improve the physical space, which would benefit users' sense of place and increase social capital. The theoretical connections developed in this study can become "the vehicle for examining other cases." (Yin, 2009, p. 44).

### **Roadmap of the Dissertation Chapters**

This study explores an important aspect of environment and behavior research to understand how the physical environment of an essential third place can build sense of place and foster social capital for its users.

Chapter 2 begins with the development of a modified theoretical framework adapted from Acedo et al. (2017). The framework helps guide the examination of the available literature on community centers, sense of place, social capital, and aspects of the physical environment that stakeholders find essential. The literature frames the argument for the community center as an important third place. The chapter then proceeds to examine available literature on place identity, place attachment, place dependence, and place satisfaction dimensions of sense of place. The literature review also explores social capital dimensions of sense of community, social networks, and neighboring. Available literature connecting the dimensions of the two constructs is analyzed and discussed, which leads to the development of a new diagram connecting sense of place, social capital, and place.

Chapter 3 opens with the stated research questions and discusses the methods adopted to study sense of place and social capital. The chapter highlights the research setting and the sites selected for this multi-case study approach. The data collection protocol is laid out in detail and brings forward the different techniques the study used to collect data and answer the research questions. The chapter discusses data analysis and concludes with the researcher's position and the study's validity.

Chapter 4 highlights the study's findings and the themes developed. Related codes are grouped under four broad themes linked to place and dimensions of sense of place and social capital.

Chapter 5 includes a detailed discussion of the dimensions of sense of place and social capital gleaned from the research, tying it back to existing literature to answer the research questions. A new theoretical model is presented along with theoretical and practical contributions. The chapter concludes with limitations and ideas for future research.

## CHAPTER 2 - LITERATURE REVIEW

The literature review uses a theoretical framework to guide the study by discussing the concepts of place, sense of place, and social capital. Thus, it begins with a presentation of the theoretical framework followed by a detailed discussion of the community center as “place” and the concepts of sense of place and social capital. It also describes the importance of the built environment and considers characteristics that can affect perceptions of a place. Dimensions of sense of place (SOP) and social capital (SC) are highlighted and discussed in detail. The literature review concludes by discussing the connections between SOP and SC.

### **Theoretical Framework**

Developing a robust theory is an essential step in case study design (Groat & Wang, 2002; Yin, 2009). As seen in Figure 1, the framework for this study was adapted from Acedo et al. (2017). The framework leans on the importance of “place” as Scannell and Gifford (2010) discussed in their tripartite framework of place attachment, and relies on the connection between the concept of SOP and SC made by (Acedo et al., 2017), where they initially connected the dimensions of SOP and SC at the non-spatial level. The framework uses four dimensions of sense of place: place attachment, place identity, place dependence, proposed by Jorgensen and Stedman (2001), and place satisfaction, proposed by Stedman (2003). For social capital, this study focuses on the informal dimensions of sense of community and neighboring proposed by Perkins and Long (2002) and social networks and cooperation proposed by Putnam (2000).

In developing the framework for SOP and SC at the spatial level (city scale), Acedo et al. (2017) hypothesized that individuals have connections (SOP) to

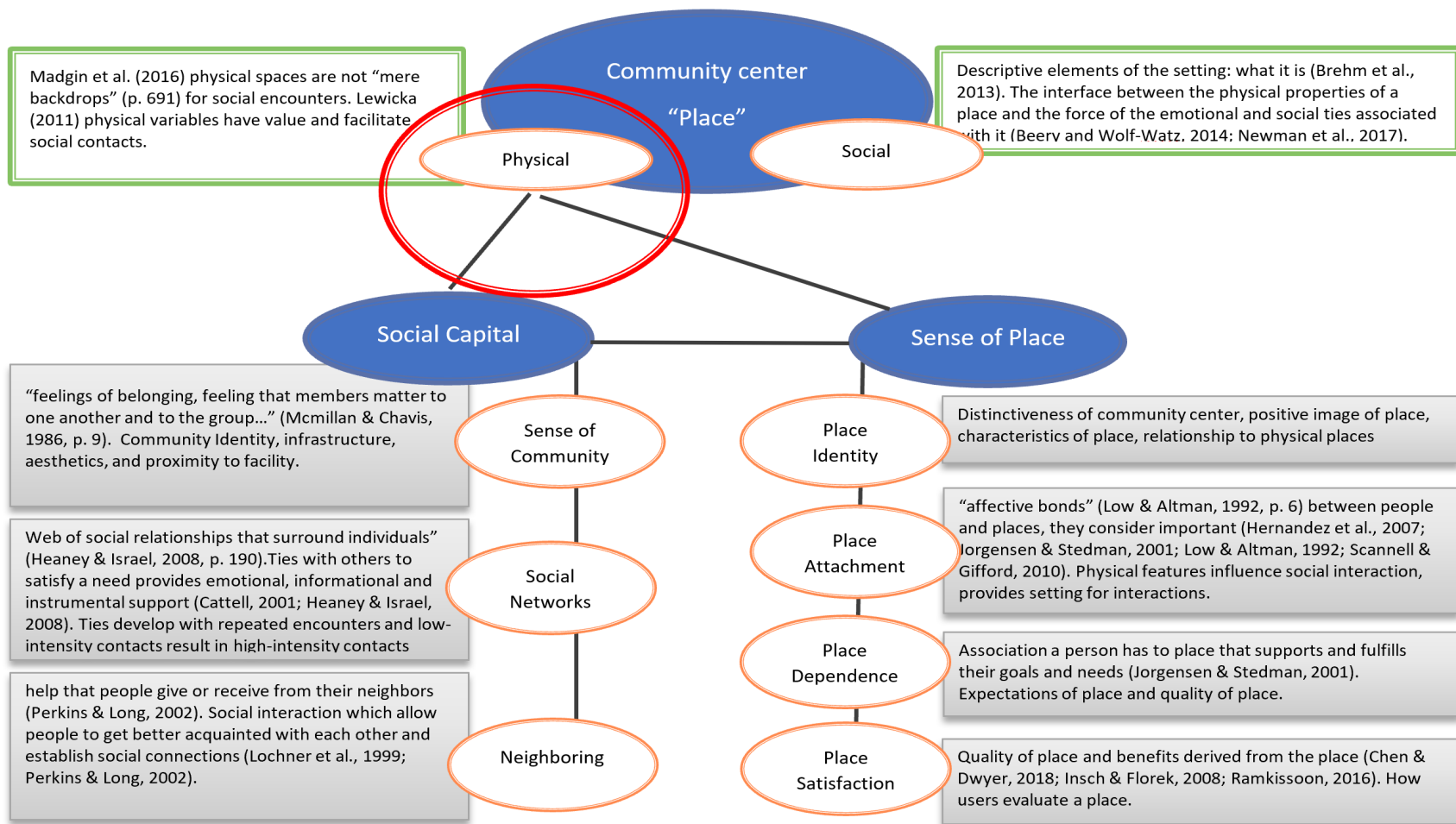
geographical areas that are meaningful to them. In those geographical areas, they develop social relations (SC). Their framework recognized “human perception and organization of social interactions fostered through geographic place(s)” (p. 504). Scannell and Gifford (2010) identify “place” as the most critical dimension of their tripartite framework, where place is divided into social and physical place. According to them, research on place has focussed on the social aspect as “people are attached to places that facilitate social relationships” (p. 4). However, they postulated that a place's physical features are essential, and several places are important to people, ranging from natural to built environments.

Furthermore, according to Scannell and Gifford (2010), the concept of “community of place” (p. 4), where social ties are rooted in physical places such as neighborhoods and coffee shops, forms an essential aspect of attachment to place. The importance of the physical place as a venue for developing social relations has been furthered by Lewicka (2011). Hence, the place (Figure 1), the community center, comprises two parts: the physical and the social.

The theoretical framework developed for this study provided the researcher with a “blueprint” (p. 36) that served as a guide to collecting relevant data for the research and eventually aided with data analysis (Yin, 2009).

**Figure 1**

*Theoretical Framework Developed for the Study Adapted from Acedo et al. (2017)*



## **Community Center – “Place”**

Community centers are considered an essential part of the communities they serve (Colistra et al., 2019). They help minorities, disadvantaged groups, women, children, and older adults, to name a few. They are also known to bring disenfranchised groups together to give them a sense of belonging and engage them in productive activity. Many community centers provide health and education services and professional training (Colistra et al., 2017; Glover, 2004; Taylor-Harris & Zhan, 2011). Community centers' contribution to reducing poverty by promoting positive interaction, cohesion, and social justice has been emphasized by the United Nations (Estes, 1997).

The history of community centers can be traced back to settlement houses, field houses, and evening schools. As early as 1889, the Hull House in Chicago served as an educational settlement conceived as a means of “uplift” (p. 227). The inspiration for early community centers in Rochester, New York, came from the social centers of Chicago, which led to the experiment of using school buildings to house these facilities. Meanwhile, in Chicago, the concept of vacation schools emerged, and schools were opened as summer recreation centers. These centers engaged in chorus work, lectures, activities, and stories for young people. Around 1909, the interest in social centers began to grow. The centers focused on recreational and educational activities such as music, library, gymnasium activities, movies, and drama, among other activities and programs. Engaging children and creating secure places for them to play was the primary objective, with programs for adults coming second (Stephan, 1932). In contemporary society, the social center is referred to as the community center. Other nomenclature interchangeable with the community center includes recreation, youth, senior, community health, and

leisure centers. Many of these centers have moved beyond being places specifically for physical activity to focus on social environments and networks (Colistra et al., 2017; Glover, 2004; Jones et al., 2013).

Glover (2004) conducted a qualitative study at a community center in an at-risk neighborhood in southwestern Ontario, Canada. The study was undertaken to “understand how active participation shaped research participants’ perceptions about citizenship” (p. 63) in community centers in relation to “citizenship and social capital theory” (p. 63). The study involved in-depth interviews with seven community center members who were also volunteers at the center. He found that community centers play an important role in contributing to citizenship and that social networks have value. This supports the evidence that community centers “encourage the production of social capital through both formal and informal leisure activities” (Glover, 2004).

In their qualitative study “exploring relationship building in the context of community centers” (p. 40), Colistra et al. (2017) found a positive relationship between the use of leisure spaces (community centers) and social interaction. Fourteen African American users who had participated in programs at the center for 3-20 years contributed to the study via individual and group interviews. Participants highlighted the role of the community center in relationship building through participation in programs and events (Colistra et al., 2017).

Another study found that socially disadvantaged adults who experienced poor health improved their health and well-being by participating in group-based activities in community centers (Jones et al., 2013). In a study of low-income households in Boston, Curley (2010) found neighborhood resources such as recreation centers, parks, and

childcare centers predicted social capital. In another study on relationship building in community centers, Colistra et al. (2019) found that “shared identities; support, reciprocity, and trust; and recurring programs” (p.1) helped in building meaningful relationships contributing to social capital. Interactions in the community center provided social support and helped members cope with everyday life's stress and challenges. Interactions with others also became a resource and provided access to previously unavailable information. All these opportunities contributed to an increase in health and well-being (Colistra et al., 2017).

The current research attempts to understand how the elements of the community center's physical environment relate to its users' sense of place and social capital. Limited literature has focused on the physical aspects of the built environment; hence, the section below discusses the importance of the physical attributes of the built environment. Tuan (1977) states that the built environment affects the people who occupy and use it and “clarifies social roles and relations” (p. 102). According to Gutman (1976), the role of the built environment is evident through symbols representing ideas and beliefs. The three-dimensional architectonic space, which helps create mood and behavior, is a unique aspect of the building. Quality, material, form, and volume contribute to the architectonic space and play an essential role in social construction.

In a study commissioned by the Commission for Architecture and the Built Environment (CABE) and the Arts and Humanities Research Council (AHRC) in the United Kingdom to provide a basis for examining how people relate to the places where they live, the project used the notion of beauty to generate debate about the quality of the local environment. The study was conducted at three levels: at the individual level were

interviews with six people; at the communal level was a group discussion with 60 members of the public in the Sheffield area; and at the national level was a survey of 1043 people across England. The study found that people enjoyed talking about beauty. Most participants found that there was value in promoting beauty. People mainly associate beauty with the natural environment. Even so, around 41% of people surveyed associated beauty with buildings and parks, and they felt beauty in buildings was important for civic pride and bringing people into the area. In the same survey, about 65% of respondents had experienced beauty in buildings and parks. Respondents associated lack of beauty with deprivation and wanted more beauty in their neighborhoods. They felt that by improving a place by including its buildings, events, and upkeep, people would find places beautiful and respect and care for them. In the qualitative part of this study, people spoke of the importance of natural light in buildings and took issue with the idea of ‘blandness’ in the architecture of buildings. For instance, respondents felt that it was better for a building to be striking (even though not to everyone’s taste) and make a statement than to be boring and insignificant (MORI, 2010).

In studies on the workplace, education, and healthcare environments, several elements of the physical environment that add to improved health, education, and business outcomes have come to the forefront. The use of natural ventilation and views of the outside has been known to reduce the time that it takes for patients to recover in healthcare settings ("The Value of Good Design," 2002) and helps reduce anxiety (Rice et al., 2008). Having windows and a view of the outside enhances “task efficiency” (Brand, 2009, p. 2), shields against the negative impacts of stress in the workplace

(Leather et al., 1998), and increases the attention span of students in school environments ("The Value of Good Design," 2002). Lighting, furniture type, and placement can affect social interaction in spaces. Configuration and the creation of smaller spaces for group interactions can help with educational outcomes (Moore & Lackney, 1994) and increase collaboration among people in work environments (Brand, 2009). Textures (walls, floors, and furnishing) and natural and artificial lighting also affect feelings (Steele, 1981). In their VR experiment on the perception of spaciousness of an interior room, Wang et al. (2020) found that texture affected users' perception of room size in smaller spaces, while in larger spaces, the effect of texture focused more on aesthetic evaluation. According to Baum and Valins (1977), design features can positively or negatively affect interaction among people. Features such as color, the complexity of a space, and elements such as doors and partitions, among others, can facilitate or hinder group interaction. Physical features like color "affect feelings and activities" (Steele, 1981, p. 15). Warm colors provide stimulation, while cold colors typically have a calming effect on people (Steele, 1981). Lewicka (2011) contends that the number of physical features that affect attachment is extensive, so a study should either be very selective about the features under consideration using a "common sense" (p.217) approach or should consider a broad range and include almost "all possible physical features" (p. 217).

### **Sense of Place (SOP)**

A sense of place is the "pattern of reactions" (Steele, 1981, p. 12) that a physical setting and its social context promote for its users (Steele, 1981). It is an "interactional concept" (Steele, 1981, p. 12) and is critical to the quality of the environment (Najafi & Shariff, 2011). Relph (1976) explains it as a "direct and genuine experience" (p. 65) of

the setting and “a profound and unselfconscious identity with place” (p. 65). Williams and Stewart (1998) discuss sense of place as a multifaceted concept that can form due to emotional bonding with a place over time and with familiarity with a place. In addition, Arefi (2004) opines that distinct qualities of a place, identifiable geographic boundaries, “sense of belonging, collective meaning, authenticity” (Arefi, 2004, p. 115), and the “cultural, historical, and spatial context” (Williams & Stewart, 1998, p. 19) within which people form bonds, associate meanings and engage in social interactions are vital to a sense of place (Williams & Stewart, 1998).

The physical setting, the meaning that people associate with the physical setting, their perceptions, experiences, and interactions in the physical space, as well as their behaviors and outcomes from the setting, are essential components for the development of SOP (Stedman, 2003; Steele, 1981; Williams & Stewart, 1998). Steele (1981) suggests that most places are merely settings until the user comes along “to complete the picture” (p. 18). Still, he also emphasizes that settings with “strong, distinct qualities” (p. 53) are likelier than bland settings to stimulate a sense of place. The importance of the quality of the setting was also emphasized in the study of three Vancouver towns by Dale et al. (2008), who found that dominant environments “encourage people to linger and interact with each other” (p. 279), generating a sense of place. “Strong location, boundaries, geographical distinctiveness, scale and proportion, and rich identity and imagery” (p. 53) are some of the physical features that can aid in the generation of a sense of place (Steele, 1981).

Several studies have used place attachment, place identity, and place dependence as dimensions of sense of place (Acedo et al., 2017; Azizi & Shekar, 2018; Jorgensen &

Stedman, 2001; Stedman, 2003), and some studies have, in addition, used place satisfaction as a dimension of SOP (Stedman, 2003). Jorgensen and Stedman (2001) used attitude theory to examine the multidimensionality of SOP and predict its dimensions. They opined that attitude theory provided a “basis for conceiving of SOP as encompassing cognitive, affective and conative reactions” (p. 244). In their study of lakeshore property owners, they considered place identity as the cognitive, place attachment as the affective, and place dependence as the conative dimensions of SOP. In another study on the contribution of the physical environment to sense of place, Stedman (2003) considered place satisfaction as a dimension of SOP, as people may be satisfied with a place but not necessarily develop a bond with a place. This study adopts the dimensions of SOP based on Jorgensen and Stedman (2001) and Stedman (2003). It considers place identity, place attachment, place dependence, and place satisfaction dimensions of SOP. Table 1 highlights the dimensions of SOP along with key attributes, which are discussed in detail in the following sections.

**Table 1**

*Attributes of the Dimensions of SOP*

SOP Dimensions	Key Words/ Attributes
Place Identity (PI)	relationship to physical places and meanings attributed to place (Lewicka, 2008; Peng et al., 2020). “subjective social construct based on objective physical settings” (Peng et al., 2020, p. 4) identity of the individual established in “relation to the physical environment” (Proshansky, 1978, p. 155) “unconscious ideas, beliefs, preferences, feelings, values, goals and behavioral tendencies and skills relevant to this environment” (p. 155)
Place Attachment (PA)	“affective bonds” (Low & Altman, 1992, p. 6)

	between people and places, they consider important (Hernandez et al., 2007; Jorgensen & Stedman, 2001; Low & Altman, 1992; Scannell & Gifford, 2010)
Place Dependence (PD)	association a person has to place that supports and fulfills their goals and needs (Jorgensen & Stedman, 2001) factors- place expectation, related to aspirations users have for themselves and place quality related to physical attributes of a place. (Alrobaee & Al-Kinani, 2019) PD- based on direct dependence, termed “functional attachment” (p. 10078), related to experiences and activities. Indirect dependence - related to “well-being goals” (Gurney et al., 2017, p. 10078)
Place Satisfaction (PS)	quality of place and benefits derived from the place (Chen & Dwyer, 2018; Insch & Florek, 2008; Ramkissoon, 2016) “evaluate and judge” a place (Chen & Dwyer, 2018)

### ***Place Identity (PI)***

Proshansky (1978), one of the earlier scholars on the concept of identity and place identity, defined place identity as “those dimensions of self that defines the individual’s personal identity in relation to the physical environment” (p. 155) and is based on “a complex patterns of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals and behavioral tendencies and skills relevant to this environment” (p. 155). Lewicka (2008) and Peng et al. (2020) discussed place identity as the relationship people have to physical places and the meanings they attribute to a place. According to Peng et al. (2020), PI is a “subjective social construct based on objective physical settings” (p. 4). Furthermore, Peng et al. (2020) state that direct or indirect contact with a place adds to people's views of the place, and people develop an identity with the place based on not only the physical features of the place but also the meanings and memories associated with the place.

According to Twigger-Ross and Uzzell (1996), place is considered to be an “active part of the construction of a person’s identity” (p. 207). Proshansky (1978) states

that the “cognitive-descriptive” (p. 157) dimension of place identity places particular emphasis on the physical characteristics of the environment, and it includes not only images and memories of places but also conceptions about the physical attributes (size, distance, color, etc.). Studies have highlighted the importance of the physical characteristics of a place in generating a place's identity. In their research on place identity and well-being, Knez et al. (2018) found that users had better place identity with areas with more natural elements and that well-being increased among those with greater place identity. Their study was conducted in Gothenburg, Sweden, and involved 1347 respondents living near six urban green spaces. A postal survey was sent to randomly selected households, and participants were requested to complete a questionnaire that included measures of place identity and well-being. Knez et al. (2018) used established scales to measure participants' perceptions of naturalness, place identity, and well-being. Their findings suggested that the emotional component of place identity, characterized by attachment and belonging, played a significant role in the relationship between naturalness and well-being. The cognitive component, involving processes of coherence and reflection, also contributed to place identity, but to a lesser extent (Knez et al., 2018).

In their study on sustainable communities, Dale et al. (2008) examined three case studies from Canadian communities to explore the concept of sense of place and its role in sustainable community development. The case studies demonstrated that communities with a strong sense of place were likelier to engage in sustainable development initiatives. Sense of place was shaped by the environment's physical characteristics and the community's cultural identity. They found that the physical space in which a

community was located influenced its identity and sense of place. They also found that communities with dominant landscapes or defining geographical characteristics have “inherently a stronger, faster-forming identity with place than communities in more monochromatic landscapes” (p. 278).

In his research article, Ho (2024) discussed that emergent place identity was achieved by restoring a rural house in the Hong Kong countryside by creating a bond between the villagers and the place. The restoration of this house (Yeung House) preserved its architectural features and symbolized the shift to modernized dwellings, which embedded the social memories of the locals (Yeungs’). According to the author, the restored Yeung House's distinctiveness and the front yard's continuity contributed to a new place identity (Ho, 2024). In another study, Gospodini (2004) discussed the relationship between built heritage, cultural identity, and urban development in European cities, highlighting the role of innovative design in contributing to place identity. The author used the case study of Bilbao to support the argument that creative designs can be “an effective means of place identity” (p. 242) through the creation of new and “distinct urban landscapes and bringing together different social/ cultural/ economic groups” (Gospodini, 2004). In a study conducted on place identity in school settings, Marcouyeux and Fleury-Bahi (2011) found that place identity was higher when students perceived the high school’s image as more positive. The study also found that place identity was related to place dependence, as when students believed that their school satisfied their needs, in this case, their educational needs, they had a more significant place identity with the school (Marcouyeux & Fleury-Bahi, 2011).

Twigger-Ross and Uzzell (1996) discussed place identity based on Breakwell’s identity process theory and used the principles developed by Breakwell on place identity: distinctiveness, continuity, self-esteem, and self-efficacy. The current study will use these principles of place identity. Table 2 discusses the principles of place identity and potential connections to community centers.

**Table 2**

*Definitions of the Principles of Place Identity Based on Twigger-Ross and Uzzell (1996)*

Term	Definition	Potential Connections to Community Centers
Distinctiveness	The specific type of relationship that a person has to an environment/ area that is distinct from their relationship to other areas	The design of the community center is unique to my community and is a reflection of the community that I am a part of.
Continuity		The community center acts as a link to my community.
Place-referent continuity	Links to past actions and experiences	I feel I belong here as the physical environment echoes my connection to the community.
Place-congruent continuity	Characteristics of place	
Self-esteem	“positive evaluation of oneself or the group with which one identifies with” (p. 208)	Being in the community center makes me feel good about myself.
Self-efficacy	idea that an individual believes that they are capable of finishing tasks and meeting goals	I feel confident when I am in the community center and can achieve my goals.

***Place Attachment (PA)***

Place attachment is the “affective bonds” (p. 6) (Low & Altman, 1992) that are formed between people and the places that they regard as important (Hernandez et al.,

2007; Jorgensen & Stedman, 2001; Low & Altman, 1992; Scannell & Gifford, 2010) and is considered a multi-dimensional concept (Jorgensen & Stedman, 2001). Hidalgo and Hernandez (2001) posit that attachment to a setting or place tends to occur when people remain at a place for a longer duration and where there may be a level of comfort and safety.

The role of comfort, security, safety, and uniqueness of the environment in influencing place attachment in the Kuching Riverfront Promenade (KRP), a popular public space in Malaysia, has been explored by Karsonoa et al. (2016). Their mixed methods study found that the promenade was unique and had diverse activities, contributing to its popularity. The study also found that the promenade was perceived as a comfortable space with high-quality facilities and a clean environment. However, there were concerns about security and safety, particularly during weekends and public holidays when crimes increased. Despite the increase in crimes, visitors felt the variety of activities and the presence of tourist police contributed to a sense of security. Overall, the study concluded that uniqueness, comfort, security, and safety strongly impacted respondents' identification with the local environment and played an essential role in supporting their attachment to the place.

According to Waxman (2006), "When relationships develop between people and places, the result is a feeling of attachment" (p. 36). Scannell and Gifford (2010) theorize that the physical place is an essential component of place attachment. While studies have focused on the social aspect of place and the social interactions that develop in a place, Scannell and Gifford (2010) opine that "physical features of density, proximity, and the presence of amenities" (p.4) influence these social interactions.

Most studies concerning place attachment are conducted at the city, neighborhood, or home level. Lewicka (2011) states that the study of place attachment needs to include “other kinds of meaningful places” (p. 209), like second homes, sacred places, recreational settings, and workplaces. In their study on urban recreational spaces, Madgin et al. (2016) found that concerning place attachment, there exists a strong connection between physical spaces and social networks; “memories, meanings, and projections were often intimately connected to the physical look and feel of the spaces” (p. 691). The study also found that the physical environment played an essential role in the development of social relations. The physical structure provided the setting for these interactions and experiences to unfold. Morgan (2009) developed a theory of place attachment based on adults’ experiences of childhood places. The theory proposed that repeated interactions between people and the settings they use result in positive emotional connections leading to place attachment. Place has a “rich and active presence” (p. 10) that supports psychological development and well-being (Morgan, 2009). Morgan’s ideas can be applied to the current study on community centers; people have repeated interactions with the community center as they visit these centers regularly for exercise or classes. The contacts and the connections that the community center affords them could lead to positive emotional bonds. In her study of place attachment in coffee shops, Waxman (2006) developed a “place attachment model of the coffee shop” (p. 50), which included social and physical factors. Some social factors identified were opportunities to linger, feelings of ownership, trust and respect, productivity, opportunity to socialize, and support. Physical factors included cleanliness, adequate lighting, comfortable furniture, views, natural light, and appealing décor (Waxman, 2006). Since the coffee shop and

community center are third places, as postulated by Oldenburg (1999), some of these features can be applied to the community center to analyze the development of place attachment for community center users.

### ***Place Dependence (PD)***

Place dependence is a person's association with a place that supports and fulfills their goals and needs (Jorgensen & Stedman, 2001). Alrobaee and Al-Kinani (2019) propose two factors that influence place dependence: place expectation, related to aspirations that the users have for themselves, and place quality, which can be associated with the physical environment and attributes of a place that encompass spaces, materials, views of the outside, and green spaces provided. In their study, Casakin and Neikrug (2012) discussed the concept of place identity in relation to attachment, dependence, and neighborhood quality as perceived by elderly residents. The study focused on the preference of older individuals to age in place and the factors that influence their decision to remain in their neighborhoods. The study highlighted the importance of a vivacious neighborhood environment that supports continued activity, social interaction, and accessible services for successful aging in place. The study collected data from elderly residents living in well-maintained and declined neighborhoods in Ramat Gan and Bat Yam, Israel. The participants completed a questionnaire that assessed their place identity, place attachment, place dependence, and perceptions of place and service quality in their neighborhoods. Among other findings, the study indicated that place attachment and place dependence were higher in well-maintained neighborhoods. In contrast, no significant differences were found in place identity between well-maintained and

declined neighborhoods, suggesting that place quality matters in developing dependence on place.

Gurney et al. (2017) discuss place dependence based on direct and indirect dependence, where direct dependence, which they also termed “functional attachment” (p. 10078), is related to experiences and activities, and indirect dependence is related to “well-being goals” (p. 10078). According to Williams and Vaske (2003), a functional attachment to a setting suggests that place dependence involves a continued association with that setting as it supports and provides conditions for meeting needs and achieving desired goals. Users develop a functional attachment to community centers as they depend on the center for programs and services. In their study, Chen et al. (2022) examined the relationship between public open space in several Hong Kong communities and older people's well-being, explicitly focusing on neighborhood social cohesion and place dependence as mediators. Their study described place dependence as a two-stage psychological experience that older people develop when using public open spaces. It is influenced by familiarity with the surroundings and is primarily related to functional attachment to the current residence. Data for this study was collected through face-to-face surveys of 501 participants. Results of the study indicated that place dependence played a significant role in enhancing older people's well-being by strengthening their sense of autonomy and environmental mastery. Familiarity with the environment “facilitates the accumulation and exchange of community-specific information among residents, conducive to place dependence” (p. 9).

The current study will use the principles of place dependence as proposed by Alrobaee and Al-Kinani (2019) and Gurney et al. (2017). Table 3 discusses the principles of place dependence and potential connections to community centers.

**Table 3**

*Definitions of the Principles of Place Dependence Based on (Alrobaee & Al-Kinani, 2019)*

Term	Definition	Potential Connections to Community Centers
Place Expectation	Aspirations users have for themselves	The community center has adequate spaces and programs to allow me to participate in group activities or work out independently.
Place Quality	Physical attributes of the place	The physical space and elements of the community center building are up to standard.
Direct Dependence	Functional attachment-related to fulfillment of goals	I can fulfill my goals at the community center.
Indirect Dependence	Related to wellbeing	I feel good when I visit the community center.

***Place Satisfaction (PS)***

In the available literature, the concept of place satisfaction is related to the quality of the place and the benefits that can be derived from the place (Chen & Dwyer, 2018; Insch & Florek, 2008; Ramkissoon, 2016; Stedman, 2002). Satisfaction is based on how people “evaluate and judge” a place (Chen & Dwyer, 2018). Stedman (2002) contends that people are satisfied with a place when the place meets particular needs, including services provided, sociability, and physical needs. While place dependence is attachment

based on the degree to which a place supports the users' needs and goals, place satisfaction is a broader evaluation and "is strongly based on cognitive attributions made about the setting" (Stedman, 2002, p. 576). In their case study of the Çukurçayır neighborhood in Turkey, Özkan et al. (2019) assessed the satisfaction levels and attachment levels of residents. The authors found that the neighborhood's social and physical properties influenced place satisfaction. Their study found that the social properties of the neighborhood ranked higher than the physical properties in enabling place satisfaction. The physical factors influencing place satisfaction included walkability, recreational facilities, cleanliness, and existing green areas. (Özkan et al., 2019). In her paper, Beck (2009) discussed the importance of high-quality public spaces in contributing to people's quality of life. The author conducted a scoping study that analyzed 34 national datasets. The study found positive associations between "design quality, condition/maintenance, user experience, ecological quality, and functional qualities of public spaces with people's quality of life" (p. 246). The study found that maintenance of public facilities, safety, and comfort of public spaces had the most consistent and positive correlation with quality of life.

Chen and Dwyer (2018) postulated that place satisfaction is "the lowest level of people-place relationship" (p. 1029), as people could be satisfied with a place without having in-depth knowledge of or connection with the place. Studies have found divergent relationships between place attachment and place satisfaction. While some studies have found that place attachment is an essential predictor of place satisfaction, others have found that place satisfaction helps predict place attachment (Chen & Dwyer, 2018; Ramkissoon & Mavondo, 2015). Mesch and Manor (1998) found that greater satisfaction

with place leads to greater attachment. Stedman (2003) postulates that place satisfaction and place attachment must be studied as separate dimensions, as people may be satisfied with a place but not necessarily develop a bond. Users of community centers will repeatedly visit the center if they are supported by the programs, services, and the physical place itself, which could predict attachment to place and sense of place.

### **Relationship Between Dimensions of SOP**

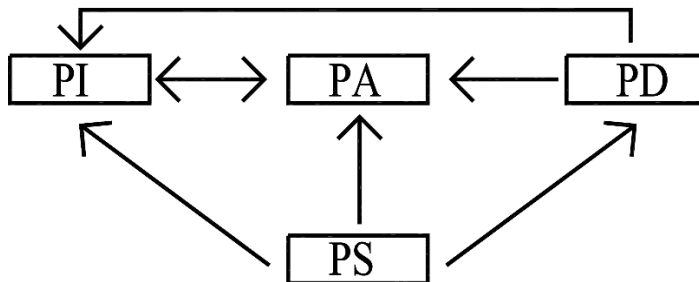
Several studies have examined PI, PA, PD, and PS relationships. Some studies have also highlighted the complexity of distinguishing between dimensions of SOP due to their “inseparable nature” (Azizi & Shekar, 2018; Pretty et al., 2003, p. 26). Confusion abounds in the relationship between place identity, place attachment, place dependence, and place satisfaction, as some studies have claimed that these dimensions are interrelated. For example, in their study, Ramkissoon and Mavondo (2015) found that place satisfaction was positively related to pro-environmental behaviors and, in turn, that was positively associated with place identity, place dependence, and place attachment. In fact, place satisfaction predicted identity, attachment, and dependence through the mediating effect of pro-environmental behaviors. A similar relationship was found by Mesch and Manor (1998) in which satisfaction with the environment and social relations led to place attachment.

Additionally, Alrobaee and Al-Kinani (2019) found that the quality of the physical environment, along with the fulfillment of needs connected to place dependence, had a direct relation to attachment. Pretty et al. (2003) found a strong connection between place dependence and place identity among adolescents and adults in their study of remote Australian towns. Bow and Buys (2003) found a similar link between place

attachment and place identity in their study of residents living in a community surrounded by a substantial natural environment. Based on these studies, the relationship between PI, PA, PD, and PS can be predicted, as shown in Figure 2.

**Figure 2**

*Relationship Between Dimensions of SOP*



### **Social Capital (SC)**

The concept of social capital (SC) has primarily been adopted from sociology. Portes (1998) describes it as a “popular export from sociological theory” (p. 2). According to Farr (2004), SC is used interchangeably as a term or a concept. Several scholars have made contributions to the concept of social capital. Farr (2004) cites Dewey as one of the earliest philosophers to offer an authoritative view of the concept of social capital. While Dewey did not specifically use the term, according to Farr (2004), “the concept is omnipresent in his writings” (p. 19). Dewey focused on networks formed by diverse community groups in schools, neighborhoods, or workplaces. He opined that these networks could tie groups of people together, providing each other with cooperation and support (Farr, 2004). L. J. Hanifan, a State Supervisor of Rural Schools, was another early proponent of the concept of social capital, where the earliest use of the term was observed (Aldrich & Meyer, 2015; Farr, 2004). Hanifan (1916) referred to social capital

as capital not in terms of monetary gains but mainly as “goodwill, fellowship, mutual sympathy, and social intercourse among a group of individuals and families” (p. 130). Bourdieu, Coleman, and Putnam are considered the prominent contemporary theorists of SC (Aldrich & Meyer, 2015; Field, 2008; Grossman, 2013; Portes, 1998). While differences exist in their conceptualization of SC, the ideas of social networks, the quality of relationships in the network, and the benefits that can be gained from these networks (Portes, 1998) are common strands.

Bourdieu (1986) discusses social capital in relation to economic and cultural capital. He defines social capital as an accumulation of resources obtained through connections and associations with robust networks formed through established institutions. The existence of a network does not evolve naturally but results from tremendous effort accrued over time that yields lasting connections and short-term and long-term benefits for the group. Coleman (1988), on the other hand, discusses social capital in relation to physical and human capital. Social capital, according to Coleman (1988), comprises “aspects of social structure” (p. 98) and “actions” (p. 98) of people (whom Coleman calls actors) or corporations involved within the social structure. He opines that social capital is generated through relations facilitated among people. Farr (2004) and Aldrich and Meyer (2015) credit Putnam with reviving and accelerating the interest in social capital in the early 1990s through his seminal work *Bowling Alone*. Putnam discusses social capital through the lens of “altruism, volunteering, and philanthropy” (p. 116) and formal and informal engagement within the community. He defines social capital as the connections people make, the networks they develop, and the relationship of trustworthiness fostered by these associations (Putnam, 2000).

Kingsley and Townsend (2006) state that “social networks, cohesion, support, and connection” form the basis of social capital between individuals and groups, and if there exists a high level of reciprocity and trust, it can result in “material and social benefits” (Kingsley & Townsend, 2006). Networks, norms, and trust (Kingsley & Townsend, 2006; Portes, 1988; Putnam, 2000) are essential in creating and generating positive, constructive, and beneficial behavior and attitudes (Bankston III & Zhou, 2002). According to Portes (1988), social capital has three functions; “a source of social control, as a source of family support, and as a source of benefits through extra-familial networks” (p. 9). Perkins and Long (2002) separated the dimensions of SC into formal and informal measures based on Saegert and Winkel (1998). The informal dimensions of SC include sense of community and neighboring, and the formal dimensions include collective efficacy and citizen participation. Since community centers are informal environments where people gather for recreation and leisure activities, this study will consider informal dimensions of social capital: sense of community, social networks, and neighboring including the elements of trust and cooperation. Table 4 highlights the dimensions of SC along with key attributes which are discussed in detail in the following sections.

**Table 4**

*Attributes of the Dimensions of SC*

Social Capital	Key Words/ Attributes
Sense of Community (SOC)	“feelings of belonging, feeling that members matter to one another and to the group, shared faith that members’ needs will be met through a commitment to be together” (McMillan & Chavis, 1986, p. 9).
Social Networks (SN)	“web of social relationships that surround individuals” (Heaney & Israel, 2008, p. 190).

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	ties with others to satisfy a need provides emotional, informational, and instrumental support (Cattell, 2001; Heaney & Israel, 2008)
Neighboring (N)	help that people give or receive from their neighbors (Perkins & Long, 2002). Social interaction - allows people to get better acquainted with each other and establish social connections (Lochner et al., 1999; Perkins & Long, 2002). Low-intensity contacts - “passive contacts” (p. 15), fleeting, formed from “being in the same space” (p. 23) and through casual encounters. High-intensity contacts - friendships evolve from low-intensity contacts, take time to develop, and happen through repeated encounters and meetings (Gehl, 2011).

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### *Sense of Community (SOC)*

McMillan and Chavis’s definition of sense of community is widely used in studies examining sense of community (Acedo et al., 2017; Farahani, 2016; Kim & Kaplan, 2004). They define sense of community as a “feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together” (McMillan & Chavis, 1986, p. 9). Their definition has four elements: (1) membership related to the feeling of belonging, (2) influence where members made a difference in the group, (3) integration and fulfillment of needs, members’ needs would be met, and (4) shared emotional connection where members believe that they share and will continue to share, among other things, history and experiences (McMillan & Chavis, 1986).

Kim and Kaplan (2004) argued that the instruments developed by McMillan and Chavis to measure sense of community do not address physical aspects. Hence, building from Mcmillan and Chavis’s framework, Kim and Kaplan’s study developed a framework for SOC concerning the physical environment. The framework comprised

four domains: community attachment, identity, social interaction, and pedestrianism. Their study, which focused on comparing a New Urbanist community with a regular suburban community, found that community identity and pedestrianism relied on the physical attributes of the area. In contrast, community attachment and social interaction were the psychological components. The results of their study indicated that architectural style and physical features provided identity and were essential to achieving sense of community along with nature, green spaces, and open areas. Residents of the New Urbanist community expressed a “stronger attachment to their community and identity with it” (p. 313) (Kim & Kaplan, 2004).

In their study on neighborhood design and sense of community, Rogersa and Sukolratanameteeb (2009) compared ecologically designed neighborhoods to regular neighborhoods in a suburb in Houston, TX. In their study, ecologically designed neighborhood characteristics included well-defined centers and edges, mixed-use functions and activities, increased density, pedestrian-friendly design, and public spaces. The results from their study concluded that “ecologically designed neighborhoods have an enhanced sense of community” (p. 331). They stated that ecologically designed neighborhoods encourage outdoor activities in public spaces, encouraging social interaction and, therefore, enhancing sense of community (Rogersa & Sukolratanameteeb, 2009).

Francis et al. (2012) investigated the role of public spaces in creating a sense of community in a suburb in Western Australia. They found that the quality of public spaces, especially shops and open spaces, was more important than size and quantity. Improved quality of public spaces encouraged casual connections and social interactions.

In addition, Tsai (2014) found that placing public facilities near residential locations and shortening inner neighborhood travel distances can enhance the psychological sense of community (PSOC). The study employed qualitative and quantitative methods to analyze the relationships between PSOC, neighborhood activities, and spatial configurations in Taipei's Beitou District.

Gueorguiev et al. (2007) explored the connection between park attributes of safety and benefits and how they were related to sense of community. Their quantitative study used a previously developed SOC scale and applied it to communities in Norfolk, VA. Their study found that sense of community was achieved when users perceived that they were deriving benefits from park usage. At the same time, the perception of safety was indirectly related to sense of community. If users felt the park was safe, they would use it more and derive benefits from it, leading to a feeling of SOC. The perception of safety adding to SOC was echoed in the study conducted by (French et al., 2014). In their study on how the built environment effects sense of community, French et al. (2014) found that “perceived street connectivity, infrastructure for walking and cycling” (p. 687), and “neighborhood aesthetics and safety” (p. 688) were all associated with a greater sense of community. While they found that the social elements contributed more powerfully than physical elements to sense of community, they concluded that the importance of the physical environment in contributing to sense of community should not be undervalued as the physical appearance of neighborhood features can influence the way that people think about others which in turn could affect interaction and sense of community (French et al., 2014).

Several studies in the literature review focus on neighborhoods and outdoor public spaces. Conclusions from these studies can be applied to the built environment of community

centers. Architectural styles and physical features, quality of the building design, materials, spaces, infrastructure provided, proximity to the neighborhood, and safety can be related to community centers. In addition, social interaction and perceived benefits that the community center affords its users can also contribute to sense of community. Based on the literature review, this study uses four domains to measure sense of community: the membership element focusing on sense of belonging, shared emotional connection from McMillan and Chavis (1986), and community attachment and community identity domains from Kim and Kaplan (2004). Table 5 below highlights the domains for SOC used for the current study.

**Table 5**

*Definitions of the Principles of Sense of Community*

Term	Definition	Potential Connections to Community Centers
Membership – Sense of Belonging	Feeling that one fits in the group and has a place (McMillan & Chavis, 1986)	I am part of the community center. I feel comfortable in the community center.
Shared Emotional Connection	Based on shared history, interaction of members in shared events (McMillan & Chavis, 1986, p. 13)	I can interact with members at the community center. I have positive interactions with other members at the community center.
Community Attachment	Ties to the community, Feeling at home, sense of connectedness, sense of ownership	I feel connected to the community center.
Community Identity	“personal and public identification with a specific physically bounded community with its own character (Kim & Kaplan, 2004, p. 315).	The community center is unique. The environment facilitates my lifestyle (Kim & Kaplan, 2004, p. 316).

### ***Social Networks (SN)***

Social networks refer to “the web of social relationships surrounding individuals” (Heaney & Israel, 2008, p. 190). In these networks, people form ties with others that may satisfy a need and provide support. Social networks can fulfill functions of support, control, and companionship. These networks can offer emotional, informational, and instrumental support (Cattell, 2001; Heaney & Israel, 2008). In their study on the quality of life among older people in Osun State, Nigeria, Ariyo and Faronbi (2022) found that social networks significantly influence the quality of life among older people. The study employed a cross-sectional design with participants aged 60 and above in selected local government areas of Osun State, Nigeria. Data was collected using a structured questionnaire that included sections on socio-demographic characteristics, social support scale, social network scale, and WHOQOL-BREF (a quality-of-life assessment tool). The study also highlighted the role of social participation and having a robust social network in preventing depression and improving mental health among older adults. Yamashita et al. (2021) conducted a quantitative study on the effect of social network and financial incentives on physical activity and social capital. Their study included 39 women over 65 randomly assigned to either a financial incentive group or a social network incentive plus financial incentive group. Both groups received a financial incentive, and the second group walked with the same three buddies for three months. At the end of the intervention, the authors found that social network incentives, grouped with financial incentives, were more effective at promoting physical activity than financial incentives alone among older women. Their study also showed that the women in the social network group continued their physical activity even after the completion of the study.

Boessen et al. (2018) investigated features of the built environment, such as population density, parks, bars, restaurants, and street networks for three different types of ties (socializing friendship ties, kin ties, and core ties) and the role that they played in forming social networks. The study involved a large sample in the Western United States. The study relied on data from the American Social Fabric Project (ASFP), the Environmental Systems Research Institute (ESRI), and land use data from *ReferenceUSA*. The main takeaway from this study was that “the built environment has consequences for the spatial distribution of personal social networks” (p. 13). Regarding density, the study found that networks and ties are formed in neighborhoods when the population density is higher. In addition, the study also found that “the spatial layout of streets” (p. 16) in high-density areas was linked to “more personal network ties in urban environments” (p. 16). Their study found limited evidence to suggest that restaurants, retail, or businesses promote social networks. Still, the study found that “local bars were associated with more local socializing friendship ties” (p. 15) in rural and urban areas, which is consistent with the idea of third places introduced by Oldenburg (1999).

According to Warde et al. (2005), network ties encourage people to participate in leisure and recreation activities, and these informal activities “promote trust” (p. 404). Their study found that people engaged with a more diverse set of people in leisure activities; they did not socialize with just like-minded people, and these heterogeneous ties led to “mutual sympathy and cooperation” (p. 421). They equated this to bridging social capital put forth by Putnam. Cattel found that “dense and weak, homogenous and heterogeneous” (p. 1513) network structures “contribute to quality of life” (p. 1513) and aid in the generation of social capital. Based on the literature review above, the current

study will investigate interactions (surface engagement or deeper bonds) formed at the community centers. The study will also look at support and emotional enrichment that users receive at the centers to understand how social networks aid in generating social capital.

### ***Neighboring (N)***

Neighboring is the help people give or receive from their neighbors (Perkins & Long, 2002). It also includes “actual interaction” (Wilkinson, 2007, p. 216) with neighbors, which allows people to get better acquainted with each other, establish social connections, and receive support (Lochner et al., 1999; Perkins & Long, 2002; Skjaeveland et al., 1996; Wilkinson, 2007). Social networks are helpful resources formed through ties that people develop with their neighbors (Ferguson & Ferguson, 2016). Gehl (2011) outlines low-intensity and high-intensity contacts that can result in neighborhoods and other public spaces. Low-intensity contacts are primarily “passive contacts” (p. 15) that are fleeting and formed from “being in the same space” (p. 23) and through casual encounters. High-intensity contacts, such as friendships, evolve from low-intensity contacts, take time to develop, and happen through repeated encounters and meetings (Gehl, 2011). The study conducted by Ross et al. (2020) investigated the effect of neighboring on SOC over time using latent transition analysis. The investigation was carried out over five years, from 2006 to 2011, in the Greater Phoenix Metro among 165 adults. Their findings align with Gehl’s (2011) assessment of neighborhood contacts. In 2006, visiting neighbors was important, which could be equated to low-intensity contacts. Alternatively, “exchanging favors” (p. 339) was most significant among neighbors in

2011, which could be equated to high-intensity contacts formed over time resulting from the trust that was built over time and sustained by neighboring (Ross et al., 2020).

Perkins and Long (2002) discussed neighboring behaviors as instrumental help provided to or received from community members. It involved things as simple as watching a neighbor's house or loaning items. They also talk about neighboring in terms of social interactions, which could lead to support and improvement in the quality of community life. According to Wilkinson (2007), neighboring acts involved “visiting neighbors in their homes and exchanging favors” (p. 216). These face-to-face interactions with people in one’s community are essential at the individual and group levels and are a set of “reported behaviors” (p. 216). In the empirical investigation of the multi-dimensionality of social cohesion, neighboring was one of the dimensions investigated. The study involved 1,732 participants from 20 rural communities in Canada who completed a survey of the Neighborhood Cohesion Instrument. The study found that neighboring was higher in geographically isolated communities. A possible explanation for higher neighboring could be that people in isolated communities pay more attention to their neighbors and are there for others.

Kusenbach (2006) discussed neighboring as essential for the development and sustainability of local communities. Individuals engaged in “friendly recognition, parochial helpfulness, proactive intervention, and embracing and contesting diversity” (p. 282) with their neighbors. Between January 1997 and June 1998, Kusenbach conducted ethnographic fieldwork and interviewed sixty-one participants in two middle-class neighborhoods in Los Angeles. The author opined that friendly recognition forms the foundation for advancing neighborly relations, eventually leading to deeper bonds. These

greetings “while superficial and do not take much effort” (p. 291) are essential first steps to community building. Regarding parochial helpfulness, the author found that neighbors gave help entirely voluntarily, and those who received the help were very grateful for it. When individuals could not return a favor immediately, they would return it on a different occasion, and this back and forth of giving and receiving help created a “network of mutual obligation and gratitude” (p. 293). Kusenbach observed several proactive intervention behaviors among neighbors, from putting back the trash can to helping out when a neighbor was unwell, creating goodwill among neighbors. Through this study, Kusenbach identified “normative, habitual practices that build and perpetuate communal relationships” (p. 301) and showed that neighboring provides practical support, safety, and sociability.

While neighboring as a dimension of social capital is discussed in terms of subdivisions or a person’s immediate surroundings, all acts of neighboring, such as help, support, social interaction, trust, and reciprocity, can be applied to community centers as most users of community centers are from surrounding communities and interact with other users at the centers.

### **Relationship Between Dimensions of SC**

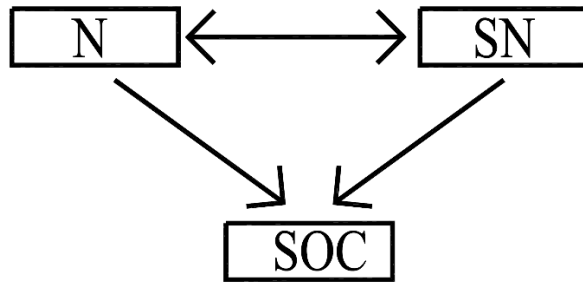
Sense of community (SOC) is considered an essential dimension of social capital. Perkins and Long (2002) found that higher SOC was related to more neighboring, and SOC was the strongest predictor of other dimensions of SC. Ross et al. (2020) found that social interactions resulting from neighboring can “build and sustain” (p. 337) sense of community. Farahani (2016) extensively reviewed the literature on SOC and neighboring. The review brought to the forefront the idea that SOC and attachment to community and

neighboring “can increase the feeling of safety and security, residential satisfaction, community identity, civic participation, and mental health and well-being” (p. 357).

Concerning the built environment, the presence of sidewalks and front porches in the new urbanist community encouraged social interactions and increased SOC for residents (Kim & Kaplan, 2004). Francis et al. (2012) found that the quality of public open space was essential to creating SOC. Public open spaces strengthened neighborhood social ties, which eventually led to the generation of a sense of community. Du et al. (2023) conducted a quantitative study involving 1051 respondents to understand the relationship between objective and perceived neighborhood environment and a sense of community belonging. They learned that perceived neighborhood attributes contributed more to a sense of community belonging. They found that residents’ views regarding neighborhood features and the appearance of dwellings significantly shaped interactions within neighborhoods and contributed to developing a sense of community belonging. Cattell (2001) observed that neighborhood factors, which included social interactions, contributed to the development of relationships of trust, norms of cooperation, and reciprocity. Neighborhood networks were found to be essential for older adults and provided an opportunity for practical relations that resulted in a feeling of security and well-being (Bridge, 2002).

**Figure 3**

*Relationship Between Dimensions of SC*



### **Relationship Between SOP and SC**

Several studies have explored the relationship between the dimensions of SOP and SC (Acedo et al., 2017; Azizi & Shekar, 2018; Perkins & Long, 2002). Moreover, an extensive literature review conducted by Acedo et al. (2017) found a strong connection between the dimensions of SOP and SC at the non-spatial level. They discovered that SOC and place attachment “are the most significant and related dimensions” (p. 508) for SC and SOP. They also found that the attachment dimension of SOP is strongly related to all the SC dimensions. In their literature review, Kim and Kaplan (2004) found that place attachment was a “key domain of sense of community” (p. 315).

Perkins and Long (2002) also found a link between place attachment, a “spatially-oriented emotional construct” (p. 297), and SOC, a “socially-oriented cognitive construct” (p. 297) at the individual and community level. They developed formal and informal dimensions of SC, with SOC forming a critical dimension of SC. They parsed data that was collected as part of a more extensive study to understand the connections between SOC and place attachment. Place attachment showed significant correlations to

neighboring, civic participation, and collective efficacy, the formal and informal dimensions of SC.

Dale et al. (2008) conducted a case study in three Vancouver towns to understand the link between SC and sustainable community development. Cross-case analysis brought to the forefront the importance of place identity in developing sustainable initiatives. The authors found that in one town, a strong sense of place generated through place identity helped create “community social capital” (p. 278), resulting in people coming together to preserve their natural landscapes. The quality aspect of place dependence and SOC were found to be predictors of identity (wanting to stay or leave) in a study conducted by Pretty et al. (2003). Their study investigated perceptions of adolescents and adults of two remote rural towns in Australia (population less than 3000) to determine if sense of place dimensions could differentiate between residents who identified with their town and preferred to stay and those who wanted to leave the town. The study used SOC, place attachment, dependence, and identity as sense of place dimensions. Data collection consisted of a survey questionnaire distributed to 365 adolescents and 246 adults, followed by focus groups conducted two months after the initial survey. Results indicated that those with high place identity among both groups preferred to stay, and those with low place identity preferred to leave. Results also showed a correlation between SOC and place attachment, which was more pronounced in adults than in adolescents.

Weijts-Perree et al. (2017) conducted a study to describe and predict the effect of personal and neighborhood characteristics on social satisfaction facilitated by place attachment and neighborhood networks. The study was based on survey data from 177

residents in the town of Eindhoven, Netherlands, and a social interaction diary that participants maintained for one week. The authors found that place attachment positively affected residents' social interactions and, thereby, satisfaction with the place. They also found that attachment was positively affected by the "number of local residents in the social network" (p. 142). In addition, they found that social cohesion (considered to be a dimension of SC) had a positive effect on attachment. People who lived in neighborhoods with high social cohesion were more attached to their communities. The quality of social networks improved when people participated in social activities and felt that they were socially included (Weijs-Perree et al., 2017). Bow and Buys (2003) examined the importance of "people's psychological, physical and emotional experience of place on the development of SOC" (p. 7). Residents developed a strong attachment to place through frequent encounters with the natural environment. There was a high level of satisfaction with the knowledge that they were surrounded by nature and were also dependent on the natural surroundings for providing them calm at the end of the day. According to Bow and Buys (2003), attachment to the surrounding environment creates a sense of identity and belonging, leading to the development of a sense of community. They also concluded that satisfaction for residents came about from the ability of the surrounding natural environment to meet their needs and fulfill their goals. Their study concluded that all dimensions of sense of place influenced the development of sense of community.

Mesch and Manor (1998) led a study examining the factors contributing to place attachment in local communities. They investigated the contribution of neighborhood social ties and environmental perceptions to place attachment. The data for the study was conducted through phone surveys of 525 households in the Haifa metropolitan area. They

found that “social investments” (p. 515) positively affected how people perceived their neighborhood. An individual felt a sense of attachment to the community when they had more close friends who lived in the same area (neighbors). Place attachment developed due to direct experiences with neighbors (social ties) and the physical environment. They concluded that “social relationships and satisfaction with the environment” (p. 517) lead to place attachment (Mesch & Manor, 1998).

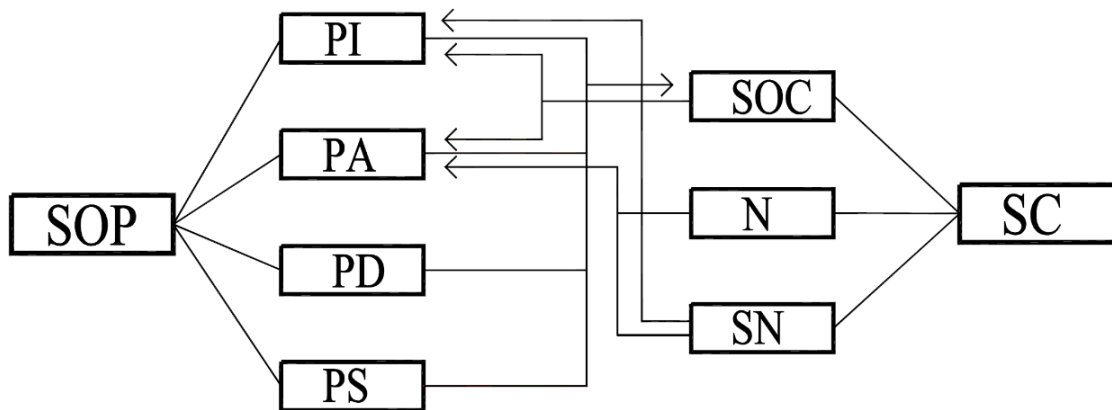
Azizi and Shekar (2018) used all four dimensions (trust, networks, norms, and cooperation) of sense of place and social capital to investigate the relationship between SOP, SC, and residents’ attitudes towards tourism support. They surveyed 386 residents in the historic city of Shiraz, Iran. Data analysis was conducted using Structural Equation Modeling. Results indicated a significant positive relationship between residents’ SOP and their SC and between residents’ SOP and their support for tourism (Azizi & Shekar, 2018).

Through a detailed literature review of existing empirical studies, a diagram (Figure 4) has been created that demonstrates the relationships between the concepts of SOP and SC at the level of individual dimensions. Numerous studies have highlighted the strong connection between place attachment and sense of community. Whereas some have demonstrated that attachment predicts sense of community, others have revealed that sense of community predicts attachment to place. In addition, all dimensions of SOP relate to the sense of community dimension of SC. Conversely, all dimensions of SC relate to the place attachment dimension of SOP, thereby strengthening the relationship between place attachment and sense of community. The literature also highlighted a relationship between social networks and neighboring and place identity. No

directionality could be observed in the relationship between SOP and SC. While some scholars have discussed how identity with a place and dependence on the place make people more vested and hence more involved with the place, which adds to SC, others have argued that the development of networks and neighboring (social interaction, help from neighbors) can lead to emotional ties and in turn, can lead to place attachment.

**Figure 4**

*Relationship Between Dimensions of SOP and SC*



### **Connecting SOP and SC at the Spatial Level**

According to Jorgensen (2010), there is renewed interest in understanding the “spatial component of social processes” (p. 554). In order to define place from the perspective of those who use it, there is the need to understand their “beliefs about, emotions for, and behaviors in the place” (Jorgensen, 2010, p. 555). The concept of place has evolved over time. In a globalized world, place can be described as a “source of potential social interactions” (Lewicka, 2011, p. 210). Place may be open or closed, diverse or homogenous; it could range from the home to the city, and it could be residential or recreational (Lewicka, 2011). Researchers have highlighted the paucity of

studies that examine spatial influence on SOP and SC. Scannell and Gifford (2010) postulate that place has the potential to influence the dimensions of SOP, especially PA. Stedman (2003) postulates that SOP has three components: the physical environment, human behavior, and social and/or psychological processes, and “humans ascribe meanings to space on the basis of their experiences” (p. 672). His study found that landscape characteristics matter and “underpin both place attachment and satisfaction” (p. 682). Stedman (2003) found that respondents were not directly influenced by the place's physical characteristics but by the meanings that these physical attributes denoted. Though many studies focus on the social aspects of place attachment, Lewicka (2011) contends that the physical variables have value and, in some instances, could be a better predictor of PA than the social aspects. “Physical features” may facilitate social contacts and thus influence place attachment” (p. 217). As mentioned previously, Madgin et al. (2016) found that physical spaces were not “mere backdrops” (p. 691) for social encounters but were responsible for shaping residents’ behaviors. In their study, the authors found that the look and feel of physical spaces were associated with memories and meanings, and that physical space and social networks together created place attachment. Ujang (2012) found that physical elements of shopping areas in Kaula Lumpur, Malaysia, which included location, nodes, streets, mixture of old and new buildings, historic building facades, activity, and perceptual image, were all significant components of place and influenced users’ attachment and place identity. The study concluded that “functional and emotional attachment” (p. 166) contributed to a stronger SOP and PI.

Social capital comprises the connections among individual networks, neighboring reciprocity and trustworthiness, and the sense of community (Putnam, 2000). According to Bridger and Alter (2006), these social networks are not “free-floating” (p. 8); rather, they are “bounded by space and time” (p. 8) and depend primarily on face-to-face interaction, which develops over time. Klinenberg (2018) opines that physical settings are essential to building social capital and refers to such as “social infrastructure” (p. 5). Places like schools, community centers, and libraries provide space for programmed activities and “tend to encourage more durable relationships” (p. 18). On the other hand, places like parks, playgrounds, and markets support loose connections, which can grow and develop into dense relationships.

Improved physical environment quality positively affects the sense of belonging and social capital. Facilities such as buildings and open spaces provide opportunities for social interaction and encourage residents to “establish long-term residency” (Paranagamage, 2014, p. 9). In her study on a disadvantaged neighborhood in Leicester, UK, Paranagamage (2014) found that facilities such as the library created an opportunity for interactive bonding and provided quiet spaces for study. In contrast, the leisure center provided a setting for casual connection among a diverse group of people. Neighborhood design characteristics also affect social capital. Leyden (2003) found that residents who lived in walkable, mixed-use neighborhoods developed higher SC, resulting in improved mental and physical health. In addition, they were better acquainted with their neighbors, were more socially connected, and acquired a higher level of trust. Kim and Kaplan (2004) found that residents of a New Urbanist neighborhood that had more open spaces and access to natural features developed a greater sense of community and expressed

stronger PA and PI. Neighborhood physical characteristics fostered pedestrianism, increasing the chance of social interaction with neighbors.

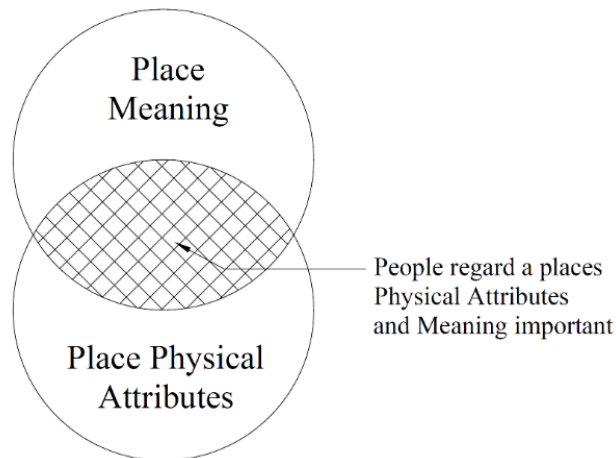
The studies above have demonstrated that physical place plays a vital role in developing SOP and SC. Studies have shown that the relationship between SOP and place may consist of two parts: the meaning associated with the place and the physical attributes of the place. Literature on the relationship between SC and place focuses on place's physical attributes. Current literature does not highlight the extent and depth of the relationship between place, SOP, and SC. Studies on place have traditionally been quantitative in nature and have used survey questionnaires, which typically have a few questions for each measure. Francis et al. (2012) used the 12-point sense of community (SCI) as their survey instrument to understand SOC. Jorgensen and Stedman (2001) asked lakeshore property owners four questions each for PI, PA, and PD (for example, I feel relaxed when I'm at my lake property -PA). Azizi and Shekar (2018) utilized measures from previous studies tailored to their situation and developed independent measures for some of the dimensions of SOP and SC. While quantitative methods establish links, they do not measure the extent to which place influences SOP and SC; qualitative studies would shed more light on this relationship. The discussion has established that place, its physical attributes, and associated meanings influence SOP and SC. As such, when considering the connection between SOP and SC, place would mediate a connection between the two concepts.

Based on the connections established between place, sense of place, and social capital, I developed the following Venn diagram to highlight the relationship. Place in the model comprises two parts: the physical attributes and the meanings associated with

them. Hence, the theoretical model will begin with place as two overlapping circles (Figure 5), one representing the physical attributes and the other the meaning related to place. The overlap denotes that for some people, the physical attributes and meaning both matter, while for others, the meaning may matter and evoke more robust responses than the physical attributes and vice versa.

**Figure 5**

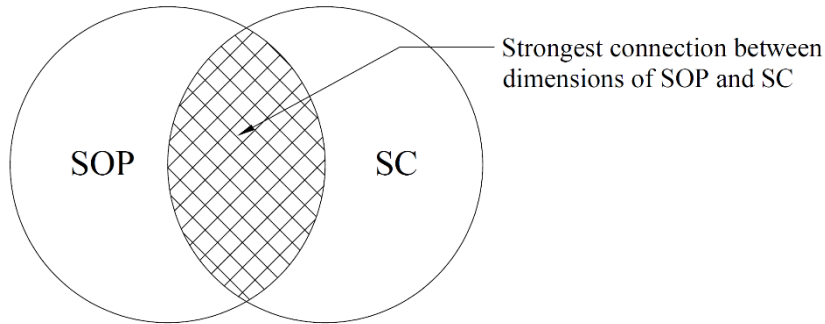
*New Theoretical Model Highlighting the Relationship Between SOP, SC, and Place-Part 1*



A connection has been found between the dimensions of SOP and SC; hence, SOP and SC will be represented in overlapping circles. The most substantial connection was found between the SOC dimension of SC and the PA dimension of SOP. Hence, the overlapping area will be where SOC and PA are the strongest, and consequently, the relationship between SOP and SC will be most robust during this overlap. There was limited evidence of the directionality of the relationship between SOP and SC; thus, the two circles are placed next to each other and do not indicate the directionality of the relationship (Figure 6).

**Figure 6**

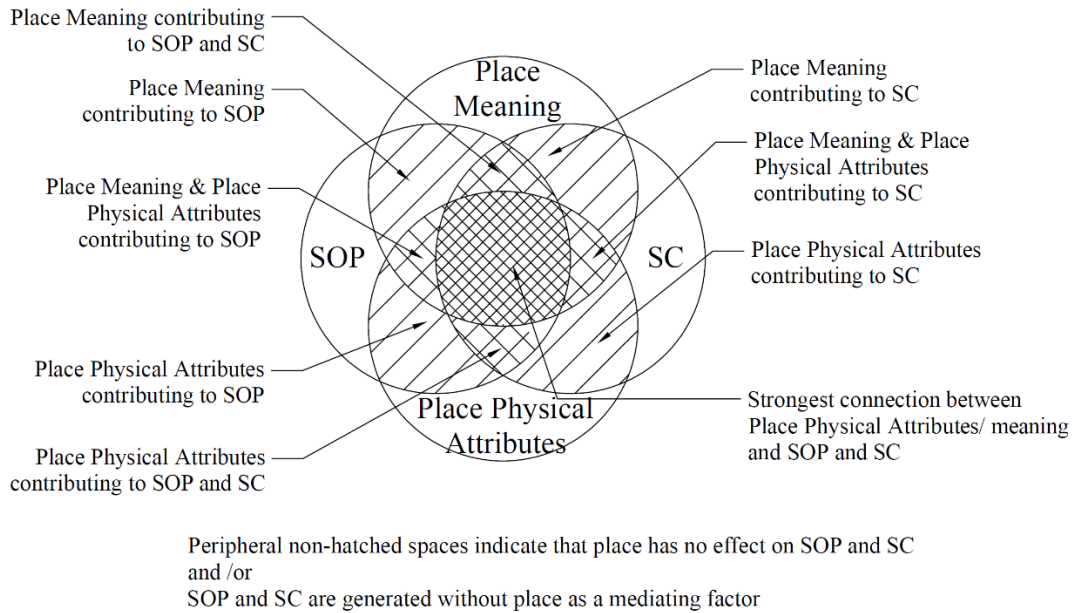
*New Theoretical Model Highlighting the Relationship Between SOP, SC, and Place-Part 2*



The final figure (Figure 7) of the theoretical model represents the overlap of all four components of the study since scholars have opined that SOP and SC should be investigated in the context of place, and studies have also found relationships between place and SOP and place and SC. There exist strong connections between SOC and PA; SOC is connected to all dimensions of SOP, and PA is connected to all dimensions of SOC. Strong connections were not found in the literature between PD and PS and N and SN; hence, the model overlaps rather than is all-encompassing. The strongest relations between place, SOP, and SC will be toward the middle, and the effect of place diminishes toward the periphery

**Figure 7**

*New Theoretical Model Highlighting the Relationship Between SOP, SC, and Place, Merging Part 1 and Part 2*



## Summary

The literature review has highlighted previous empirical studies on sense of place and social capital and addresses the importance of community centers to the surrounding community. The review also examined available literature on the relationship between sense of place and social capital. Several studies underscore the importance of SOP and SC, but these studies have focused on social relationships, social cohesion, and the quality of social interaction between individuals. A limited number of studies have focused on the physical attributes of the environment, natural or built, and how they aid in creating a sense of place and social capital for the individual or group. In discussing the progress of research on place attachment, Lewicka (2011) contends that research has focused on “features of people rather than on places or processes” (p. 222) and that

“physical-environmental predictors are studied infrequently” (p. 222). In addition, she states that a lot is known about the who, how, and how much of attachment, but “relatively little is known about which places have the highest attachment potential” (p. 223) and how it can be realized.

Studies that have investigated the physical attributes of the built environment to contribute to a sense of place and increase social capital have primarily focused on the natural environment. At the neighborhood level, these studies have looked at walkable streets, signage, and availability of amenities, and at the city scale, studies have focused on density, amenities, and safety (Alrobaee & Al-Kinani, 2019; Azizi & Shekar, 2018; Jorgensen & Stedman, 2001; Kim & Kaplan, 2004). A handful of studies have focused on the physical attributes of the built environment of third places such as coffee shops, brew pubs, and libraries (Paranagamage, 2014; Rojak & Cole, 2016; Waxman, 2006). In addition, a vast majority of studies on sense of place and social capital are quantitative in nature. According to Lewicka (2011), current place studies focus on the “significance of places” (p. 220), the “how much rather than what” (p. 220), which does not bring to the forefront the process through which places acquire significance and the connection between the physical place and the bonds that people develop with and in the place. She states that “qualitative measures are intended to offer insight into meanings that places entail” (Lewicka, 2011, p. 221) and the aspects of the physical place that aid in generating sense of place and social capital.

The current study aims to fill the gap in the literature and investigate how the physical attributes of community centers can contribute to the psychological processes of place identity, place attachment, place dependence, and place satisfaction. They can lead

to the generation of social capital for community center users. The theoretical framework will be used as an umbrella in a multi-case qualitative study to understand the importance of the physical environment and characteristics of place and the “process through which people make sense” (Lewicka, 2011, p. 227) of places in their communities and develop social capital.

## CHAPTER 3 – RESEARCH METHODS

This chapter discusses the methods that were employed for the successful completion of the study. The chapter begins with the stated research questions and outlines the research design. In this chapter, I also highlight the reason behind the selection of the multi-case study approach, provide an in-depth description of the setting, the two sites selected for the study, and participant selection. The data collection protocol, researcher position, data analysis, and validity are discussed in detail and form the basis for the findings chapter.

### **Research Question**

This study is exploratory and was undertaken to gain a deeper understanding and explain the influence of the physical environment of “third places” such as community centers on developing a sense of place and advancement of social capital for its users. According to Acedo et al. (2017), meaningful places (SOP) exist for people, and in those meaningful places, people develop social relations (SC). Referencing the framework developed by Acedo et al., this study sought to investigate further the relationship between SOP and SC in the context of community centers.

The overarching research question: In what ways does the physical environment of community centers foster the feelings of connectedness to place and the development of social capital for its users?

Research Question 1 (RQ1): What distinct qualities of the environment attract patrons to the community centers?

Research Question 1a: What design features attract patrons to the community center and why?

Research Question 1b: Which spaces are most frequently used by center patrons?

Research Question 1c: Which spaces encourage social interactions among community center users?

Research question 2 (RQ2): How does the environment of the community center support the psychological processes of place identity, place attachment, place dependence, and place satisfaction?

Research question 3 (RQ 3): How does the environment of the community centers support the ways in which users develop a sense of community, social networks, neighboring, trust, reciprocity, and cooperation?

Research question 4 (RQ 4): What is the relationship of the process of developing SOP to the process of developing SC in the context of the physical environment of community centers?

### **Research Design**

The primary objective of this study was to understand the influence of the physical environment of community centers on social capital (SC) for its users through an increase in the sense of community, social networking, and neighboring while considering the sense of place (SOP) as an essential construct promoting connectedness to place. This study considered place identity, place attachment, place dependence, and place satisfaction as dimensions of SOP. The social constructivist framework helped shape the study through “meaning-making, sense-making” (Denzin & Lincoln, 2011, p. 116) activities positioned around the social phenomenon being studied (Lincoln & Guba, 2009). According to Creswell and Poth (2018), “In social constructivism, individuals develop subjective meanings from their experiences. These meanings are varied and

multiple, leading the researcher to look at the complexity of views rather than narrow the meanings into a few categories or ideas” (p. 24).

Social constructionism argues “that human behavior and experience cannot be properly appreciated when divorced from its social context” (Burr & Dick, 2017, p. 78). This is supported by Creswell and Poth (2018), who state that “the social constructivist framework seeks to comprehend experiences in relevant social settings and that social interaction is an important aspect of the framework which relies on interactions with the participants, their actions, and opinions” (p. 24). Under the guidance of the social constructivist framework, the qualitative multi-case study method was employed to conduct this study and answer the research questions. The research goal was “to rely as much as possible on the participants' views of the situation” (Creswell & Poth, 2018, p. 24). The study was conducted within the social setting of the community center, emphasizing the users' “actions and opinions.”

### **Multi-Case Study Approach**

Qualitative research examines the world from the observer’s perspective (Denzin & Lincoln, 2011). Rather than experimentally examining or quantifying, qualitative research focuses on understanding the qualities, processes, and meanings of experiences (Denzin & Lincoln, 2011, p. 8). According to Merriam and Tisdell (2016), researchers involved in the qualitative field aim to comprehend how individuals interpret their experiences, construct their reality, and attribute meaning to their lived experiences. Furthermore, they explain that the “overall purposes of qualitative research are to achieve an understanding of how people make sense out of their lives, delineate the process (rather than the outcome or product) of meaning-making, and describe how people

interpret what they experience” (p. 15). One of the main characteristics of qualitative research is to understand “the phenomenon of interest from the participants' perspectives” (p. 16). Since this study sought to understand the phenomenon of social capital and the sense of place experienced by users of community centers, the qualitative inquiry method best suited the study and supported the goals of the research.

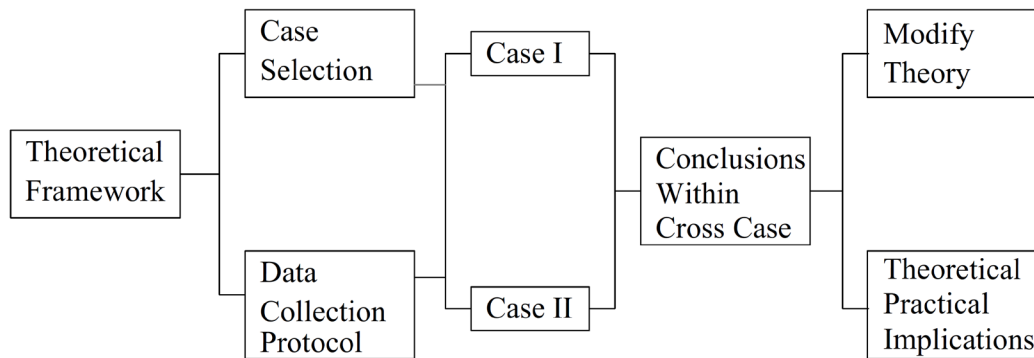
There are several definitions of the case study approach to qualitative research. Yin (2009) defines the case study method as an in-depth investigation of a contemporary phenomenon within its real-life context. To align Yin’s definition of the case study research method better with architectural research, Groat and Wang (2002) modified the definition of a case study as “an inquiry that investigates a phenomenon or setting” (p. 346). Thomas’s definition of case study research points to the need for two parts in the case study method: the presence of “a subject” and “an analytical frame or an object” (Thomas, 2016, p. 15). According to Merriam and Tisdell (2016), the case study should focus on “delimiting the object of the study: the case” (p. 38). Creswell and Poth (2018) define case study research as a detailed, in-depth exploration of a real-life bounded system or multiple systems over time using several information sources.

For this study, a multi-case study approach was selected to address the research questions. Creswell and Poth (2018) use the term “collective case study” (p. 99) to describe multi-case studies where multiple sites are selected to study the issue or phenomenon. This approach offers several advantages: (1) it provides more compelling evidence, (2) it allows for within-case and cross-case analysis, and (3) it enables reporting of similarities and differences across cases (Gustafsson, 2017; Yin, 2009). Furthermore, Yin (2009) notes that when selecting cases for a multi-case study, the

researcher should either select cases that may “predict similar results (a literal replication) or predict contrasting results (theoretical replication)” (p. 54) Using 2 or 3 cases would enable literal replication.

**Figure 8**

*Research Design for Study Adapted from Yin (2009).*



For this study, the physical environment of two community centers in a major metropolis formed the “real-life context” (Yin, 2009, p. 18) in which users' development of sense of place and social capital was studied. The users were the ‘subject’ helping illuminate the phenomenon under study. In addition, Creswell and Poth (2018) discuss the “logic of replication” in the multi-case study approach. This study replicated the same procedures for each case under consideration.

**Research Setting**

The study was conducted in a major metropolis in the southern United States. This city was selected for its convenient location. It is an important urban center that has seen a substantial increase in population and economic growth. In 2008, the city's population was about 1.7 million; by 2035, it is estimated that the city will have added another million people ("Growth Trends & Forecasts," 2018). The Metro Monitor report

on economic success published by the Brookings Institution in March 2017 ranked the city 4th on GMP (gross metropolitan product) growth, 9th on prosperity, and 25th on inclusion from 2010-2015 (Shearer et al., 2017). The city is home to several regional and neighborhood community centers. Regional community centers were considered for this study as these centers are more extensive and provide more user amenities and programs. Regional community centers are a minimum of 25,000 square feet. They have an indoor swimming pool with showers and changing rooms, a fitness center, a walking track, a gymnasium, and multi-purpose rooms. Some centers offer specialty training rooms such as teaching kitchens and computer labs, among other amenities. The centers also provide a variety of classes such as dance, fitness, aerobics, yoga, art classes, and after-school and senior programs. I connected with the assistant director of Metro Parks and Recreation via email and provided him with a synopsis of my study and the dissertation proposal. After gaining permission from the assistant director, I visited five regional community centers and met with the managers of each center. I selected two centers with similar square footage and amenities available to patrons. Both community centers operate Monday to Thursday, 6:00 a.m. to 8:30 p.m., Fridays from 6:00 a.m. to 7:30 p.m., and Saturdays from 8:30 a.m. to 4:00 p.m. In addition, the managers of the two centers were optimistic that I could recruit participants for interviews and were willing to help spread the word about the study. The names of both community centers will remain anonymous. The first community center will be referred to as Center 1, and the second one will be Center 2.

## Site Selection

### *Site 1*

Center 1 is in the city's South and about 20 minutes from downtown. The center is a relatively new community center; construction finished in 2018. Designed by a reputable local architectural firm, it is approximately 31,000 square feet.

### **Figure 9**

*Center 1 (Left) Taken by the Researcher and (Right) from Google Earth*

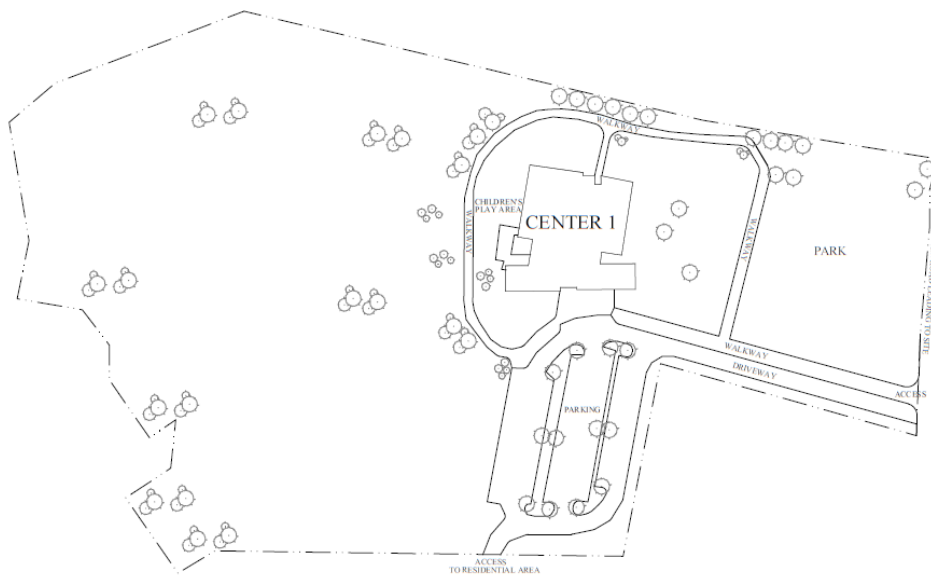


Located close to a well-known neighboring lake and just off the busy main road, the “building stands tall” (*Center 1*, 2020). Elevated high off the road, granting visibility while piquing the passerby's curiosity, the design draws inspiration from the original farmland on which it sits, with one part of the building incorporating the outline of a farm jutting out at an angle, connected to a more contemporary rectangular form (*Center 1*, 2020). On the exterior, the barn is finished in charcoal-colored standing seam metal panels, providing a visually striking contrast with the earthy tones of the rectangular form. Large glass facades on the barn facing the road give a view of the center's interior.

The facility has two access points, one from the main road and the other through the neighborhoods surrounding the site. A long driveway up the access from the main road leads to the parking lot adjacent to the building. Figure 10 shows the site of Center 1. The access from the neighborhoods enables patrons to bike or walk to the center when the weather permits.

**Figure 10**

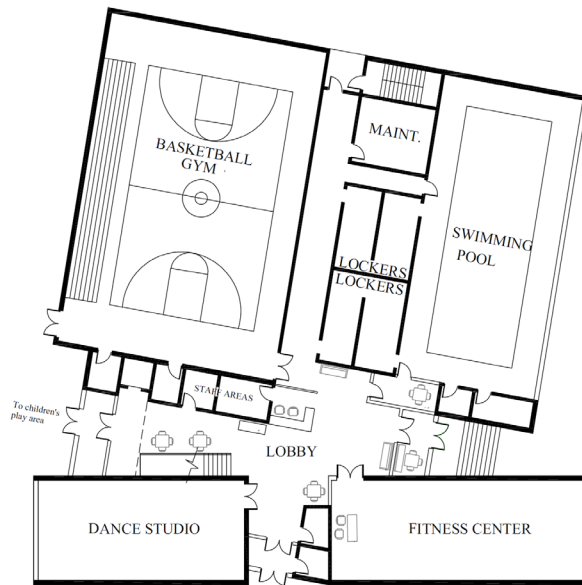
*Site Plan of Center 1 Redrawn from Google Maps*



The main entrance to the building is from the center of the barn form and leads to a sizable double-story lobby connecting the barn and the rectangular form. The center comprises a swimming pool with changing rooms, a full-service fitness area, a dance studio, classrooms that serve as multi-purpose rooms, and a gymnasium with an indoor and outdoor walking track. The layout of Center 1 can be seen in Figure 11.

**Figure 11**

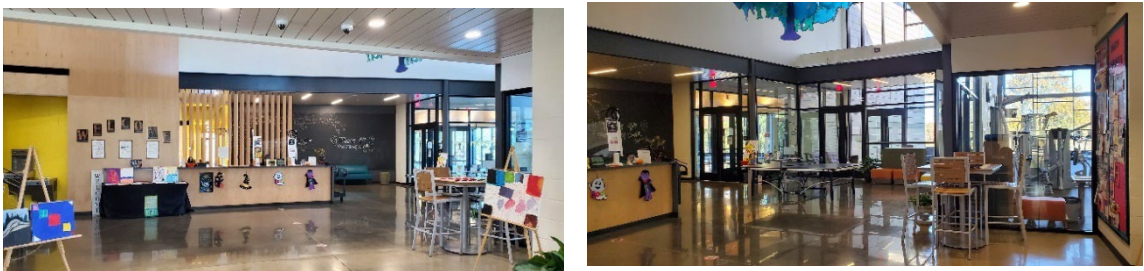
*Redrawn First Floor Plan of Center 1 (From Metro Parks and Recreation Website)*



Upon entering the building, one is instantly greeted by the front desk. Figure 12 highlights the reception desk and lobby of Center 1. The lobby has a variety of seating

**Figure 12**

*Reception Desk (Left) and Lobby (Right) of Center 1, Taken by Researcher*

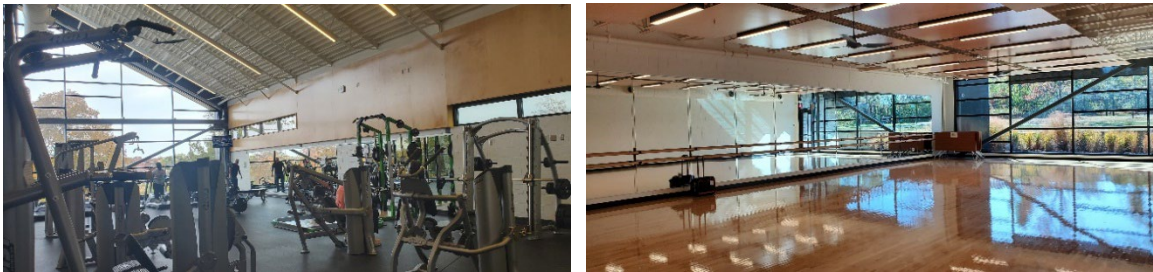


areas. The palette of the lobby is primarily neutral; white walls show a splash of yellow color, and natural wood veneer salvaged from trees on the original farmland complements the neutral aesthetic. On the lobby behind the front desk is a chalkboard where announcements and quotes are displayed. Artwork created by children in the after-

school program is displayed throughout the lobby and along the walls of the walking track. In addition, informational brochures from various community organizations are

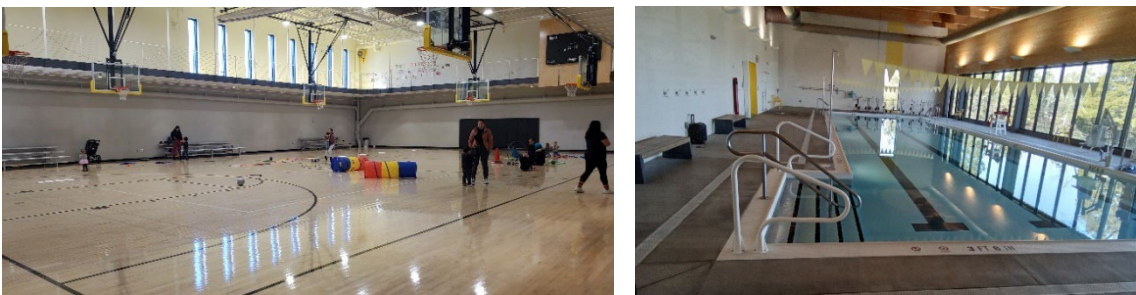
**Figure 13**

*Fitness Center (Right) and Dance Studio (Left), Taken by the Researcher*



**Figure 14**

*Gymnasium (Left) and Swimming Pool (Right), Taken by the Researcher*

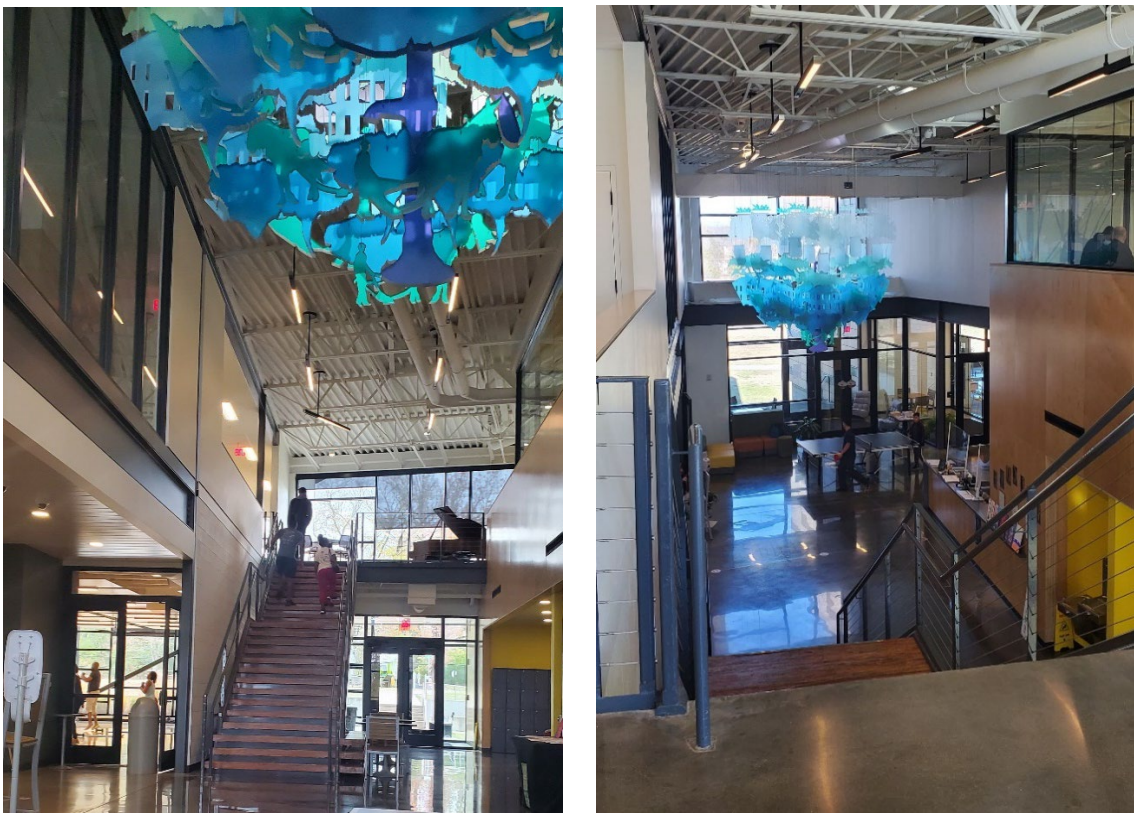


laid out on tables in the lobby. The fitness center and the dance studio seen in Figure 13 flank either side of the entrance, drawing patrons further into the building. While the swimming pool is visible from the lobby, access to the swimming pool and the gymnasium, as seen in Figure 14, is through a corridor behind the front desk. There are three exits aside from the front entrance on the lower level that lead to the outside walking track and the children's play area. Hanging in the lobby is the artwork a local artist created with community member input (Figure 15). The main stairs leading to the multi-purpose rooms and the upper walking track are to the left of the entrance. These

open into an upstairs seating area that looks out onto the children's play area and a vast expanse of farmland. A piano with a bench is also provided at this level. The multi-purpose rooms are to the left of the stairs, and the right leads to the walking track surrounding the gymnasium, as seen in Figure 16. The architect's website states, “The Community Center seamlessly blends functionality with local flair into a vibrant and dynamic gathering space for the community” (*Center 1*, 2020).

**Figure 15**

*Art Work Hanging in the Lobby (Left) and View of Lobby From the Upstairs Common Area (Right), Taken by Researcher*



The center offers a wide variety of programming that caters to different age groups. Open swim time begins at 6:00 a.m. and continues till 9:00 a.m. on weekdays.

There is gymnasium time for adults that starts early in the morning, and on Saturdays, parents and children have open gymnasium time for basketball. On weekdays, volleyball practice is available for teens and adults in the gymnasium. The center offers pickleball

**Figure 16**

*Gymnasium (Left) and Multipurpose Room Kitchen (Right), Taken by Researcher*



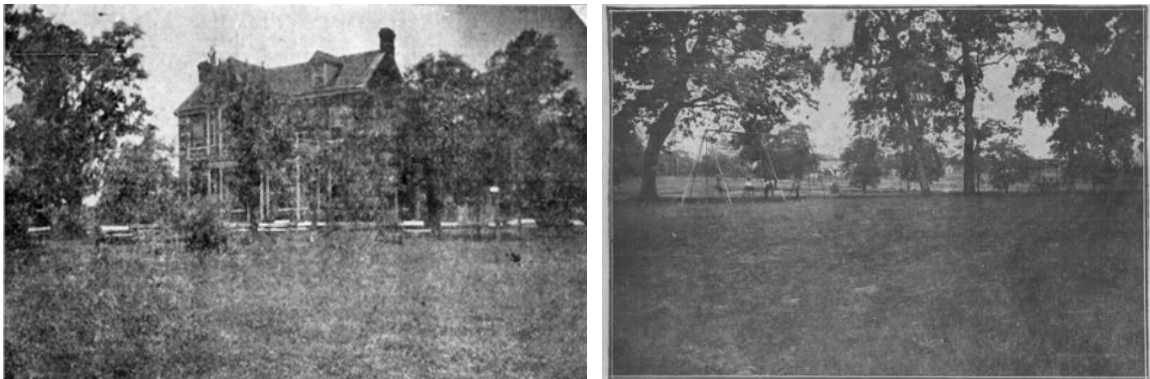
classes twice weekly and a boot camp every Saturday. Yoga classes are offered once a week in the evenings to cater to the working population. Low-impact strength and movement classes, line dancing classes, and water aerobics are typically available mid-morning for seniors. Some groups get together for card games once a week. An English and Spanish book club and a cooking club meet monthly. There is tot-time, home-school fitness classes, and free play time twice a week to cater to young families. Twice a month, there is Family Fun Friday, when the swimming pool and the gymnasium are open for families. The center has an elementary after-school program during the school year and a summer program for school-aged children. Most of these programs are free, and some classes charge a nominal fee, which is subsidized for senior citizens. The fitness center is available to all patrons for a very nominal cost.

## ***Site 2***

Center 2 is located in a 30-acre park eight minutes northwest of downtown. Situated between two Historically Black Universities (HBCUs), it was one of the first parks in the United States exclusively set aside for use by African Americans. The original land was a plantation owned by a white American who enslaved people. According to archival sources, the city purchased the land and dedicated it as a park on July 4<sup>th</sup>, 1912 ("Center 2 Dedicated July Fourth," 1912). The main house on the parkland, as seen in Figure 17, served as the recreation building, along with a bathhouse, shelter house, comfort house, garage, and a refreshment stand.

### **Figure 17**

*Center 2 Original Plantation House (Left) and Park (Right)*



The recreation building had playrooms and storage rooms (*The Cultural Landscape Foundation: connecting people to places*). It is unclear how the park got its name. Two possibilities exist, the first being that the park was named after the plantation owner and the second being that the park was named after a reputed African American doctor. In 1949, the first Community Center was built on the parkland for about \$35,000. Outdoor tennis courts were also added in phases to this park, honoring one of the city's

famous African American tennis players. Between 1953 and 1955, the city added the first two tennis courts. By 1979, there were five courts, and in 1985, the city added the last two outdoor courts (Ingram, 1986). Around 1955, an outdoor swimming pool was constructed for African Americans. This center was replaced in 1985 with an updated community center at the cost of \$350,000. The outdoor pool was closed and filled in at some point after the 1985 construction. The current community center was built in 2006 at a cost of approximately \$5 million. Apart from the gymnasium seen in Figure 18, one of the latest additions to the 1985 building that was left intact, the rest of the building was demolished, and the current center was built alongside the existing gymnasium, incorporating it into the center (Jones, 2006).

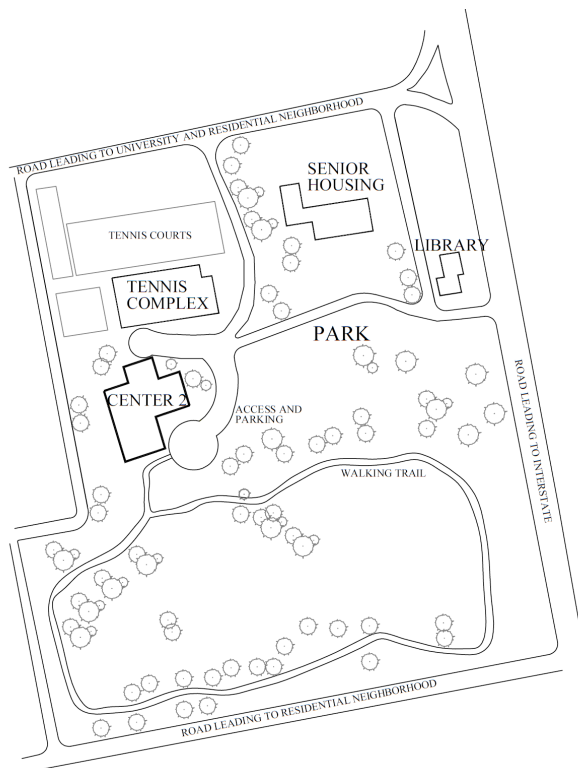
**Figure 18**

*Existing Gymnasium After Demolishing the 1985 Community Center*



**Figure 19**

*Master Plan of Park with Center 2 Redrawn from Google Maps*



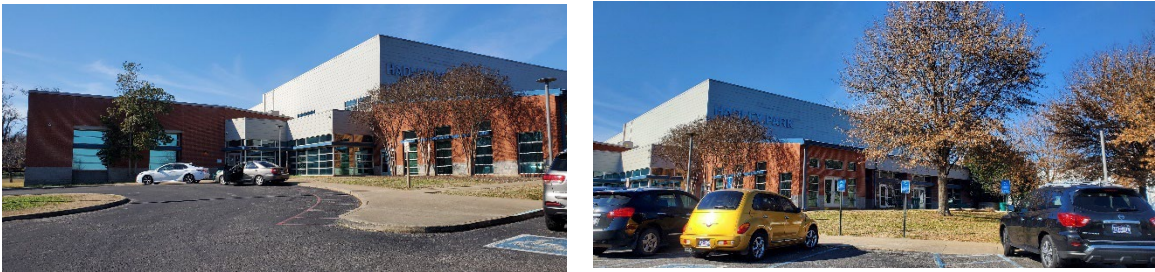
As seen in Figure 19, the park houses a public library, an indoor tennis facility, and outdoor tennis courts. A senior residential apartment complex just off the park appears to be part of the park. In addition, there are picnic shelters, an amphitheater, and a long walking track that encircles the entirety of the park. Completed in 2006, the current community center is nestled among the trees of the larger park area, forming the park's focal point. A long driveway leads from the main road up to the center.

The exterior of the building, as seen in Figure 20, has a contemporary feel, incorporating red brick with white metal panels. The red brick on the façade plays off the brick from the existing gymnasium façade. Glazing on the exterior provides adequate

lighting to all interior spaces. The center has a swimming pool with changing rooms, a game room, a gymnasium, a full-service fitness center, a dance studio, a computer room, and a senior center with a full-service kitchen that doubles as multipurpose rooms during weekends. The walking track on the second floor weaves through the center and is not

**Figure 20**

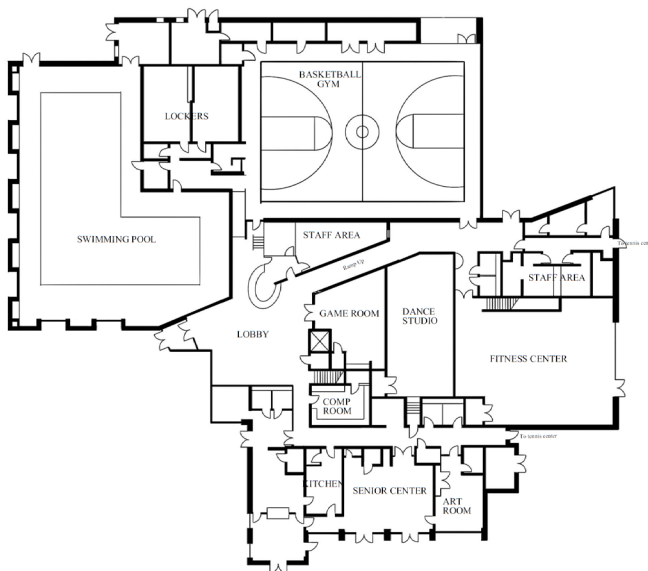
*Exterior Views of Center 2, Taken by Researcher*



above the gymnasium, as is typical in most community centers. The main entry to the building leads into a double-height lobby space with a direct view of the swimming pool to the left. Figure 21 shows the first floor plan of Center 2. A glass façade separates the

**Figure 21**

*First Floor Plan of Center 2*



pool from the lobby, as seen in Figure 22. To the right is a seating area with several displays of the park's history. Directly in front of the main entrance is the check-in desk. Behind are the corridors leading to the gymnasium and the senior center.

**Figure 22**

*Swimming Pool, Taken by Researcher*



**Figure 23**

*Lobby (Left), Check-in Desk (Right), Taken by Researcher*



While the color palette throughout the center is neutral, one of the walls in the lobby is maroon, with a piano. One can access the walking track from the stairs and elevator that opens into the lobby. Just off the lobby is a game room. Since the gymnasium, seen in Figure 24, was part of the older structure, it is at a higher level than the lobby, necessitating two ways to reach the gymnasium: one is from stairs that are directly off the lobby, and the other is through a ramped corridor. This ramped corridor also leads to the fitness center and the dance studio. One can access the computer room and the senior center from the second corridor. Seniors access the senior area through a

separate door along the front of the building. This area comprises a small lobby, full-service kitchen, TV room, large seating area that also serves as the dining room, and a smaller crafts room.

**Figure 24**

*Gymnasium (Left) and Fitness Center (Right), Taken by Researcher*



The center has programming that supports the surrounding community. The pool is open Monday through Friday, and on most days, there is lap swim time from 8:00 a.m. to 10:00 a.m., after which are senior water walking classes. The pool is reserved for after-school activities during the week, and in the summer, the pool is reserved in the afternoons for children from the summer camp. In the evenings, there are Aqua spin classes and swim lessons. The gymnasium is available for basketball in the afternoon and late evenings, and the family open gymnasium occurs every evening. The gymnasium is used for senior dance classes in the mornings, and the Center 2 line dancers practice at the gymnasium twice a week in the evenings. The line dancers are well-known and perform all around the city. Ballet classes are offered for children on Saturdays. The center has an elementary after-school program during the school year and a summer program for school-aged children. As in other centers, most of these programs are free,

and some classes charge a nominal fee subsidized for senior citizens. The fitness center is available to all patrons for a nominal cost. The senior program is free, well-organized, and popular, running Monday to Friday, 8:00 a.m. to 2:00 p.m. Most seniors can avail themselves of a free ride to the center. They are provided a light breakfast, after which they engage in physical activities around the center. Sometimes, they have art classes and exercise routines followed by a hot lunch. Some days, they play cards, bingo, and watch TV. Figure 25 shows the spaces utilized for the senior program.

**Figure 25**

*Senior Area Spaces, Taken by Researcher*



### **Subject Selection**

For this study, I employed purposeful sampling to select interview subjects. Purposeful sampling gives the researcher the advantage of interviewing people who can provide deeper insights, enabling the researcher to better understand the research questions (Creswell & Poth, 2018). Purposeful sampling also allows the researcher to “learn a great deal about issues of central importance to the purpose of the inquiry” (Merriam & Tisdell, 2016, p. 96). Merriam and Tisdell (2016) list five types of purposeful sampling: typical, unique, maximum variation, convenience, and snowball or

chain sampling. A typical sample reflects the “average person” (p. 97) as the researcher is trying to focus on the usual and the common. Since the study sought to understand how the physical environment of community centers enabled users to develop social capital and sense of place, the subjects chosen were typical users of the two community centers. They were selected based on the following criteria: (1) users above 18 years of age and (2) users who visited and participated in activities in the community centers at least once a week. In addition to typical sampling, snowball sampling was used, as I asked interview participants to refer me to other users who would be able and willing to participate in the study. Many participants of the study recommended friends who were in classes with them. At Center 2, seniors connected me to other seniors they knew.

**Figure 26**

*Recruitment postcards (Left) and flyer (Right)*



I posted flyers on the community centers' lobby bulletin boards (Figure 26) to recruit participants and placed postcards on the community information desks. Figure 26 shows a recruitment postcard and flyer used in the study. The community centers did not maintain a mailing list or database of users; hence, as part of the recruitment drive, I

visited the community centers daily, approached patrons, and provided them with information about the study. I also handed them the postcards with my contact information and a QR code that they could scan and provide me with their contact information if they wanted to participate in the study.

In addition, the manager and staff of the community centers introduced me to patrons as they were coming into or leaving the center. I attempted to select participants of different ages and genders to gain a broad perspective and interview users who had been visiting and using the center for extended periods. Both efforts would yield participants who have insights that would add value to my study. The study was incentivized with a \$30.00 gift card to Amazon, Walmart, or Target, and the gift card was given to participants upon completion of the interview. While there is no specific amount of time and number of subjects to interview, Merriam and Tisdell (2016) propose that data collection can conclude when “the data and emerging findings feel saturated” (p. 246).

I interviewed 20 users from Center 1 and 14 users from Center 2. The study collected basic demographic information. Most participants were females, 65% in Center 1 and 93% in Center 2. Regarding race, 50% of participants in Center 1 and 93% in Center 2 were African American. At Center 1, 40% of the participants were Caucasian, and 10% were Hispanic. In terms of age range, 50% of participants were 65 or older, and 25% were between 50 and 65 in Center 1, while at Center 2, 57% were 65 or older, and 29% were between 50 and 65. Tables 6 and 7 provide a detailed list of Center 1 and Center 2 participants.

**Table 6***Details of Interview Participants at Center 1*

No.	Subjects (Pseudonym)	Age Range	Race	Sex
1	Liv	74-91	W	F
2	Glen	65-73	W	F
3	Charles	74-91	W	M
4	Therma	31-38	Hispanic	F
5	Landon	65-73	B	M
6	Cali	55-64	B	F
7	Tina	31-38	B	F
8	Glory	65-73	B	F
9	Joann	65-73	B	F
10	Viv	65-73	B	F
11	West	31-38	W	M
12	Miles	39-45	W	M
13	Neena	39-45	B	F
14	Peter	74-91	W	M
15	Riley	65-73	B	F
16	Castor	55-64	B	M
17	Deanna	55-64	B	F
18	Ross	55-64	W	M
19	Sylvia	74-91	W	F
20	Ann	23-30	Hispanic	F

**Table 7***Details of Interview Participants at Center 2*

No.	Subject (Pseudonym)	Age Range	Race	Sex
1	Lisa	65-73	B	F
2	Brooke	65-73	B	F
3	Orion	65-73	B	F
4	Ester	65-73	B	F
5	Carmin	65-73	B	F
6	Caley	39-45	B	F
7	Gaby	55-64	B	F
8	Willa	55-64	B	F
9	Daisy	65-73	B	F
10	Pearl	65-73	B	F

11	Debra	65-73	B	F
12	Mason	23-30	W	M
13	Catherine	55-64	B	F
14	Amy	55-64	B	F

### **Data Collection**

Qualitative research consists of a set of interpretive material practices that make the world visible. These practices transform the world; they turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive naturalistic approach to the world (Denzin & Lincoln, 2011, p. 3)

The most common sources of evidence used in case study research are interviews, documents, archival records, direct observations, participant observation, and physical artifacts (Yin, 2009). Researchers have advocated the use of multiple sources of evidence to complement each other (Groat & Wang, 2002; Yin, 2009). This study collected data through interviews, photographs, observation of spaces, social patterns, and documentation. Institutional Review Board (IRB) approval was obtained for the study. Permission to conduct the study in the facilities was gained from Metro Parks and Recreation. I also meet with the facility managers for both the community centers to introduce myself, inform them about the project, and gain access to the facility.

### ***User-Employed Photography***

A photo-based method was used to gather data to understand the importance of the physical environment in contributing to a sense of place and social capital. In their study, Stedman et al. (2004) refer to the photo-based method as visitor-employed photography (VEP), commonly used in leisure research. As espoused by Stedman et al. (2004), user-employed photographs in this study enabled community center users to “represent their own experiences” (p. 584). According to Haywood (1990), as cited in Stedman et al.

(2004), VEP has several benefits: it provides the researcher with a clear idea about what participants like or dislike, it sharpens observations, helps to identify important aspects of the setting, and helps with generating comparisons between settings. This study used the photo-based method and referred to it as user-employed photography. Participants were given a tablet and requested to walk around the facility and take at least 10-12 photographs of areas, objects, and activities inside and outside the community center. Participants were also provided prompts (Table 8) for taking pictures, guiding them through the process. Participants were requested to take at least two pictures of each area so that there was at least one usable picture. In their study, Stedman et al. (2004) encouraged their participants to make a list of areas/ objects that the participants “wanted to capture prior to taking photographs” (p. 588). This provided participants with a road map and avoided unnecessary pictures.

**Table 8**

*Prompts for Pictures Provided to Interview Participants*

No.	Please use the prompts below to guide you through the picture-taking process
1	areas and spaces that you use on a regular basis while in the community center
2	areas you socialize in and/or use the most
3	Areas of the community center you feel most connected to
4	Physical aspect (spaces and/or objects) in the interior and exterior of the building that you find attractive

Initially, users were asked to take pictures before the interviews, but I changed the pattern since the subjects were not taking pictures based on the prompts as they could not connect the prompts and the interviews. We would take a break halfway through for the

rest of the interviews, and the users would take the pictures. This provided a better set of images and more meaningful discussions. Towards the end of the sit-down interview, I would go through each of the photos with the subject and would discuss which prompt the picture satisfied. In their study of a historic brewpub, Rojak and Cole (2016) employed the photography method “to better understand subjective feelings concerning place” (p. 584). This study also used the combination of photographs and interviews to gain a deeper understanding of the physical places that increase connectedness to place and the development of social capital.

### ***Interviews***

Semi-structured, “focused interviews” (p. 107) were undertaken as part of the study. The photographs served “as a reference point” (p. 586) for the interviews. At the start of each interview, I provided the subject with a brief personal history and background of the study. Interviews were open-ended and were based on a specific set of “how and why” (p. 13) questions that were “issue-oriented” (Stake, 1995, p. 65). The “how and why” (Yin, 2009, p. 13) questions were formulated so that the responses were not just “yes or no” (Stake, 1995, p. 65) answers but an explanation, a story, or a description that added value to the study (Stake, 1995). I avoided using “technical jargon” (Merriam & Tisdell, 2016, p. 118). I simplified the questions to enable the subject to provide meaningful responses. I used words like ‘can you describe...’, ‘what is your opinion....’, ‘how do you feel about ....’, providing the user ample time to expand on responses. Sometimes, I would ask the subject if they could elaborate on a particular topic. The interview protocol has been discussed in Appendix A. After completing the questions, I went through each photograph with the user. I asked them to describe “the

content of the picture and what they were attempting to represent” (Stedman et al., 2004, p. 588). Since photographs can “convey multilayered meanings” and can “represent multiple things” (Stedman et al., 2004, p. 586), it provided me the opportunity to delve deeper into specific dimensions of SOP and SC. Except for two interviews, which lasted 30 minutes, all other interviews lasted between 45 -90 minutes, which Yin (2009) suggests is the amount of time focused interviews take.

Yin (2009) points out that the research for case study takes “place in the natural setting of the case” (p. 109); hence, interviews were conducted in the community centers. At Center 1, 17 interviews were conducted in a secondary vestibule of the center, which had been converted to a makeshift meeting room, while three were conducted in a seating area next to the stairs as the meeting room was unavailable. At Center 2, 12 interviews were conducted in the art room next to the senior area, while two were conducted in the lobby. In addition to interviewing users of the community centers, I also interviewed the managers of both centers. The facility managers provided information on the programming and structure of the center and the vision for users.

### ***Observations***

Direct observations are an essential source of data gathering and were undertaken in the study through spatial analysis and observations of the social patterns of users. To become familiar with the community centers and as part of the observation protocol, I photographed every aspect of the physical environment of both community centers. I walked around and took photographs of the spaces, architectural features, furniture, and design aspects of both centers. In addition, photographs also included pictures of spaces

where people were engaged in structured programs as well as spaces that people used for informal gatherings.

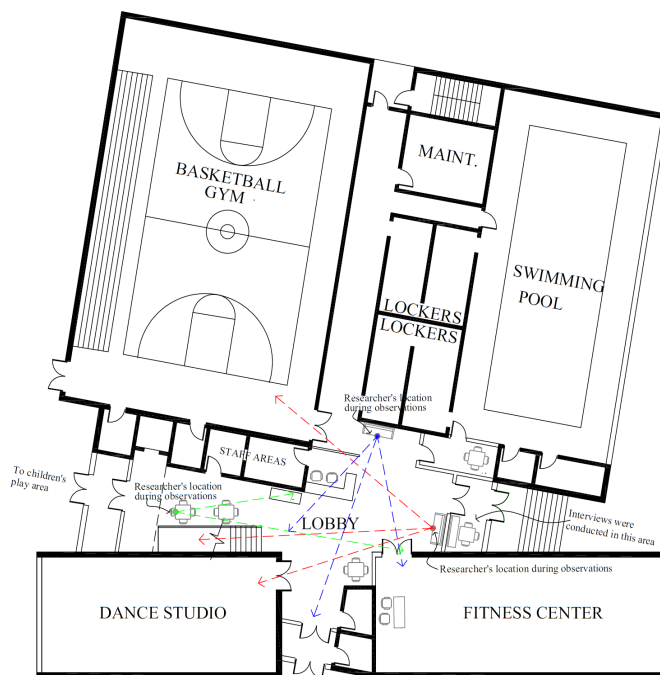
Formal and casual observations (Yin, 2009) were conducted throughout the study. Formal observations were planned explicitly as part of data collection procedures. The observation protocol can be found in Appendix B. Both community centers operated on a Monday- Wednesday and Tuesday-Thursday schedule. Friday and Saturday had different schedules. I planned my observations so that I would visit the centers one week on Monday, Wednesday, and Friday, and the subsequent week, I would visit on Tuesday, Thursday, and Saturday. Each visit happened at different times of the day, 10 a.m.-1 p.m., 2 p.m.-5 p.m., and 4 p.m.-7 p.m.

While there is no specific amount of time to spend on observations, Merriam and Tisdell (2016) recommend about an hour or less per session as it involves a lot of concentration and energy. I observed for an hour or so during each visit, but I spent close to three hours each time I visited the centers, engaging with the staff and trying to recruit participants. For most of the observations, I sat in the lobby of both centers. From my location in the lobby, I could see the entrance and reception desks. At Center 1, I could also see most of the spaces from the lobby, and observations were conducted in the lobby area. Figure 27 shows the areas of the lobby where the observations were conducted. At Center 2, I conducted observations from the lobby, where I could see the swimming pool and corridors leading to the other spaces. Figure 28 shows the lobby area where I sat for the observations. Halfway through each observation, I would walk through the centers. At both centers, I would take a lap around the walking track to see how many people were on the track and whether they were walking alone or with a partner. With the staff's

permission, I also went into areas where structured activities occurred. This helped me get an idea of the number of people who were participating in activities at each center and their interactions. In Center 1, I also conducted observations on the second level. The seating area off the stairs gave me a clear view of the walking track, multipurpose rooms, and the lobby below. I redrew the floor plans of both community centers and used them as part of the observations. I annotated users' space utilization patterns on the plans and which areas were most used.

**Figure 27**

*Plan Showing Areas Where Interviews and Observations Were Conducted in Center 1*

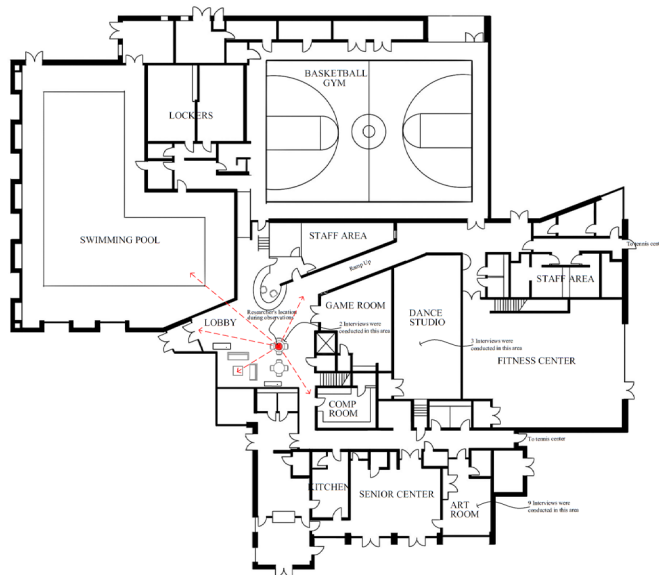


Casual observations were undertaken on days of interviews and when other evidence was being gathered. Observations accounted for the "physical setting" (p. 140), the study of the architectural features of the community center, the spaces most used, time spent in spaces, the users of the community centers, activities undertaken in the

different spaces, and how people interacted in these spaces and informal conversations (Merriam & Tisdell, 2016). In addition, they also suggest that the researcher spend time as soon as possible after the session writing out the field notes in a "narrative form" (Merriam & Tisdell, 2016, p. 149). The field notes included the date, time, and place. It also listed the people present (gender, approximate age range), how many people were in the spaces, and which spaces were being used. During observations, I photographed classes and activities in which people were engaged. Merriam and Tisdell (2016) recommend that field notes should be "highly descriptive" (p. 1510) and should have a "reflective component" (p. 1510), which would include interpretations, thoughts, and reactions. Since both centers were an hour's drive from my home, I used that time to record reflections of the observations, which were transcribed using Otter.ai.

**Figure 28**

*Plan Showing Areas Where Interviews and Observations Were Conducted in Center 2*



## ***Documents***

Documents were another method adopted for data gathering. According to Yin (2009), documents are used to “corroborate and augment evidence from other sources” (p. 103). I obtained a floor plan for both centers. The manager of Center 2 provided me with a floor plan for the center, and I downloaded the master plan and floor plan for Center 1 from the Metro Parks and Recreation website. These were initial drawings used during community presentations. I obtained copies of the community center programming from the front desk of the centers as well as the Facebook page of each center. I downloaded archival documents about planning participation and community meetings before the design and construction of Center 1 from the Metro Parks and Recreation website. Archival newspaper articles were obtained from Newspapers.com and the Library of Congress website and were used to understand and document the history of Center 2.

## **Data Analysis**

**Table 9**

*Matrix of Research Questions*

Research Question	Data Collection	Data Analysis
RQ1	Photo/ Interviews	Line by line coding, coding photos
RQ2	Interviews (photo-sit down)/ Observations/ Documents	Line by line coding, grouping into codes, developing themes
RQ3	Interviews (photo-sit down)/ Observations/ Documents	Line by line coding, grouping into codes, developing themes
RQ4	Interviews (photo-sit down)/ Observations/ Documents	Relationship codes through Maxqda software

In qualitative research, data analysis should begin early during the data collection process, where the researcher keeps detailed field notes and narratives of field observations and adds reflections immediately upon completion of observations (Creswell & Poth, 2018). Creswell and Poth (2018) identify three strategies for data analysis in qualitative research: preparing and organizing the data, coding the data, and representing the data. At the start of data collection, I created a spreadsheet that contained sequential information about interviews conducted and included name, date, time, age range, race, and the duration of each interview. I also maintained a spreadsheet of days I conducted observations, locations, and reflections. A separate spreadsheet was maintained for documents obtained for each community center. Through the data collection and analysis process, interviews were recorded on my cell phone and laptop and transcribed within a couple of hours using a paid transcription service, Otter.ai. I uploaded the recording using an account that I created. Once the transcription was complete, I received an email and would be able to access the transcripts in my account on Otter.ai. While I used Otter.ai for all my interviews, some required substantial editing, so I used the human transcription service from Rev.com. After the interviews were transcribed, I listened to each interview again while going through the transcript. I made spelling corrections and notes and added pictures each subject had taken and discussed during the interview. This gave me more familiarity with the data, and I could move forward with coding. Yin (2009) proposes that the researcher should "follow the theoretical propositions" (p. 130) that were developed as a road map for the study. The theoretical framework developed at the beginning of the literature review helped shape

the research questions and the data gathering. It also helped organize the data, focus on relevant data, and ignore other data (Yin, 2009).

Coding was undertaken to glean meaningful segments (Creswell & Poth, 2018) from the data collected. I developed a codebook early in the analysis process with a set of initial codes gathered from the theoretical framework. I assigned definitions to each of these initial codes. I then used MAXQDA, a qualitative data software, to assist with coding. The software helped "categorize a large amount of narrative text" (Yin, 2018, p. 166) collected during the interviews. The software was also used to locate text associated with developed codes, themes, and familiar passages related to codes (Creswell & Poth, 2018). I used the open, axial, and selective coding strategies for data analysis. Using these three strategies enabled "a cyclic and evolving data loop" (Williams & Moser, 2019, p. 47) through which I could compare, reduce, and consolidate the data (Williams & Moser, 2019).

I began with open coding, sifting through the interviews and user-employed photographs. The coding was deductive, as I had developed a codebook to guide me through the process. Line-by-line coding was undertaken of interview transcripts (Bernard et al., 2017). I read the transcripts multiple times to get a sense of the data. I organized "similar words and phrases, and concept-indicators" (Williams & Moser, 2019, p. 48) and assigned relevant data segments into broad initial codes. After the initial codes were populated, I re-read the data and derived additional codes from the data following an inductive coding pattern. Creswell and Poth (2018) recommend a lean coding process, starting with a few codes, expanding the initial codes, and finally reducing them again to combine the final codes to arrive at higher-level themes. Through the deductive and

inductive coding process, 35 codes emerged upon completing the open coding process. I then used axial coding to refine and better align the developed codes (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Williams & Moser, 2019). I engaged in line-by-line coding to further engage with the data. I looked for relationships between the open codes and created distinct categories. I combined the initial 35 codes into 18 higher-level codes. Selective coding followed the axial coding, leading to "further refinement of the data" (Williams & Moser, 2019, p. 15). In this process, I amalgamated similar codes to generate themes to help answer the research questions and satisfy the study's goals.

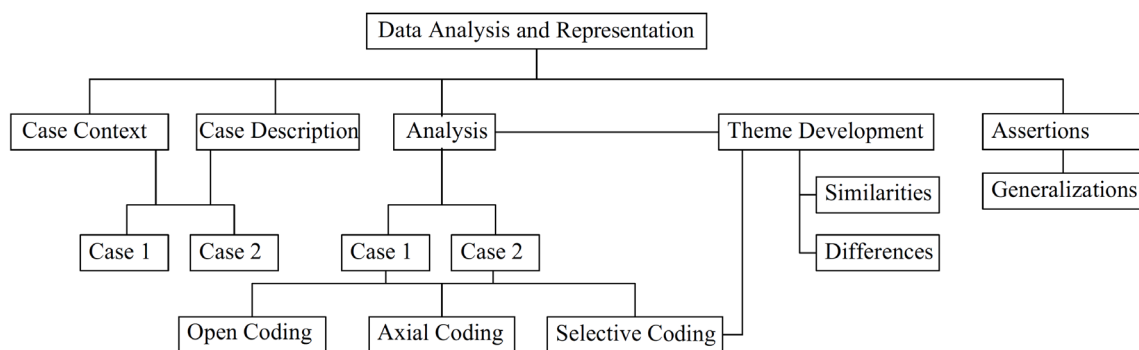
The user-employed photographs and text were coded throughout the data analysis. Photographs taken during interviews and observations helped "to convey important case characteristics" (Yin, 2009, p. 110) and became part of the data analysis and report. The photographs were also used to support themes that emerged from the coding process. I highlighted meaningful user quotes that would enrich the final report. Regularities in the data were identified as prescribed by Wolcott (as cited in Creswell & Poth, 2018). I also cross-checked the observations and documents to examine whether new codes emerged. No new codes emerged from the observations and documents, but the observations supported the codes developed from the interview data.

For case study research, it is recommended that the analysis include a detailed description of the case (Stake, 1995; Yin, 2009). The individual site descriptions were provided at the start of Chapter 3. Since a multi-case study approach was utilized for this study, each theme developed was analyzed in relation to the individual sites, and then cross-case analysis was conducted within the themes, highlighting similarities and differences. The data analysis process is described in Figure 29. "Naturalistic

generalizations" were developed after analyzing the data, which ensured a better understanding of the case and could be used and transferred to similar contexts (Creswell & Poth, 2018). Stake (1995) maintains that those generalizations will arise as they will "regularly occur along the way" (p.7) during data analysis. Yin states that the results from case study research can be generalized "to theoretical propositions" (p. 15). The themes developed and results obtained were examined in relation to the theoretical framework developed at the start of the study. In addition, the themes were also linked to the published literature.

**Figure 29**

*Data Analysis Process Modified from Creswell & Poth (2018)*



**Researcher Position**

In a qualitative study, the researcher must clearly outline their position concerning the study (Creswell & Poth, 2018; Pitard, 2017). Creswell and Poth (2018) posit that the process of reflexivity enables the researcher to situate themselves in the writings. Berger (2015) recognizes reflexivity as an essential activity that should be undertaken during the qualitative study. As the researcher, I believe that my background and experience have had an effect on the concept being studied. I have worked with several architectural

students over the years who have designed community centers (as part of their capstone projects) for their hometowns, citing the need for a place for the young and aging to come together, to re-create the sense of community that has been lost due to economic downturns. I believe that community centers are vital facilitators in achieving social and economic outcomes in the communities in which they reside. My immigrant status has also affected my data collection process, as many community centers in densely populated urban areas serve immigrant populations. The community centers that I studied are in dense and diverse regions of the city and cater to local and immigrant populations. In addition, my architectural background plays a role in how I view the community center's design and what design can achieve for users. Reflexivity has helped me understand that I approached aspects of this study from an "insider position." Berger (2015) opines that a researcher with an "insider position" during a study must be alert and reflect on how their presence and experiences influence the conversation. Understanding my "insider position" helped me be more aware of the bias I could bring to the interview process. I was able to position myself and be careful during the data collection and analysis process.

### **Validity in Qualitative Research**

Groat and Wang (2002) discuss four standards of quality proposed by Guba: credibility, transferability, dependability, and confirmability. Merriam and Tisdell (2016) offer four strategies for validity: triangulation, member checks, adequate engagement in data collection, and support of alternative explanations. Three strategies were utilized in the study: triangulation of data was the first way that validity was ensured in the study (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Yin, 2009). The use of multiple

sources of data, interviews, observations, and documents, increased the credibility and confirmability of the study (Groat & Wang, 2002; Merriam & Tisdell, 2016). These multiple sources supported the codes and themes that emerged from the analysis. To ensure the accuracy of information explaining the relationship between SOP and SC, triangulation was undertaken between data collected from interviews with community center users and facility managers, the photographs taken by myself and the users, and observations. According to Yin (2009), using multiple sources of evidence will aid in “the development of converging lines of inquiry” (p. 115). While member checks were not used to add validity to the data due to the flexible nature of the time users spent in the community center, once the codes and themes emerged from the data, I reached out to the facility managers of both community centers to discuss findings and understand any anomalies that arose in the data. During the study, I spent considerable time on-site engaging with research subjects and making observations, which helped verify the information received. Analysis and evidence that did not support the research problem in question were reported, which brought forward a more “realistic assessment” (p.261) of the concept under consideration (Creswell & Poth, 2018). “Rich, thick descriptions” (p.31) of the site, setting, and interviews were provided when elaborating on the codes and the themes. These descriptions focused on the primary constructs, physical aspects of the case, the activities that users are involved in, and the movement of users (Creswell & Poth, 2018; Groat & Wang, 2002). These rich, thick descriptions also added to the transferability of data. Though the intent of this study was not to generalize findings, I have provided details about the centers and a brief idea about the communities in which these centers were situated so that the reader can establish a “degree of transferability”

(Glover, 2004, p. 69) of the findings from the cases studied to the case to which the findings might be transferred (Glover, 2004). Dependability was achieved through transparency with data collection, analysis, and interpretation (Groat & Wang, 2002). I documented the data collection process and maintained all the recordings, transcriptions, and field notes. All observation sheets had a date and time, which were scanned to create digital copies.

Using the multi-case study approach also strengthened the data that was gathered from the study. According to Merriam and Tisdell (2016), “inclusion of multiple cases is a good strategy for enhancing the external validity or generalizability of findings” (p. 40). According to Yin (2009), “analytical conclusions independently arising from two cases will be more powerful than those coming from a single case” (p. 61). During the data analysis process, developed themes were analyzed for each case, and then a cross-case analysis was conducted, which highlighted similarities and differences between the two instances, further strengthening the validity of the findings.

## CHAPTER 4 – FINDINGS

This study sought to understand how the physical environment of community centers assisted in creating sense of place and social capital for its users through the constructs of place identity, place attachment, place dependence, and place satisfaction and sense of community, social networks, and neighboring. The interviews with users and community center managers, as well as participant photographs, observations, and documents, offered insights into the domains of sense of place and social capital in the context of community centers. Data analysis took shape through inductive and deductive coding. Coding was guided by the theoretical framework developed by Acedo et al. (2017), which was modified for this study. This study began with a focus on the physical aspects of place, but through the interview process and coding, it was evident that separating the social and physical elements would not provide a complete picture of the importance of place in developing a sense of place and social capital. Hence, when developing the themes for the study, overlaps are evident between the physical and social aspects of place. Codes were grouped together to create four overarching themes, each consisting of at least three codes. The findings will be discussed through the following themes: (1) Reactions to the Physical Environment, (2) Incentives for Using the Community Centers, (3) Users Feelings about the Community Centers, and (4) Weaving Connections and Social ties. The themes are discussed in no particular hierarchical order; instead, they begin with a focus on the attributes of the physical building and then dive into the social aspects of community centers. Table 10 highlights the four themes and their codes. The four themes that emerged from the coding process are discussed in detail.

**Table 10***Themes and Related Codes*

Themes (TH)	TH1 Reactions to the Physical Environment	TH2 Incentives for Using the Community Centers	TH3 Users Feelings about the Community Centers	TH4 Weaving Connections and Social Ties
Codes	Atmospherics of the Centers	Users are able to Access the Centers with Ease	Users feel Welcomed at the Centers	Social Activities
	Design Elements of the Centers	The Centers are Affordable	Users feel Uplifted at the Centers	Keeping up with Each Other
	On the Utilization of Spaces and Resources	The Built Environment Supports a Sense of Safety	The Centers are a Link to the Community	Helping Each Other
		The Built Environment Supports Users' Needs	The Centers Create Opportunities	Shared Feelings of Belonging

## Theme 1: Reactions to the Physical Environment

The first theme highlights the physical environment of the centers through views expressed by users about, and their reactions to, various aspects of the physical building, spaces, and resources available for use. This theme ties into the idea of the physical place, a vital element of the study. The codes presented in this theme bring forward the constructs of place identity, place attachment, place satisfaction, and sense of community. The distinctiveness of the physical environment adds to identity with place, the facility's aesthetics contribute to place satisfaction and creating a sense of community, and the availability of spaces and resources adds to place attachment and place dependence.

**Table 11**

*Codes and Associated Sub-Codes of Theme 1*

Code	Sub-Codes	Context
Atmospherics of the Centers	Design- Exterior	Setting of Building on Site  Creating a dynamic form Using distinctive materials Providing outdoor amenities
	Design- Interior	Natural light streaming into the space Views and connection to the outside Natural materials enhance the space Open, airy, and spacious Cleanliness and maintenance are essential
Design Elements of the Centers	Interior	Durable materials  Combination of different paint colors and materials Furniture – different seating options Amenities were convenient Artwork added interest

		Quotes were inspirational Bulletin boards provided information
On the Utilization of Spaces and Resources	Structured Activities	Gymnasium supports tot-time, pickle ball, line dancing and organized activity  Dance studio instructor-led classes Swimming pool instructor-led classes Multipurpose rooms organized club activities, senior programs
	Unstructured Activities	Walking track as a standalone activity  Fitness Center Gymnasium -free basketball playtime Swimming pool – open lap time Multipurpose rooms rented out for community use Lobby in Center 1 as a game room Lobby as a nucleus

### *Atmospherics of the Centers*

So, I like that it's a modern piece in an old, like an older place. You know, it's, it's reflective of just how well established and I don't know that a number of years Center 2 has been here. And that's something I should know. But it is a modern building in a well-established place. And I think that means a lot too, that you can have two, two different eras coexist, and everybody's still find, some wholesomeness in it. (Caley-C2)

During discussions of the centers, users talked about the location of the community centers on the site. At Center 1, a couple of users commented on how it was perched “on top of the hill at an angle” (Ross-C1), which felt strategic and made it very visible from the road, but one user thought that because the building was setback made “a lot of people miss it” (Sylvia-C1). The primary complaint was that turning from the main road into the center's driveway was difficult.

**Figure 30**

*View From the Building Looking onto the park highlighting the location of Center 2,*

*Taken by Gaby*



For users of Center 2, the setting of the building within the park (Figure 30) was significant and generated a positive image of the place. Some users liked that it was setback from the road, and they had “to drive up” (Carmin-C2) before reaching the center.

Look at the trees, it's surrounded by trees. And in the summertime, these trees give us shade, breeze. And there is a what there are benches. In the summertime. You can have your family come and have lunch. You can eat lunch. And what is that? There? There are seats for presentations. the pavilion area. So it's it's, I don't know. It's just a nice, inviting community center. (Brooke-C2)

You got a nice park. They have, they have events in this park all the time. Some of my favorite festivals, like the African street fair is held here, annually. So, I mean, there's a lot of things I love about this park and just, it just fits our community well. (Catherine-C2)

Discussions about the atmospherics of the buildings were generated from the photographs users took during the interview process. Users expressed strong opinions of

the interiors; few users commented about the exterior of the building at both centers. The few users who commented on the exterior of Center 1 appreciated that it was not a square box but angled. There were some stark differences of opinion about the exterior of the building. Some users believed the outside was uninspiring, while others commented that the outside was “modern” (Figure 31) (Neena-C1).

**Figure 31**

*Exterior View of Center 1 Highlighting the Modern Exterior, Taken by Charles*



But we're fortunate to have a contemporary kind of. I think it makes the kids feel like it's part of their century. You know, it's not an old log cabin somewhere where they go to spend time, which it'd be alright too, but I think they, this is probably I've been in most of the schools around here, and this is built far better and more interesting and cleaner and nicer looking. Futuristic, kinda, you know? I think children would think this is a Grand Place. (Liv-C1)

Users liked that a combination of materials, such as steel, masonry cladding, and expansive glazing, was used outside and that it was not just a regular brick-and-mortar building. One common idea that emerged was that there was a glaring difference between

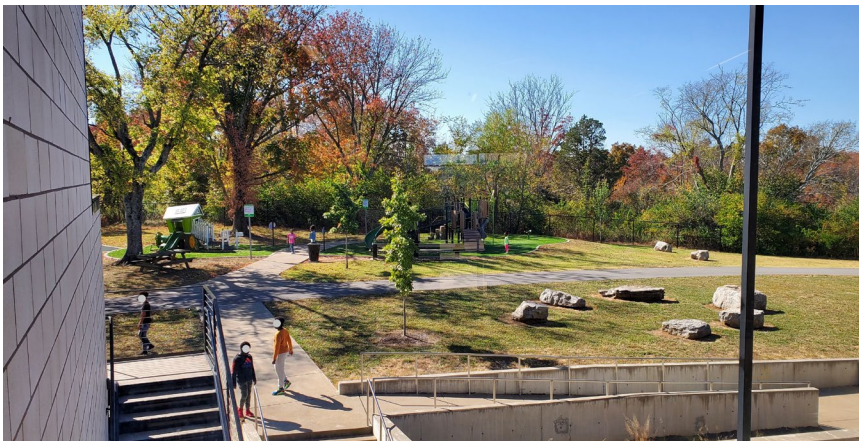
the outside and the inside, with many commenting that the inside was much nicer than the outside.

I think a lot of people miss it because it's setback. There is a sign, but I don't think it's, it's impressive. And unless you actually know it's here, and you turn in the driveway. So, I would say that the impression is not as good from that viewpoint as probably from once you get inside. I've heard people say, oh, I didn't even know it was there. And then I went inside it was beautiful. (Sylvia-C1)

Users who had little kids discussed their use of the outdoor playground. They believed that it was a well-thought-out and executed space. The “funky playhouse” (Neena-C1), rocks, and picnic tables made the area enjoyable (Figure 32). Some users who did not have young kids commented that they enjoyed watching the kids have fun in the playground as they were walking the track. Users also liked the pavilion and wished there were more around the site. Others commented about the well-maintained landscaping around the building and the convenience of having bike racks.

### **Figure 32**

*Children's Play Area and Rocks at Center 1, Taken by Neena*



But even like the design elements of like the rocks, right? Those rocks don't have to be there. But they're pretty. And they're in a circle. And the kids play on them. People eat on them. Like it's, it's like a nice thing. You know what I mean like. So, I love that I like the fact that there's a community shelter like and that they

designed that, and the park is a good. Like, I like how this was conceived as you have a door in, like how they thought about that. Because you couldn't put it right here and not like this is a straight. So I feel like this was thought because some things I'm like, that doesn't make any sense. So I love that, too. (Neena-C1)

When discussing the exterior of the building at Center 2, users liked that the facility looked up-to-date and did not look run down. They enjoyed the combination of red (brick veneer), white (metal panels), and glazing. At Center 2, seen in Figure 33, some felt it looked “modern” (Caley-C2). Many liked that the parking lot was close to the building and had a drop-off area, which helped seniors. Many appreciated the outdoor benches which they used regularly.

**Figure 33**

*Exterior of Center 2, Taken by Debra*



It's a nice building. And I'm glad they went out of their way to make it look good and it's not just like all the other buildings that just look run down, but they have made it look good. The parking is good, the spaces are wide enough, so you don't have to worry about no one hitting your car. They have the little circle where you can go let people off by the circle and go around and park, and it's good. (Gaby-C2)

On the inside, users at both community centers commented about the glazing on the exterior walls and the interior areas of the centers. Most users appreciated the glazing on the façade, which allowed natural light to stream into the facility, providing a feeling of spaciousness. The light streaming into the spaces made users feel very comfortable and enabled them to enjoy the facilities. At Center 1, the programmed spaces, fitness center, dance studio, and swimming pool had glazing from the floor to the ceilings, making them feel more open and connected with the outside.

I do like the glass in the building because it allows light to come in. And so, it won't be like a dark building. So, I think that architecture detail is great in here. And of course, the gym, everything is to me light and bright, and the wood, I like that it plays off of the trees and the atmosphere outside. (Deanna-C1)

Users of the fitness center were pleased with the location of the glazing and the positioning of equipment in relation to the glazing, as seen in Figure 34. They could get outside views, which made their exercise routine more enjoyable. One user said she felt like she was on a “CrossFit or a Peloton” (Therma-C1)

...and when I use the fitness room, I like the fact that it you know, you have all the, the, the bikes open up to the, the glass, where you can see out ... and while in there bicycling or whatever you can look at and see the cars or whatever, going, you know, going across the highway, which is, you know, I like that. (Cali-C1)

....what I did like about the weight room was like that big windows. Like it's really cool to be on the rower and just look out the window. I mean, it's, it's really pretty. And so, I do like all the windows. I like all the light, the natural light. (Miles-C1)

### Figure 34

*View of the Exterior from the Fitness Center at Center 1, Taken by Therma*



Similar sentiments were expressed by patrons who used the swimming pool and the dance studio. Both spaces had large glass walls across an entire façade, which provided a connection with the outdoors. Some users felt like they were outside. One user commented that seeing the sunrise in the morning during winter as he was swimming was breathtaking. Another user at Center 1 mentioned that being in the pool felt like a retreat, and seeing the wood beams on the ceiling as she floated was magical and something she enjoyed (Figure 35). In addition, users also noted how the location of the glazing on the side facades and a more solid front façade facing the parking lot afforded them privacy (Figure 36).

**Figure 35**

*View of Glazing in the Swimming Pool Area at Center 1, Taken by Therma*



**Figure 36**

*The Front Facade of Center 1, Taken by Charles*



At Center 2, users also enjoyed the natural light streaming into most spaces in the building. Some users commented that during winter, the sunlight streaming into the pool made it feel warmer in the pool (Figure 37).

....when you're real cold, if the pool is kind of cold, the water's messing up, that sunlight coming in, and you stand right there in that little spot until you get

warmed up. I stand right there for a minute. I'm standing right here till I warm up. Yeah. Yeah. (Daisy-C2)

**Figure 37**

*Swimming Pool of Center 2 Showing the Light Entering the Pool, Taken by Daisy*



Users also enjoyed the light streaming when they walked the track (Figure 38), as they could see outside, feel connected to, and be aware of their surroundings. Similarly, users liked that the gymnasium felt open and airy, with light entering through the elevated glazing. The gymnasium was part of the older community center and had been integrated into the new center. In the senior area, many seniors also appreciated the extensive glazing and their connection to the outdoors. It helped them feel more comfortable, and some commented that they enjoyed watching people who visited the center.

In addition to natural light bringing about a spacious feeling, at Center 1, spaciousness was created through the organization of rooms around the lobby. The use of glass to separate interior spaces made the center feel open and visually connected while at the same time keeping the noise confined to each room. In Center 2, the pool was the

only space directly connected to the lobby. Still, the glass separating the pool and the lobby and the natural light streaming into the lobby added to the feeling of spaciousness and, at the same time, users felt that it encouraged others to come and use the pool as they were able to see the pool and activities going on in the pool. Both lobbies were double-height, further enhancing the spaces' openness.

**Figure 38**

*Walking Track at Center 2 with the Light Streaming inside, Taken by Willa*



...all the glass, the fact that it's open, there's something to look at while you're here doing whatever it is you're here to do. And letting all the light in and the fact that it's, it flows from one place to another but can still be closed off door wise to keep the noise of basketball going on over there out of the gym or vice versa. (Charles-C1)

...it's the first space that I walk into and use at the front desk (lobby) (Figure 39). I have noticed recently they put up these plants which I do really like. But there's also to me, you can see all these huge windows that open up into the pool. And then the pool room also has lots of huge windows. It's just like an open well lit area, okay, that I use, okay, that you have to use to come inside. (Mason-C2)

## Figure 39

*Lobby at Center 2, Taken by Mason*



The cleanliness of the facilities was another aspect that users talked about at least once when reviewing the photos they took. Users believed the centers were well-maintained and clean, which kept them returning to use them.

...but another piece will be the cleanliness of the building. That's the draw. Also, you don't get a lot of noise. So, you know, people are here to do what they need to do. (Castor-C1)

I wouldn't come here if it was not clean. If I saw bugs in here, where the bathrooms were not clean, or there was trash in the parking lot, I wouldn't come. So, it makes a difference. Like I keep my house, that's where I would like to visit places that are kept neat and clean. Not cluttered. (Gaby-C2)

### *Design Elements of the Centers*

This code is being discussed to highlight specific aesthetics of the centers that users noticed and enjoyed and examines how they described them. This code will discuss the facilities' interiors generated from the photographs that users took during the

interview process. Since they spent most of their time inside the center when they visited, users at both centers spoke in detail about the interior spaces and elements of the buildings.

Users discussed the materials, (paint) colors and tones, and furniture and fixtures used in the spaces. At Center 1, users enjoyed the natural wood grain interspersed throughout the center. One user who primarily utilized the swimming pool had this to say.

.... on the inside, I like natural materials. So, looking at the ceiling. I think it really adds to my environment, at least because a couple of things going on one, you have the woodgrain that's nice; I don't think it's sanded but it's just a natural woodgrain. The vaulted ceilings are a nice feeling of openness. And then I like the exposed ceiling beams. Rafters, whatever. I'll have that I really enjoyed while I'm swimming. I again, it's not something I can describe. I'm not much of an interior designer or architecture person, but it makes me feel good. (West-C1)

Few users commented on the practicality of the polished concrete floors, the natural wood grain on the stair treads, and the colors on the walls (Figure 40). They liked how the natural wood tones played off the white-painted masonry wall in the lobby and the mixing of the industrial materials with the wood.

Just I feel like mixing this, like industrial elements of like the, like the metal railings, and then the the wood tones on the stairs is a lot more, it feels a lot more modern to me. And again, just it's visually appealing the way that they set those stairs up. So that's all. (West-C1)

Look at the paneling. Do you see what I'm saying? It gives it a different and the fact that they like colored that that's nice, but like do you have to do this? No, no, but does it add something? Yes, it de-sterilizes and de-institutionalizes the space by adding natural materials you know what I mean? (Nancy-C1)

## Figure 40

*Lobby of Center 1 Showing Interior Finishes, Taken by Glory*



Some users also discussed the vertical wood slats behind the reception desk and how the slats helped divide the space but, at the same time, did not make it feel closed off. This can be seen in Figure 41.

I like that little thing right there (wooden vertical slats behind the desk). Okay, because it kind of divides it. Where the staff can have their little personal space, but yet also be out in the open as well when needed. And I can talk to them through that little thing, right there. (Joann-C1)

The color on the walls and artwork in the lobby areas at both centers pleased users. At Center 1, splashes of yellow were interspersed throughout the various common areas, like the lobby, the corridor leading to the changing rooms, and the area around the elevator. The multipurpose room's cabinets were also yellow (Figure 42), making the space appear lively. Most of the walls were painted white, which some users commented seemed “boring” but made the center look clean and neat.

...you know, like, like, the kitchen is yellow. Right? I wouldn't have that kitchen for myself. But going up there for the club. It's bright and cheerful. (Glen-C1)

**Figure 41**

*Slats Behind the Reception Desk in Center 1, Taken by Therma*



**Figure 42**

*Kitchen in Multipurpose Room in Center 1, Taken by Glen*



Another aspect that users valued at Center 1 was the chalkboard wall seen in Figure 43, where staff wrote the week's quote. In addition, patrons enjoyed the ping-pong

table and the checkers board in the lobby. Regarding convenience, users spoke about changing tables in the locker rooms, elevators, and water bottle filling stations (Figure 44).

### Figure 43

*Chalkboard in Center 1, Taken by Riley*



The best thing I love that (pointing to the chalkboard wall), I think what encourages activity and connectivity is the quote, you can go out there and write your quote on the wall, and you can give encouragement to someone who didn't even know though they needed it. (Tina-C1)

Every user commented on the mobile artwork hanging from the ceiling; many were fascinated by it and enjoyed seeing it in the center. Users also liked seeing the children's artwork from the afterschool program displayed throughout the center (Figure 45).

I love the artwork, because that's one of the first things you see when you walk in, and it's very different. And the colors are just so soothing, I think, I think it's beautiful. The colors are very nice. I took a picture of the artwork. I love that piece. You know, we're out here by the lake and it just really blends in with the natural environment. (Cali-C1)

**Figure 44**

*Water Bottle Filling Station in Center1, Taken by Tina*



**Figure 45**

*Children's artwork at Center 1, Taken by Charles*



Most users at Center 2 expressed similar sentiments about the look of the center's interiors as the users of Center 1. They liked the lobby wall's deep red/maroon color on which the inspirational quotes were displayed (Figure 46). Users also noticed and appreciated the artwork hanging above the elevator (Figure 47).

I like how they did the colors of the wall and the colors of the different artwork, we see the different colors, I don't know who did it, but it's like, it just stands out. Somebody did a good job on that artwork. It represents everybody. (Gaby-C2)

**Figure 46**

*Lobby in Center 2, Taken by Orion*



**Figure 47**

*Artwork Above the Elevator at Center 2, Taken by Gaby*



One of the users liked the painted cinder block walls, which they felt made the center look clean. Users also enjoyed the playfulness of the multi-colored floors throughout the center. They appreciated that historical information was displayed in the lobby so that everyone could read and understand the struggles of African Americans. Since the center was more than fifteen years old, wear and tear was visible, and users commented on this aspect at Center 2, suggesting that a few things could be upgraded.

I mean, these are like cinder blocks, essentially, that are painted. And that's what the schools use that I, you know, elementary schools and stuff. And it's like, it's interesting how this particular space reminds me of places that I felt safe growing up, schools, libraries, and whatnot. (Mason-C2)

At Center 1, users commented on the various available seating options. The lobby had couches, high seating, and regular chairs and tables near the stairs. On the second floor, there was seating right as you stepped off the elevator and stairs, including bar stool-height chairs with tables and couches. During observations, I noticed people using these at various times of the day. On two days of the week, a group came in, had lunch, and sat at the tables next to the stairs. Once they had finished lunch, they would go upstairs and sit on the couches. Some parents of kids who came for the home-school program sat in the lobby while their children were participating, and many other ladies used the seating to cool down after their group activities. Figures 48 and 49 show the seating options that users spoke about in Center 1.

Like I say, they have the ping pong tables, and they have the checkers out. All the doors in entryways are glass that you can see in; you don't have to necessarily go into the place to see if you want to go into it. And then they have the piano in the foyer. And they just have various seating places too. So you don't have to really do anything. You can just sit here and enjoy. Just enjoy every. Take it all in. (Therma-C2)

**Figure 48**

*First Floor Seating at Center 1, Taken by Glory*



**Figure 49**

*Seating on the Second Floor of Center 1, Taken by Charles*



At Center 2, users also talked about the seating options in the lobby. There were couches and regular tables and chairs (Figure 50). During my observations, I saw one or

two seniors finish their swimming class, sit in the lobby, and watch TV shows. I also saw several parents waiting in the lobby at the end of the day to pick up their children from the after-school program. Some adults brought their children for swim lessons and sat in the lobby to watch, which was convenient as there was a direct line of sight into the pool.

This is our lobby. And you know, you can, you can go here, and you can learn, you look on the things, and they tell you all about Center 2, and you get to look out the window, which is another peaceful thing, and you can sit over here and just be comfortable. You know, like that. (Lisa-C2)

Users at both centers commented on other fixtures: the table for community events in the lobby (Figure 49), the piano (Figures 50 and 51), the bulletin boards (Figures 52 and 53), and the plants in different areas of the centers. Users felt that the bulletin board provided much helpful information.

### **Figure 50**

*Lobby Seating and Table with Community Information in Center 2, Taken by Pearl*



I like the lobby because of the plants. The words on the wall. You have a piano. I like the floors. (Catherine-C2))

And the piano, and I do like that window out there. I like the natural light that comes in. And it's just kind of a nice, it's a nice setting. I don't know many other recreation areas that have a piano. I actually play the piano when I come up here. I like playing the piano. It's nice. (Miles-C1)

**Figure 51**

*Piano in Center 1, Taken by Liv*



**Figure 52**

*Piano in Center 2 Lobby, Taken by Gaby*

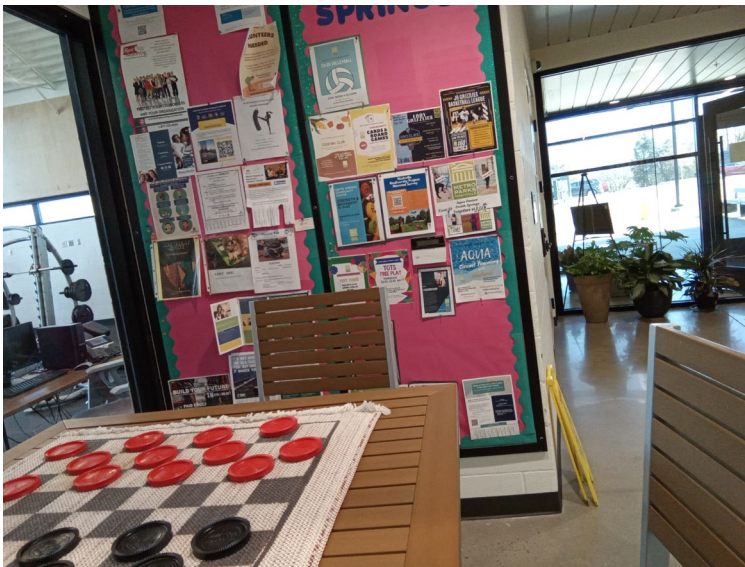


They had the board filled with flyers. They had that table as soon as you come in with flyers and sometimes, I have flyers on the front right here. And they, they always have something posted. (Tina-C1)

The bulletin board and table shows you the different things that's going on in the community; whether you want to attend or not, it's available for there if you decide that's what you want to do. (Gaby-C2)

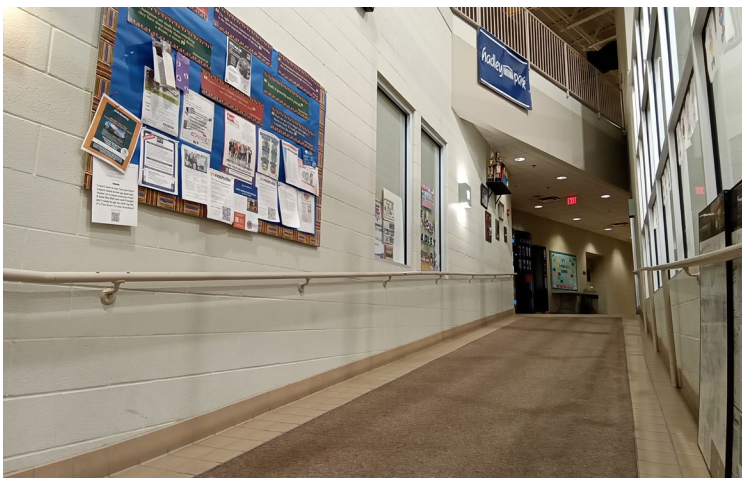
**Figure 53**

*Bulletin Board in Center 1, Taken by Tina*



**Figure 54**

*Bulletin Board in Center 2, Taken by Mason*



### *On the Utilization of Spaces and Resources*

Patrons used a variety of programs and spaces that were available at each center. When asked about the resources they utilized in the community centers, users talked about programs and activities they participated in and the spaces they used while engaging in those activities. Patrons at both community centers used spaces for structured and unstructured activities. At both centers, structured programs were conducted in the basketball gym, dance studio, and swimming pool. In addition, at Center 1, some structured programming was conducted in the multipurpose rooms, while at Center 2, some structured programs took place in the senior area. The most common spaces for unstructured activities were the fitness center and the walking track.

Most users used the walking track seen in Figure 55 as a stand-alone activity or as a warmup before or cool down after a structured activity. At Center 1, some users talked about using the outdoor track during the warmer months but shifting to the indoor track when the weather was non-cooperative. They were thankful that they had both options available to them.

The track. I also use the weight room. And also, I come to a boot camp class on Saturdays from 10:15 to 11:15 am. I generally get here about nine I'll walk from nine to about 10. And then, 10:00, 10:15 I stretch, and then the class is at 10:15 to 11:15, the class that you saw on Saturday. Yeah. So. we're here about 10:15 to 11:15. And they close at 12. So, from 11:15 to 11:55 then I go back to the track.  
(Castor-C1)

I like the walking track. You know, especially when you see if there's almost always somebody downstairs doing something. So, it's kind of fun to watch them. And because you know, it's flat, so you don't have to worry about it. And there aren't that many people. It's not like you're running into people or anything.  
(Glen-C1)

**Figure 55**

*Walking Track at Center 1, Taken by Glen*



The fitness center was another space that many users utilized on their own. While most users thought that the equipment in the fitness centers at both centers was on par with other fitness centers, a few users at Center 1 remarked that there was less equipment in this fitness center than in some of the other community centers, but it was still adequate. Many older patrons at Center 1 used the fitness center on weekday mornings when it was not too crowded. They avoided evenings and weekends. At Center 2, the two younger interview participants used the fitness center exclusively while at the center, incorporating the walking track as a warm-up before their routine. As all the spaces in the center were free to use as part of the senior program, seniors at Center 2 incorporated the fitness center into their daily routine. They believed that the people in the fitness center were friendly and the space was adequate.

The gymnasium seen in Figure 56 was a space where a patron could work out independently or be involved in a structured activity. Both centers had open court times set aside for several groups. There were adult, teen, and family basketball court times, and on some evenings, they had court time set aside for volleyball or soccer. At other times at Center 1, the courts were reserved for structured activities such as pickleball, tot-time, and homeschool activities. At Center 1, one user spoke about how he came at lunchtime to shoot hoops, and it was great as he typically had the entire court to himself. He also mentioned how he enjoyed the father-son basketball time on Saturday mornings.

The primary resource is the gym; I play a lot of basketball. So it's, it's, it's awesome to have this facility with those goals. I mean, in in during lunchtime, when I come, generally, it's empty. So I can practice drills, do whatever I want. It's great for my kid because on weekends, he comes out here and he gets in a lot of activity. So that's really nice. That's one that I use. I use the Track upstairs there to warm up. (Miles-C1)

**Figure 56**

*Gymnasium at Center 1, Taken by Miles*



At Center 2, the gymnasium as seen in Figure 57, was very busy as most of the classes were offered in the gymnasium. The manager informed me that the class sizes had grown beyond the capacity of the dance studio; hence, most classes had moved to the gymnasium. In the daytime, there were low-impact exercise classes for seniors. A line dancing class was offered in the gymnasium 2-3 times a week in the evenings, which was very well attended. Most users were passionate about the class, and many had been involved in this activity for several years.

**Figure 57**

*The gymnasium at Center 2 with the Line Dancing Class, Taken by Researcher*



They had line dancing scheduled. It was convenient. I think it was on a Monday, Wednesday and Friday because I was here and I got involved in it. I loved it. I loved line dancing. I like music. And I like to move my body. (Brooke-C2)

Users at both centers were animated when they spoke about the swimming pool. For most users, the swimming pool was a place to achieve physical goals and socialize. Users participated in classes such as water aerobics, aqua exercises, and water walking, and some did lap swimming during open swim time. Seniors at Center 2 who participated in the senior program had access to the pool every morning. During observations on

evenings and weekends, I observed a few families in the pool at Center 1 enjoying open family time. At Center 2, I observed open lap time for seniors and swim classes organized for young children.

The pool, yeah, that's my joyful place. In a pool I run, I jump, I do jumping jacks. We dance in the pool. Sometimes we do. Like the slide, we can do that in the water. And it's a lot of stuff that we do in the water. The things that we do here on the floor we do it in the water too, besides swim. You know, like, we have a boot camp and when I say boot camp, it's a boot camp. (Lisa-C2)

So, I have enjoyed their low-impact exercise classes with Diane and, and then the water aerobics. I do that, I enjoy that, and then just the swimming every day is mostly why I come. So, I'll do laps like I was saying earlier until I work outside. (Ross-C1)

Some older patrons at Center 2 had stopped using the track and focused on activities in the pool.

There's something about that water where you don't feel it. When I get in that water, it's like I don't have a pain in the world. So I start ....stopped doing the walking and got in the water aerobics, and so that's what I've been doing it from now on, from here on that's what I've been doing. (Ester-C2)

The dance studio at Center 1 was utilized for more structured activity than Center 2. At Center 1, the dance studio was used for senior aerobics and low-impact exercise classes, boot camp on Saturdays, yoga classes in the evening, and line dancing classes on Fridays. Users enjoyed the space and opportunity to engage in physical activity. The dance studio was used sporadically at Center 2, and some seniors used it for short exercise activities conducted as part of the senior program.

We use that room in there (dance studio), where they teach, they teach exercise. And they teach exercise on Mondays and Wednesdays from 9 to 10. This was one way of senior aerobics and as a cardio class, really. (Riley-C1)

The multipurpose rooms in Center 1 were used for structured social activities such as cards and the cooking club. The rooms were also used as part of the after-school

programs, and on weekends, they were rented out for private gatherings. Users appreciated that the multi-purpose rooms could be divided into smaller spaces or opened to accommodate a larger gathering. At Center 2, there were no dedicated multi-purpose rooms. The spaces occupied by the seniors during the day served as the multi-purpose area. The senior program ended at 2:00 p.m., and the community center manager informed me that all these spaces in the senior area were utilized for after-school activities during the week and rented out for private functions on Saturdays.

**Figure 58**

*Center 1 Lobby with the Ping-Pong Table, Taken by Researcher*



In addition, at Center 1, spaces were being repurposed to suit growing needs. Book club members used the vestibule to the side of the building lobby on the main floor for their monthly meetings. Users with young children complained about the lack of a game room at Center 1, which led to the placement of a ping-pong table and a giant checkerboard in the lobby area. I often observed young kids playing with their parents; sometimes, adults could be seen playing ping-pong (Figure 58).

I do like, like, when you come in and the art there and my kids, my kids favorite is the ping pong. (Nancy-C1)

Center 2 had a game room across the lobby with several activities for kids and teens. While most participants mentioned liking the game room, only one interviewee spoke about utilizing it. When she took her grandchildren to the center, they would spend a lot of time in the game room.

I like that the children can go in there (game room) and have fun. It's a way to keep them off the street. They don't have to be on the street doing other things. They can learn a skill, learn to play pool, learn to shoot the little basketball.  
(Amy-C2)

While the programmed spaces were essential to both centers' success, the lobby formed the centers' nucleus. At Center 1, the lobby area was much more extensive and felt more open, which encouraged the mingling of people. During my observations, I saw people seated in different lobby areas throughout the day. Parents sat in the lobby during homeschool program time while their children participated in activities. Many people used the lobby space at the end of activities to cool down before they headed out. After swimming, the ladies would wait in the lobby for each other. On weekends, parents could be seen playing ping pong with their kids in the lobby.

I would say we use more of the lobby because while my kids are playing on the ping pong table, me and my husband can be on the table that are playing or talking. And sometimes we just sit down right here in the lobby and sometimes talk to the staff when they're not busy. So I mean, I can say we use the lobby more as far as room wise. (Therma-C1)

While much smaller, the lobby in Center 2 carried the same significance. Some seniors found a sense of security knowing that everybody had to pass through the lobby to get to any area of the community center (Figure 59). The location of the front desk felt like the beginning point as well as the culmination point. Everyone had to sign in before

proceeding into the rest of the facility, and on the way out, users had to pass by the desk to get out, creating a core.

Because that's where everything culminates, whether you're going to the pool or to the gym or to the workout room or upstairs. Everything starts up in here at that desk. Or you have kids that'll sometimes come and just sit here and talk and look at TV. (Riley-C2)

**Figure 59**

*Lobby Showing the Reception Desk of Center 2, Taken by Caley*



**Summary**

This theme showed users' opinions and reactions to the physical environment and utilization of the spaces and resources. The theme highlights how the physical environment and available resources created a vibrant community setting encouraging participation in various activities. Regarding the atmosphere of the physical environment, users focused on the cleanliness and spaciousness of the center. Natural light streaming into the building and the layout's connectedness were essential considerations that users commented on and appreciated. Elements such as materials, colors, artwork, and

furniture contributed to both centers' appeal. In addition, users' appreciation for various amenities like seating options, bulletin boards, and community information areas was evident throughout the interviews. Patrons utilized almost all spaces in both centers throughout the day for structured and unstructured activities, which enabled them to be active in the centers.

**Theme 2: Incentives for Using the Community Centers**

Theme 2 discusses the characteristics and attributes that bring users to the community centers. The aspects of access with regard to the affordability of the centers, the feeling of safety, and the centers' ability to fulfill users' goals yielded four codes. The codes presented in this theme focus on place attachment, place dependence, place satisfaction, and sense of community. The secure environment adds to the attachment to place, whereas affordability and the ability to fulfill users' goals add to dependence and satisfaction with the place. The proximity to the centers adds to the sense of community.

**Table 12**

*Code and Associated Sub-Codes of Theme 2*

Code	Sub-Codes	Context
Users are able to Access the Centers with ease	Proximity	Live near the center
	Conveniently located	Significant motivator to visit the center
	Free ride to the center for seniors	
The Centers are Affordable	Financial Support	Senior program is free
		Classes are inexpensive Some areas are free to use

		Nominal fee for fitness center Renting the multipurpose rooms is affordable.
The Built Environment Supports a Sense of Safety	Design-Interior/ Exterior	The openness of the center enables a clear view  Glazing connects spaces, creates connection Provision of lockers Well-lit parking lot Location of reception desk as a checkpoint
	Staff	Staff at the reception desk is aware of people coming and leaving center Staff as a guide in case of emergency Presence of metro officers
	Other Users	Familiarity with other users Friendly nature of people Pleasant Interactions
The Built Environment Supports Users Needs	Walking Track	Availability of different lanes enabled walking at own pace  Enables seniors to be physically active Helped increase stamina
	Pool	Swimming is less stressful on the body  For some pool was a primary reason to come to the center
	Fitness Center	Variety of equipment Space available for stretching
	Dance Studio	Structured classes create opportunities for exercise
	Gymnasium	Essential area for physical exercise Aided in goal fulfillment for all age groups

Lobby	Social space – social wellbeing Bulletin board – community information
Computer Room- Center 2	Educational benefits- learning to use a computer Free tax services

***Users are able to Access the Centers with Ease***

It lowers barrier to entry very well, for me where it’s like 8-10 minutes away from my house, that’s pretty close. (West-C1)

This is closest to my home. So, you will probably, as you age out, you'll think in terms of I don't have to get in and drive as far. Because I'm 68, will be 69 in June, but will I want to drive to Center 3 in two or three years? I don't know. (Riley-C1)

At Center 1, most of the users interviewed lived within minutes of the center.

Fourteen of the twenty users interviewed lived within two miles of the center. One user commented, "I get here in less than three minutes, so I have no excuse" (Joann-C1). Four users lived within 15-20 minutes of the center, and two users lived a little further away. Another user commented that even though the center was further out, it was the closest community center to her home and was convenient for her. For most users at Center 1, the convenient location and proximity of their homes to the center were significant motivators for coming to the center.

I like the proximity because before this, I would go to the other one on XX (road name) Road. So now this one is here. And even when they built this one, I was still trying to go over there because I was kind of interacting. I got to know people over there. So, I would go over there, but then I would have to pass this one to go over there. Plus, the pool here is bigger than the other one. So, and it was newer. So, then I started to come to this one. (Viv-C1)

Most users interviewed at Center 2 also lived in close proximity to the center. One user commented, “I live right down the street in the tower over there. I can walk here” (Orion-C2). Of the thirteen users interviewed, six lived within 5-6 minutes of the center,

four lived about 15- 20 minutes away, and three lived a considerable distance away, with one user commenting that she lived 26 miles away. Users who lived close by utilized their vehicles to come to the center. Many of the seniors interviewed used the free ride service to travel to the community center. They had been coming to the center for so long that the distance to the center was not a deterrent. They felt a deep sense of oneness with the center; many thought of this as their center due to the connection with the park's history, and they were most comfortable at Center 2, so they continued to come to the center.

### ***The Centers are Affordable***

Affordability was an essential factor that was a major draw for several users, especially seniors at both centers. When asked about affordability, most users expressed their wonder that many of the amenities were available for free, such as the walking track, gymnasium, and swimming pool. They had never experienced that before in other cities where they had lived.

Well, the gym is free. That's awesome. I can play basketball for free. I can't do that anywhere else except for outside or other rec centers. Like, I've said, again, I've never been I don't know if this is just XX (city's name) that does it because I've lived all over but I've never been to a place where a community center gym is free to play ball. So that's awesome. (Miles-C1)

One user at Center 1 felt "financially supported" (Tina-C1) due to the inexpensive nature of the center. At both centers, there was a nominal fee to use the fitness center and the structured classes, which were instructor-led. The instructor-led programs were between \$3.00-\$4.00. The senior program at Center 2 was free, with meals and access to all areas in the center included. Another user at Center 1, who was also a metro employee, expressed how this was even more affordable as he got further discounts due

to being an employee. Many compared the center's affordability with what other places around town were charging.

But even from an economic standpoint, it's, the classes are four dollars. As a metro employee, you can get a card and have visits. And that's like \$10. Whereas you got Planet Fitness, YMCA, YWCA charging \$49 a month for those parts. So, I think from an economic standpoint, you can't beat the community center. I think it is a hidden gem. I don't know what people have against it. But from an economical standpoint, you can't beat the price. (Castor-C1)

... it's free. You don't pay nothing. You just pay to go in there and work out, and I think it's like \$1 and something. But if you go to the Y, you're going to pay to go there. I was at the Y because my insurance was paying for it, and they dropped it. But it's like \$65, maybe get a \$30, but you got to pay. There's no reason for nobody not to be healthy or feel good or whatever because it's free. You ain't even got to pay. Why can't you go and get in the pool free? You don't have to pay for it. It's free. You just come up here and sign the book and go and get in the pool. It don't get no better than that. It don't get no better than that. (Orion-C2)

Another aspect that users at both centers found affordable was the availability of multipurpose rooms in the community center for general community use. They felt that the spaces greatly benefited the community due to a lack of such resources in the city.

And also the community rooms upstairs where you have a viable place to rent. Of course, you can, if you had something that you need, a party or whatever, that those spaces are important because I feel like XX (city's name) doesn't have a lot of spaces to rent out for the public to rent that's at a nominal fee and cost and we don't break the bank. So those spaces are very nominal costs of fee. I think it's very much needed to have something like this. (Deanna-C1)

Actually, my niece had a birthday party here. They have a room over there where you can have a birthday party. So, it was a big family thing then. That was very useful because it's affordable. And if you started, you know, you were you get real couples who try to have events, and you can use the community center, it's a lot cheaper, it's a lot more affordable, for working-class families, I find it very useful. (Catherine-C2)

While most users at both centers appreciated the affordability of the centers, two users at Center 1 commented that the cost of services was going up, which they did not fault the centers for. Still, it was an observation about the general cost of everything

getting more expensive. One senior at Center 1 discussed how they calculated the price at different centers and positioned themselves to visit other centers to get free services.

See, I'm interested in free programs, I'm not really interested in programs that you do a lot of pay for. Because you got to realize seniors, when you retire, you don't get raises and stuff like that, you know, unless your social security goes up. Or, you know, as an increased cost of living increase from your place that you retire, most of the time, you don't get any more money, you know, so there's very limited income. So you have to look at now if you pay \$4, for this, and then four dollars on Tuesday, for water aerobics, and then come back and pay four dollars on Wednesday, and then four dollars on Thursday, so that they you know, \$4 every time you walk in this door, four times a you know, you walk in four times a week, that's what, it adds up What \$16.

Well you multiply that times four times a month..so you know, that's, that gets into 50-60 dollars. So, do you want to do that? Or do you rather not, rather drive? Probably about 8-10 miles and go to the other center, and do the water aerobics for free. (Riley-C1)

### ***The Built Environment Supports a Sense of Safety***

During the interviews, users were asked how secure they felt in the center.

Comfortable and safe were how users at both community centers described their feelings about security in the centers. Some of the primary factors that contributed to creating a secure environment were the facility's design, the people they interacted with, and the staff.

I feel pretty safe. I've never felt my life was in danger or something dangerous was going on here. (Amy-C2)

I feel safe and feel welcome. And it just... it feels nice. (Ann-C1)

At Center 1, users discussed the center's design as contributing to the feeling of safety. The openness of the facility, due to which users could see everything around and were not siloed, added to that sense of safety. The extensive glazing areas in all spaces provided openness and enabled users to view everything outside.

I haven't run across any issues of not feeling safe in this building. I think, again, going back to the features in the building, if something were to happen, I think you can see what may have happened. And then I think there are avenues where you can go and protect yourself. So, it's not like you got a peek around the door or look around the door. But I think they wanted to make sure if something did happen. You won't be caught off guard, you can see what's coming at you. (Castor-C1)

The provision of lockers in the facility also added to the idea of safety and security. Users also commented on the cubbies in the fitness gym and the walking track area. Figure 60 shows the cubbies in the Fitness Center at Center 1.

....and I feel like it's a very safe space. They have lockers over there. So, if you want to use a locker, keep your things safe. You were new; you didn't know how people were around here. They give you the option to use the lockers. (Landon-C1)

So, yeah. And so, then I went back down to the exercise room and took a picture of the cubby that was to show that that's in that room too, as well, which is really helpful when, you know, some people who put their car keys there. You feel so safe here that you know no one will touch anything. (Glory-C1)

..... and, and it's nice, because I leave my keys there sometimes, like my phone. And I never had to worry about it being stolen or anything like that. (Ann-C1)

## Figure 60

*Cubbies in the Fitness Center at Center 1, Taken by Glory*



Although every one of the users that were interviewed felt safe inside, a couple of users were slightly uncomfortable outside, mainly on the outer edges of the property, which had more trees and felt isolated.

Several interviews at Center 2 were conducted around the time of a mass shooting at a local elementary school, so the idea of safety seemed very pertinent. A few users mentioned that they thought about the aspect of safety due to mass shootings that they hear about regularly, but they have never felt unsafe at the center. Users at Center 2 felt safe and comfortable in the center; however, the idea of locked doors appeared essential to many seniors. They felt safe and secure, knowing all other entry points were locked except for the front entrance, and people had to come through the front to access spaces in the center. In addition, seniors felt comfortable that their area was away from other places and that the doors to their spaces were locked.

I feel safe because they keep the doors locked. On this side, they lock. If you want to come in, you got to come around. You can't just walk in the door. (Orion-C2)

I feel safe because they keep the doors locked. On the senior side, we keep ... except for the front right there. But on our side, we got the side doors and all them doors; they keep them locked so can't no one just walk in. So I feel very comfortable and safe. (Ester-C2)

Center 2 was a much older center than Center 1, and many users had been coming to the center for a long time. Familiarity with the center and the surrounding neighborhood and the friendly nature of people using the center added to the feeling of comfort and safety.

I've been coming that long too, and so it's very familiar. (Carmine-C2)

I think the people are very friendly, but I'll say this also, you get what you put out. I'm a very friendly person, so people tend to be friendly. I've not had an interaction that's been adverse to my interaction with people. I've had good

experiences up here. I've not had a negative experience. So, I like that. I feel safe when I come up here. That's a major part. I feel safe up here. (Amy-C2)

Some other aspects that added to users' sense of safety were the well-lit parking lot, the presence of Metro Park officers, and the maintenance of equipment in the fitness center.

Well, you know, routinely, again, depending on what time I come in the day, I will see, you know, Metro officers here, the park officers. So that provides a physical sense of safety that they come in, do their routine inspections that they're on patrol. As far as equipment or facilities management, I'll see like a company work truck, come and do maintenance work. So, I know that there's integrity behind keeping the facility up to code, right. So that is a part of safety, too, is not just how do I feel like I'm physically going to be threatened. But internally, I want to make sure that, you know, nothing falls and hits me in the head while I'm doing, while I'm on the treadmill or whatnot. And so, they're very, the staff is very attentive to that, like, I'll see Miss Macy (center manager) walking the track. I feel like you know, how it's probably killing three birds with one stone. (Caley-C2)

In both centers, the location of the reception desk was an element that further added to the perception of safety from different angles. At Center 1, the reception desk's location was mentioned regarding the staff being able to see out into the parking lot. At Center 2, the location of the front desk added to the feeling of security since everyone had to sign in and pass by the front desk before moving on to the rest of the center.

Well, the fact that the front desk can see out the front door, and they can look and see, you know, they can keep an eye on the parking lot. (Sylvia-C1)

I feel... I've never felt threatened or anything like that. And I like another thing. I like the way they do when you come in is somebody's always there sitting at the desk like somebody should be.....But if you're coming in to go to any parts of anything, facilities, you have to sign in, put your name down and everything. So, they keep up with who's coming in, and I know who's in the building. I like that part too. (Willa-C2)

Staff presence was also an essential factor that added to the feeling of security. In both centers, users believed the staff would guide them in case of an emergency.

You know, it's not like they have a security guard here or anything like that, but I definitely feel safe here like it has to do with the staff. You know, because they're always around. (Glory-C1)

The centers' family-oriented nature contributed to making users feel secure. Many users felt safe as they had not experienced adverse interactions with others at the centers.

In fact, many users rarely thought about the aspect of safety.

I feel safe. I've never not felt safe, again, I don't see any people that I would consider unruly or threatening or bad, you know, to make me have any hesitation. It does seem family-oriented, it does seem, people that are single and come in and seem to get along, I haven't seen any bad interaction. I feel safe. (Ross-C1)

Users of both community centers discussed the walking track when discussing safety. At Center 1, the openness of the track was important as users could see everyone using the track and view the indoor basketball courts and the play area outside. At Center 2, one user mentioned that they felt uncomfortable if they were alone on the track as it was more closed off, and they could not see the entirety of the track.

And while I walk around, I like the fact that I can see around you know, it's again, it has a feeling of safeness. (Riley-C1)

But it crosses my mind. Even when I go to the track and walk a mile or two, I don't walk on that track unless there's a lot of people. And so, we don't know how safe we are today. (Pearl-C2)

### ***The Built Environment Supports Users' Needs***

The community centers functioned primarily as a venue that enabled users to meet physical goals. While users at both centers expressed the center's importance for physical activity and exercise, many users, mainly seniors, spoke about the center's importance for meeting mental and emotional needs. The benefits that the community center afforded users as they fulfilled goals came out through the discussions of photographs participants took. Users at both centers discussed utilizing the spaces to exercise, meet, and interact

with others. Users at both centers discussed the plusses in terms of health and well-being due to the availability of resources.

Users at both centers spoke about the health benefits of available spaces and activities. One senior at Center 1 discussed how the indoor walking track enabled her to be physically active and safe, as it was becoming difficult to walk on the sidewalks in her neighborhood. Most users incorporated the track into their routine at the centers. A couple of users at both centers discussed how the track had initially helped them increase their stamina, after which they could include a rigorous workout in the fitness center.

...and so I started walking on the track and started out at like, half a mile slowly now, and now I'm up to three miles in 48 to 51 minutes. (Charles-C1)

oh, well, within the actual fitness center, there are open spaces for someone to do their own stretches. Then there obviously are the weights in the weight center. So, I've been incorporating that more. I spent January building up my stamina, so I was walking and kind of running, and so as I achieved that and felt like I could come back down to the gym floor level and utilize the weights more utilize a treadmill, and so and I go back and forth. (Caley-C2)

Seniors at both centers used the track because they could walk at their own pace. The availability of different lanes indicating different speeds made them feel they were not in anyone's way. A couple of seniors at Center 2 discussed how the track was helping them with their fitness and how there were conveniences on the track level to help them.

That's the walking track. Yeah, I like that. Now. You can see the windows back there. Yeah. That's nice. And then they got the different lanes and some are the speed lane and some if you want to go slow. Uh huh. And that's the other part of the walking track. Yeah. And it's the chair that was telling you about with when I when I walked and my knees used to flare up. That's my little, little spot where you can sit right in there. (Willa-C2)

Regarding the pool, users at both centers discussed the availability of the pool for open swim time for lap swimming or water walking, which was very beneficial to them

as it was less stressful on the body than walking on the track. They also liked the structured water classes that were offered. Managers of both centers also told me that the pool was very popular and users would like it to be more available, but staffing issues prohibited providing additional hours. Two of the users at Center 1 that I interviewed mentioned that the pool was the only reason they came to the center. Another user at Center 1 discussed how using the pool had benefited her.

Because the pool is my primary reason for coming to the center. It is why I come so I can, you know, the pool is available, and I want to swim. Because before I wasn't even a swimmer. So now, you know from doing the senior classes when I was at the other pool, I was able to learn how to swim and so I just continued. So, it fulfills that need that, you know, somebody like me who couldn't swim, I was able to learn how to swim just from coming to classes. (Viv-C1)

Oh, it's helped me a lot. I used to use a cane 100%. And I think this is about my fourth year coming here. And I had explained to my doctor what I was doing, and he told me to try to use the cane less and I have, and I'm able to walk and you could ask the staff that, I used to come in here on the cane every day, fear of falling and then, you know, sometimes my leg felt like it was gonna give out. (Joann-C1)

Very few seniors at Center 1 discussed incorporating the fitness center into their routine. The seniors who talked about the fitness center were primarily male users. At Center 2, several seniors spoke about the importance of the fitness center in their daily routines. For some seniors at Center 2, the fitness center was a motivator for them to come to the community center. They appreciated the variety of equipment, such as treadmills and free weights (Figure 61), and the space available in the fitness area to include their stretches and exercises.

I like the exercise part. I love the fitness side part of it. That's the main motivating me to come is the fitness part mostly that I get out of. I like the treadmills, I like the bikes and I like the lifting of the weights in the fitness center. It's uplifting. It's uplifting. Very much so. (Carmine-C2).

And then the fitness room, it helps work on every part of your body, your abs, your legs, the overall parts of your body, the fitness. (Pearl-C2)

But I used to come, before I do water aerobics, and go to the exercise rooms, and just work out in the workout room, and walk around the track, or just work out on the machines. And I love it. I mean, we had COVID, it shut down, and it just killed me. So, I came back two years later, I ain't left yet. It is the best thing. I miss it. I miss it. It benefits me a lot, because I have health issues. So, I have scoliosis, and I have to keep it moving. I have fibromyalgia, which I need to keep moving, and I have neuropathy. So, it helps me with my body, because if I miss two days working out, I know. So, that's why I'm so active in coming, and keeping my body in shape, and it's the best thing. (Daisy-C2)

**Figure 61**

*Fitness Center of Center 2, Taken by Carmine*



At Center 1, the dance studio was a popular space (Figure 62). Seniors enjoyed their exercise classes on weekday mornings, younger folks enjoyed the boot camp on Saturdays, and a mix of seniors and younger folks enjoyed the line dancing class that staff had introduced during the study.

That is the dance..... to dance, the dance studio. Exercise is very important because this is what brought me here. The cardio class. So yeah, I took a picture of that. Yes. (Riley-C1)

**Figure 62**

*Dance Studio at Center 1, Taken by Sylvia*



From my observations, I noticed that the gymnasium was used very differently in both centers. At Center 1, the gymnasium was a space utilized mainly by younger folks for volleyball, soccer, basketball, and most weekday midmornings for kids' activities. The only senior class in the gymnasium was pickleball. At Center 2, seniors mostly used the gymnasium for structured courses in the mornings. There was a time during the early afternoons when the gymnasium was open for basketball. The line dancing class was held twice a week in the evenings in the gymnasium. This was also reflected in the interviews where most users at Center 2 talked about how the gymnasium was essential for fulfilling goals (Figure 63).

I like the gym. Because we have classes..... look how clean it is, how the floor shines, it's well kept, it's just nice (Gaby-C2)

The gymnasium definitely is one place where my goals are met. I come there for the dance class. Well, that's initially what I started coming for, but I try to participate in other things going on here as well. (Amy-C2)

**Figure 63**

*Gymnasium of Center 2, Taken by Gaby*



Many seniors at Center 2 spoke about general well-being through free access to all spaces and the availability of hot lunches. They also discussed free dental screenings and vaccination programs organized at the community center. One senior mentioned that she could get her COVID vaccine at the center, which was very convenient for her.

They even had when it was going on, you could come up and get your shot. They had nurses up here, and they do that too. They have a lot of places, people come up here to check on you. You can come up here and get your teeth checked and get your blood pressure checked, and they do all of that. (Orion-C2)

In addition, being able to socialize with others benefited users' general well-being. Users at Center 1 talked about the availability of spaces in the lobby that enabled them to sit, relax, and chat with others before or after classes. They did not feel pressured to leave and could mingle if they liked; users modeled this sentiment at Center 2, where I observed users spent time in the lobby areas after their classes. Some seniors watched

their shows on the television in the lobby and mentioned that the mere presence of the center benefitted them as they had a place to go.

Users at Center 2 also spoke about a few educational benefits they received at the center. Occasionally, they would have classes in the computer room; this was very beneficial for some as they had not used a computer before. They had access to tax services either at the center or at the library down the road. They also appreciated that a daily newspaper was available for them. At both centers, users benefitted from the community information that was available at the desks in the lobby and on the bulletin boards. These helped keep them informed about resources offered in the community. One senior at Center 1 summed up how the center benefitted families living in the surrounding community.

But I think community centers can offer a lot to the youth in, in our culture. We talk a lot about that in the book club. Because lots of books we've covered have been about dysfunctional families. And I think that community center has a great start on helping families stay functional. You know, just about what they offer, And what they do. And mom knows when she drops her child off here after school, he is safe until she picks him up. You know, and he's getting instruction and he's getting guidance and he's getting mentoring and he has adults, they're watching over him and requiring things of him. Yeah, you know how to get along with people. So it's a great place, it's a great space, okay. (Liv-C1)

### ***Summary***

The theme brought critical aspects of the environment and design to the forefront, which got people into the centers. The people-friendly design of the center and accessibility made the community centers critical assets that users incorporated into their daily lives and depended on for their overall well-being. Both community centers were a constant in the lives of most users who visited and utilized the centers regularly. The presence of the centers provided people with an affordable and safe environment. The

centers' secure environment allowed users to keep returning to the centers. Design features like openness, transparency, and lockers created a sense of safety. The physical building, staff, and other users contributed to the quality of the centers, and the presence of spaces and services encouraged users to achieve their goals and be a part of the environment. Accessibility, affordability, convenience, and programming that catered to diverse groups (from seniors to young families) made the centers a critical asset for the community. Users appreciated the classes, programs, and amenities and viewed the centers as benefiting the community.

I think that it's, it is a staple. And I mentioned this earlier, you know, being a modern building in a well-established area. Everyone knows I don't know anyone that does not know Center 2. (Caley-C2)

### **Theme 3: Users Feelings about the Community Centers**

The first two themes focused on the community centers' physical features, location, and amenities. Theme 3 examines 'place' in a more holistic way that is inclusive of both physical and socio-cultural dimensions of place and how these features of community centers foster place meaning. Users expressed various sentiments and feelings about the community centers. The theme discusses the perceptions of the centers among users related to the image of place and contributing to place identity. Furthermore, the theme also discusses the welcoming and uplifting nature of the centers, which adds to place attachment, place dependence, and place satisfaction. The final code – on the opportunities for users at the centers highlights the construct of a sense of community. All four codes will communicate the idea of a complete system formed due to the intertwining of the environment and the people who use and interact within the environment.

**Table 13***Codes and Associated Sub-Codes of Theme 3*

Code	Sub-Codes	Context
Users Feel Welcomed at the Centers	Physical Structure	Openness and transparency provide a welcoming feel  Cleanliness is important for users to feel welcome
	Programs and resources	Senior program makes seniors feel appreciated
	Staff	Friendliness Acknowledge users Personal attention
Users Feel Uplifted at the Centers	Physical Structure	Access to spaces is supportive  Place to be able to come to Availability of spaces helps users exercise Amenities provide support to young families Quote of the week in Center 1
	Other Users	Seeing familiar faces Interaction with others Verbal support through encouragement
The Centers are a link to the Community	Physical Structure	Center 2 – Historical connection  Center 1 - Artwork connected to the community
	Other Users	Encourages Interactions
The Centers Create Opportunities		
	Other Users	Encourages Interactions

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*Users Feel Welcomed at the Centers*

I really love it here. I really enjoy it here. I feel safe and feel welcome. And it just it, feels nice. You know, and I think they... they, have the cleanliness is nice, too. And even the bathrooms too, I would say that it's nice because it's welcoming, and it's there for anyone at whatever stage of life for whatever they want to do in here. (Ann-C1)

The "Atmospherics of the Centers" and the "Design Elements of the Centers" codes illuminated the physical elements that users noticed, appreciated, and enjoyed at the centers. The current code focuses on how those physical elements, available resources, and the presence of staff translated into feeling welcomed at the centers. Most users at both centers believed the centers had a welcoming feel. Nice, clean, welcoming, positive, pretty, and satisfied were terms repeatedly used when discussing the community centers. For many, the physical attributes added to the welcoming nature of both centers. The use of glass strengthened the openness of both centers and made them feel transparent and accessible, welcoming people into the centers. The general look and feel of the buildings were an essential component of users feeling welcome at the center. The idea that the center was not "falling apart" was important due to the preconceived notion that government institutions are poorly maintained. They thought it was on par with other community centers in the city.

I think it is very good. I think is... it is up to par is any other center in this city. Probably better than some others. I think they... I think they've done a good job in keeping this center up and running and offering the services that this community needs. It is perfectly located in an area next to a university and park and everything. I think they've done a good.... the City did a good job with this. (Catherine-C2)

Users at Center 2 felt welcomed and identified with the center due to the history associated with the site and park. They felt a sense of ownership and that the center was their place.

This park is historical. This community center is historical. It's almost like it's ours. There are other community centers here, but it's like this community center is like... Now, don't get me wrong, more than black people come here, black, white, Asians, whoever. But it's almost like this is our community center. And I don't know. I don't know how to say it other than that. And I feel like it pulls North XXX(city name) in. It's a resource point. It's a beacon for North XXX(city name) here. And even though I live in XXX (neighborhood name), this is the community center I come to. There's a community center out there, but I really don't go to that one. I come out here. Don't get me wrong, if there's something going on, I'll attend. But for the most part, I'm out here. I just feel better out here. (Amy-C2)

Seniors at Center 2 felt welcomed due to the senior program that catered to their needs. At Center 2, most seniors interviewed were part of the senior program. They felt fortunate to be a part of the program, receiving free meals and being involved in all activities within the center. Some seniors discussed how they enjoyed having a separate space and how they used these spaces. The senior area had a small TV room where seniors who were not easily mobile sat and engaged with each other and watched programs (Figure 64). The larger space doubled as a dining area where they played cards and bingo or sat by themselves and pursued their own interests. One patron told me she enjoyed having lunch with all the seniors (Figure 65). Another patron told me she would usually sit in a corner and work on her crochet in the morning. Attached to these spaces was the kitchen. Some of the seniors helped with lunch preparation. There was another smaller room towards the end of the senior area, which functioned as an arts and crafts room in which most seniors participated.

And then we have like we eat free, we ride free through SS rider picks us up and bring us here and you know then he takes us back and forth to the doctor or things we have to do throughout the year. What else do we do? Sometimes we go outside and walk around, you know we can do whatever we want to, it's a lot of stuff that we do we participate in drawing. Like right now, we got, I said arts and crafts, we did that this morning. We do that every Tuesday. You know it put the date Tuesday, right? We're gonna do that every Tuesday. We have music. We love music. (Debra-C2)

**Figure 64**

*Senior TV Area in Center 2, Taken by Debra*



**Figure 65**

*Senior Dining Area in Center 2, Taken by Orion*



The friendliness of the staff was a critical aspect of users' feeling welcomed at the centers. Most interviewees emphasized how courteous and friendly the centers' staff were, as they were always acknowledged at the front desk. Some users spent time at the front desk and casually conversed with staff. Staff seemed to know visitors by name. This personal attention connected members beyond just customer service. Users felt that the staff genuinely enjoyed their roles at the center (Figures 66 and 67).

Now, I'm so used to it. So, I just come in, and before you get halfway in the door, you're saying, "Good morning," and get that big smile from the people sitting at the front desk. That the smile, you get greeted with such warmth. And then they always say, "How you doing this morning?" We say, "How you doing this morning?" And the beautiful smile they give us. And then we sit there and talk to them for a minute, and move on. But it's just the attitude when you walk in, you feel welcome. Yeah. You always feel welcome. Yeah. (Daisy-C2)

**Figure 66**

*Reception Area at Center 2 with Staff, Taken by Amy*



Oh, they're friendly, friendly, very helpful, informative. And they do a lot of things to help you to really enjoy the facilities. If you have questions, anytime they help out, they will give suggestions. So it's basically very informative both ways. (Landon-C1)

I took a picture of this because every morning that I'm here, I'm always greeted with a good morning or good afternoon and a smile. (Joann-C1)

At both centers' users experienced a high level of comfort with the staff. The staff kept users informed about activities and were responsive to their queries and needs; they also let users know about any closings and operational issues. Users commented that staff took pride in the building and maintained it (Figure 68). Cleanliness was important to users at both centers, adding to users' level of comfort and welcoming feel.

For me, is, I think there's a great level of comfort. As far as you know, when you speak in terms of comfort, I think people are comfortable here. Because when I see them talking to the people that stand, and I see them talk to the staff, and that was one of the reasons I took a picture of the lady up there. (Riley-C1)

I do I do. And again, because of the staff that is here. Also, I have never walked into this building and it's not clean. And I think that's a big thing for people when it comes to community centers, they don't think that it's clean, they don't think it's not being kept. But this is probably one of the cleanest community centers I've seen. (Castor-C1)

The building is well kept, they take pride of the building and they keep it up. (Gaby-C2)

### **Figure 67**

*Reception Desk at Center 1, Taken by Joann*



## Figure 68

*Staff Cleaning Center 1, Taken by Glory*



### *Users Feel Uplifted at the Centers*

When discussing the benefits of the community center, the idea of upliftment emerged. The support users received at the community centers uplifted them. Users at both centers talked about the physical, emotional, and mental support that they had received or provided others at the centers. There were commonalities in the responses received by users of both centers. Overall, users felt that the presence of the physical building, spaces, and resources allowed them to come, be engaged, and feel active.

But it's, it's, nice to have the support here. I mean, even, even, just walking in and knowing that the building is standing and that the, the, you know, the workers are here is honestly support enough for me because I'm able to show up I'm a lot like the gym is clean. The gym is ready, you know, like it's good, but honestly, yeah, like even the community here just gives me a lot of support when it comes to Hey, like I you know, I just need to relax. You know, I need to get away from my dogs or my house. Yeah. But it's been really, really nice. (Ann-C1)

Users felt the center's availability and resources were a tremendous support as they were able to make it part of their routine. Being in the center and using the spaces

and available resources was also very empowering for users, who said that having exercised for a period of time made them feel strong and confident.

By being available, convenient, it's very convenient. It's available at a low cost in some offerings. At a low cost, and one activity is free and pickle ball is free, but other classes, you got to pay a small fee. it is convenient. Just got to take the time to use. (Landon-C1)

One user at Center 1 described their journey in the center and how their usage of the center had grown over time, making them feel empowered, strong, and confident.

And it wasn't that long ago, a few months ago, maybe after coming back or something I, I was squatting or something. And I was like, wow, like, I remember a time where I couldn't even look at myself in the mirror, because I felt so awful about myself from the fact that I can look at myself down, then feel empowered and feel strong and feel confident and like nothing can break me down. I guess it's, it's insane to think that the community center has done that for me and kind of helped me change and grow, you know, and the community has been huge for me, you know, it started with a cooking class. And that was just once a month. And then it started to the swim class that I was also just once a week, and then I went to the dance class once a week as well. So now I find myself here all the time. But I really love it, you know, and the fact is, people who don't even come to the community center that are, you know, family and friends outside of here know how much this place means to me, too. (Ann-C1)

The acknowledgment from other users and staff was essential to their overall well-being. Some users discussed how seeing familiar faces and being acknowledged by others helped them mentally and made them feel nice. Many seniors and retirees attested that this was a place where they could come and be outside their homes, interacting with others, and that the people at the center were essential aspects of their lives.

I don't work, I don't do much with my days. This gives me a place to go and, and people to interact with and things to do. Besides play golf twice a week and bore my wife by being around. (Charles-C1)

But they are an essential part of my wellbeing and my happiness. They are I mean, if I were not here with you this afternoon, I would be working out in the backyard, maybe, you know, raking leaves and doing something like that. But it's,

it would be tempting to just, I cut back my hours for my television.... well, I think coming here definitely enriches my life. It really does. (Liv-C1)

For many seniors at Center 2, the center provided an uplifting feel, where they were cared for and respected. They appreciated the free meals, resources, and opportunities to participate in activities.

And that's what I like about Center 2, because they take care of the seniors, and they have programs for the seniors. And that's what we need because as we get older, it's not that much that we can do, so it's a good thing they have that, the senior program. (Pearl-C2)

One user at Center 2 spoke about being around others in terms of human connections.

But just to say that, because of those human connections that we've made over the years, it's hard to replace that just by going to, you know, another community center, just as nice, just as accommodating. It just doesn't feel the same. And that's important. It's a part of your holistic wellbeing not just the physical, but the mental, and the emotional wellbeing to know you can relate to people. (Caley-C2)

Users felt they received emotional support from others in the center. They could share things happening in their lives, and users rallied around them and checked on each other during family crises and emergencies. Users, especially at Center 2, had started calling each other regularly to chat and check on each other. These interactions helped them navigate rough situations in their personal lives.

It gives you your strength, it gives you encouragement. Just when you're feeling bad, or you're down. Just like my sister and brother died. I didn't think I was going to make it. I'm just going to be honest. I was like trying to drink, and I don't even drink like that. I was drinking every day, and like, "Girl, turn it to God." And so, just talking to people, and they being there for me, because it was a real hard time. (Daisy-C2)

Users at both centers discussed the idea of verbal encouragement and motivation from other users and staff. Some users had exercise buddies who encouraged and assisted them in their exercise routines. One user discussed how her class instructor had assisted

her with mobility routines after her surgery, which enabled her to move better and recover faster. Users also felt that verbal encouragement from other users and instructors helped them during their classes and made them feel positive. At Center 2, users talked about how they embraced newcomers and made them feel comfortable, caught them up with exercise routines, and verbally encouraged them so that they would keep coming back.

....people being nice to you....you know, people being positive, I, you know, I try to support them more, because I feel like I'm a little more physically fit in the class. And so, if I see somebody like the girl swimming today, I encouraged her that she was doing great. And then in, I mean, she said something nice about me swim. And so, I guess I have received a little support. Just verbal. (Ross-C1)

I get a lot of encouragement. So it's gotten to the point where every time I shave another minute off upstairs on the track, I'll come down, say another record - "Keep going? You really doing great". So, that's, it helps keep me coming back. (Charles-C1)

Yeah, I think, yeah, well we support each other and then one, see what... You'll lose some weight. You doing good. We support each other and we notice somebody look different in some kind of way where just something, you better keep on going. It is working, I can see it and they say, "Well, I don't see it." Well I can see it, sometimes other people can see something you can't see. Well I don't see it but you say, well I can see it and it's what they say it makes you feel good. (Willa-C2)

Yes. And really. I have met Rose. Rose is I think Chinese. When Rose is here, she and I walk the track. And she is a talker. And I am a listener. And she, she motivates me. She, I think she does longer than an hour. (Lisa-C2)

Young parents I spoke to at Center 1 said they felt supported through amenities such as the outdoor park, pool, ping-pong table in the lobby, and activities such as the homeschool, tot-time, and afterschool programs. The after-school program was also offered at Center 2, but I did not interview any parents there. I interviewed one grandparent who brought her grandkids to use the game room in the center and found that

to be very beneficial for her family. At Center 1, I interviewed two young parents who discussed support not from a personal perspective but more from the standpoint of providing opportunities for their children. They felt that areas such as the outdoor park, the ping-pong table in the lobby, and the large checkerboard allowed their children to be engaged and play with other kids. In addition, organized tot-time in the gymnasium provided structured physical activity, as seen in Figure 69.

**Figure 69**

*Gymnasium During Tot-Time, Taken by Researcher*



One young mother spoke about how the outdoor benches beside the children's play area supported parents and promoted community. Parents could sit and talk to each other while their children were having fun in the park. One parent spoke about how the center was a neutral place to have playdates for their children.

Um, I think I mean, mostly it was like, we just meet up here because it's central to where everybody lives and everybody has kids. And it's like, you don't have to clean your house. You don't have to, you know what I'm saying? Like, so it's a good neutral space, where you don't have to do anything. (Nancy-C1)

While users mostly spoke about emotional well-being in terms of human connections, some users at Center 1 talked about elements in the center's interior that added to their emotional stability. For example, the quote of the week on the chalkboard in the lobby was always positive and inspirational, uplifting users.

...oh, a big, big thing that I really love is that chalkboard there. I look at it all the time. And it's funny because when I stretch at the end of my workout through the doors, I can actually see that quote every single time. So, I like to focus on it and like read it and like, okay, like, how can I put this into my own life. (Ann-C1)

### ***The Centers are a Link to the Community***

Users at both centers believed the community centers were a link to the surrounding community. The link to the surrounding community came through a historical connection at Center 2, the artwork at Center 1, and the amenities available for residents who lived around the centers. In this code, I will discuss the link with the community through the historical connection at Center 2 and the artwork at Center 1.

Center 2 was located in the park, a former slave plantation. There was a history associated with the park that many users had witnessed and been a part of. The original center was the plantation house, and the subsequent centers were built in the same area as the original. Many users remembered the outdoor pool and mentioned that, as kids, it was the only pool they could use due to segregation.

Yes, I grew up in this community. Actually, they used to have, the park had an outdoor pool when we was itty bitty kids. We lived in the park. I mean we was here two or three times a week. They had a movie night in the park. I mean, we used the swim thing, I mean, the outdoor thing. It was just nice. It was just nice. I've been living at park the forever. I mean it's benefited me and my family a lot, it has. It has. (Daisy-C2)

The current center was built at the exact location of the original center, and the gymnasium from the old center had been left intact to be a part of the new center. Center

2's manager informed me that this was something the residents had advocated for during the design phase for the new center. All these aspects reinforced the link between the center and the surrounding community. Some users who went to the two universities close to the center also remember visiting the center for recreational activities. In addition, some users who were not originally from the area and were not aware of the historical ties were appreciative of the information displayed around the lobby, as seen in Figure 70, which seemed to be intertwined with users' everyday experiences. Users were proud of the area's history, making many feel like the center reflected the community and their culture.

**Figure 70**

*Center 2 Lobby Connecting the Center with the History of the Park, Taken by Gaby*



Most of the people interviewed at Center 2 strongly believed that the community center reflected them and was an "anchor" for the African American community in the area. They were proud that there was a building where they could feel comfortable and welcome, where they were treated with respect and dignity, and where people of all ages

from the surrounding community could gather. For many, the community center was not an isolated entity but a part of the grounds, the outdoor performing space, the library, and the senior housing.

It goes back to how they have the building design. It has our history in it. So our people going to know our history, they feel comfortable when they come in, and they see things that relates to them. And they just make you feel a part of it.  
(Ester-C2)

For Black people, this is an anchor. Definitely. Because this is the main park.  
(Carmin-C2)

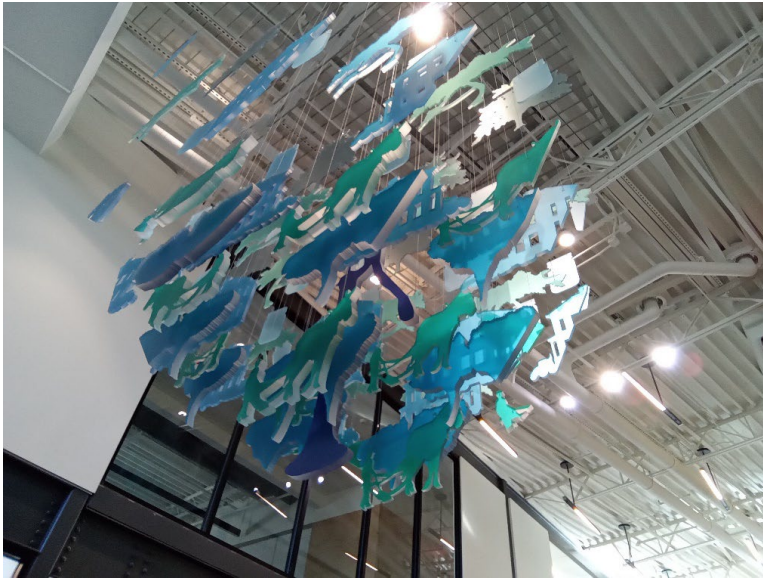
While Center 2 was steeped in history, the connection to the community at Center 1 could be felt from a different angle. At Center 1, the mobile artwork hanging from the ceiling in the lobby was distinctive, and for many users, it generated a positive vibe and a link to the community. The community center manager informed me that the artist commissioned for the art piece met with groups in the community to get a vision of how they saw the community. The resulting piece in Figure 71 represented the community's history, and users felt it embodied the community.

I think the artwork is very distinctive because when you come in, you see that you can't help not see that piece of artwork because the artwork is flowing down. But the artwork has a story, too, and I tell people that story when they come in to the center. I think that's very distinctive. When one thinks about it, about this, this area. When you come into this area, I think it's very distinctive because this area has a history behind it. So it was this building was planned here because of the history of the area. It has certain distinctive things outside. (Deanna-C1)

I think so because of how the design and that sort of blends in with the nature. I mean, we're not some slick spa looking facility with stained glass, I mean, with glass and you know, it's not your traditional building. I think it does, I really does, especially with the, with the artwork, because that's something that they talked about when they first opened about how it picked up on things here in the community, like the trees and you know, different things. I think there's water and stuff there. (Cali-C1)

## Figure 71

*Mobile Artwork Hanging From the Lobby Ceiling in Center 1, Taken by Nancy*



### *The Centers Create Opportunities*

Both community centers provided a stimulating and rich environment, encouraging users to come in and not being a barrier to the user. For many, both centers symbolized a place filled with possibilities where users were able to complete their routines and engage with others. From a physical standpoint, users had a place to exercise and stay in shape without judgment.

So I'm very grateful that I can walk and especially since I've had this illness this summer, it's been a.... it's been a godsend to have a place to walk. (Liv-C1)

I mean, it just, it gives people access to stuff that they wouldn't have access to, if they had to rely solely on private enterprise. .... there are a lot of people in this area that have nothing close to that. And the fact that this place provides a an accessible, affordable fitness center where they can like, access equipment and a lap pool, and a gym is important to me. (Mason-C2)

I use this place mainly to further my own personal goals that being exercise. I think everyone's been a little sedentary for the last couple of years due to global

pandemic. So, this is helping me, this space is helping me get back on track. It completes my routine. (Glen-C1)

Many users felt that the centers were a way to get out of their homes, not be alone, and mingle with others, shaping and influencing their interactions without added pressure. For some users, the centers were like a 'second home,' a home away from home. Some users described the community center as a 'heaven' while others described it as their 'happy place.'

To me, this center is, like I said, home from home because you feel free. It is; you are comfortable. And then, if you need anything, somebody there for you. If you get sick, they will call an ambulance. If you get sick, they will call your family. You know, so it's like, here, my second home here. That's how I feel about it. It's like my second home here. Because when something happens, everybody will collide. (Lisa-C2)

I just don't know it's as if I'm going to a happy place. Yeah. When I turn in, I know I'm coming to a happy place. It makes me feel good. (Ester-C2)

At both centers, users discussed how being in the center had aided them physically and mentally. Participating in exercise classes and meeting people assisted them beyond the community center; they could do more things in their houses and around the community.

And each time I will go to the doctor, he will say, keep it moving, keep it moving, keep it moving. And I said, well, I can't really walk anymore. He said, well, find, a water aerobics class, but you got to get exercise in every day. And mentally, you do not realize how much that help you until you get up and start moving, get up and start doing something. So that's why I said it has helped me physically and mentally I'm able to do things more around the house. In the community. You know, I do volunteer work. (Joann-C1)

It kind of gives you that space to come and relax and know that I don't have to worry about standing or I'm trespassing, or I don't have to buy anything to use this space, I can just come in and relax. (Tina-C1)

...but just getting out of the house and, you know, interact with other people and it gives me something to wake up for every day. (Daisy-C2)

Some users believed that the combination of the classes and the physical environment encouraged them to come to the center (Figure 72).

It's a combination of the classes and the environment created that bring me here. I don't think I had really thought about how much the physical aspect influenced, you know, how I felt about the space. But I think it really does. And I think that's one reason why I really like coming here is because it feels, so open and so comfortable. (Sylvia-C1)

**Figure 72**

*Center 1 Lobby as Viewed by Sylvia*



For many, the centers went beyond exercise, becoming a space for socializing. Some saw the center as a place that could become their regular hangout, embodying positive community engagement.

You know, maybe one day I always said, I want to be one of those old guys and all the buddies gather around McDonald's and drink coffee early in the morning and eat their biscuits. You know, I could see this place being that. (Ross-C1)

## *Summary*

The theme highlighted how the physical environment, users' perceptions, and personal experiences intertwined to create a welcoming and supportive setting within the community centers. Users at both centers had favorable opinions about the buildings' physical appearance and condition, conveying a positive image of place. The history and cultural significance of Center 2 as a former slave-holding plantation also shaped users' image of place. At Center 1, the giant mobile artwork hanging from the ceiling aided in connection to the community. For many, the centers symbolized a non-judgmental place for exercising, staying active, and creating opportunities for engagement in various activities. It provided a "second home," fostering attachment and a sense of community.

## **Theme 4: Weaving Connections and Social Ties**

Theme 4 addresses the concept of social capital. It discusses the vital role that community centers play in facilitating contacts and building friendships. The community centers allowed users to experience community. The physical environment formed a backdrop for users to interact and socially connect. These connections are essential for the self-esteem of users who see the community center as a place of comfort and security. The theme will discuss the acts of neighboring users experienced at the center through the help they gave and received. In addition, the construct of sense of community will be addressed via the sense of belonging that users at both centers discussed. This theme brings the constructs of sense of community, social networks, and neighboring to the forefront.

**Table 14***Codes and Associated Sub-Codes of Theme 4*

Code	Sub-Codes	Context
Social Activities	Multi-purpose rooms	Socialization through Clubs
	Programs and resources	Senior program socialization through cards, Bingo
	Staff	Organizing trips
Keeping Up with Each Other, From Kitchen Table Conversations to Deep Bonds	Physical Structure	Backdrop for interactions
	Pool	Interactions during lap swimming
	Changing Rooms	Conducive for interactions
	Gymnasium	Interactions during games
	Interactions	Before and after structured activities Homogenous -age or interests Extending beyond the centers
Helping Each Other	Structured Activities	Sharing techniques and exercise routines
	Unstructured Activities	Teaching skills
	Staff	Sharing information and resources
	Other Users	Information Sharing Seniors assisting less mobile seniors Volunteering in the senior kitchen Donating to center
Shared Feelings of Belonging	Central Location	Easy to get too
	Interactions	Pleasant experiences
	Other users	Enjoying each other's company

### *Social Activities*

When asked about the resources used at the community centers, in addition to discussing spaces and resources used for physical activities, users discussed the social activities they engaged in within and outside the center. The book club, card club, and cooking club at Center 1 were popular, and users actively participated. These activities encouraged interaction and building a social circle. In the cooking club, people bonded over a meal. During observations, I went into the multipurpose room where the cooking club met and saw participants prepping and cooking. It was busy, and everyone seemed stimulated by the food's aroma permeating the center (Figure 71). The book and cooking clubs took place monthly, while the card club met weekly.

Like cooking club, that's only once a month. And it, but it's fun too 'cause you're doing the prep work and different people doing things. And so, I've gotten to know some of the people that come fairly regularly. (Glen-C1)

I've never been in a book club before. And I really love it. And the ladies that are in it are great, they're well traveled, they're well spoken, they have a lot to contribute, they are alert, and they're they're go-getters. And if you want to stay on your feet, you need to hang out with people like that seriously. (Liv-C1)

well book club and cooking club and the fitness classes is the most ones that we kind of interact with each other as well as the tot-time. (Therma-C1)

### Figure 73

*Cooking Club Activity, Taken by Researcher*



At Center 2, users in the senior program engaged in social activities such as cards and bingo, which helped them socialize with each other and stay alert. Many ladies not enrolled in the senior program also played cards in the senior area. They enjoyed interacting with the seniors, and some felt they had learned a lot from the wisdom of the older adults. During observations at Center 2, I saw the users were animated and having fun when they participated in the bingo game held once a week in the seniors' area. Some users talked about participating in the Valentine's dance and Christmas potluck. They found all these activities helped them feel like a part of the community.

We play cards. We play cards, we watch TV. We like *The Price Is Right*, so we watch TV every day when we're not busy. I get along with the other staff, the other members because as a child, I always used to be around older people. So I guess it kind of grew up in me because I like to be, because some of them are so wise and have a lot of knowledge. (Orion-C2)

The Valentine dance that the seniors had, okay, it was so much fun. They have it every year, they said. And I'm like, I will be there from here on out. They did the

dance, you dressed up and they have a dinner, dance, and door prizes. It was so much fun. I've been missing out all these years. (Gaby-C2)

Many seniors also took part in trips arranged by the staff at the community center.

A couple of the users at Center 2 spoke about participating in the yearly picnic trip, which they went to a neighboring city for what they called a 'fish fry' activity. The center arranged this, and they went together in transportation organized by the center. A few users at Center 1 also mentioned this. Users at Center 1 spoke about going together to the museum downtown, which was a lot of fun for them.

Well you know the only time we deal with other ones was when we have a picnic every year. And then all of them will be on the picnic like that. And then like, oh, once a year, we go to XXX (city name). There is a fish fry there. All the centers go there, too. Everybody like about to get on, you know, get on the bus and everybody, like, communicate like that. (Lisa-C2)

but they would have a night where we meet at all community centers, and they have a talent show, which I love that. This hadn't started back yet. Oh, I love the talent show. And then once a year they have park, they celebrate the park. So, we get together and we compete against each other. So, I love that a lot too. They just hadn't started all that back since the COVID, but I'm sure they will. (Daisy-C2)

....but the community center also put on things. Yeah, lots of things.....We tend to like to go to trips, we tend to like to look at things like yeah, when the community center says, Hey, we can take you down to the music museum downtown, you know, like music museum downtown. And we all get on the bus, you know, and ride down because it's easier than driving downtown in XXX(city name) and parking and all that. So I think there's all the center's when they offer trips, seniors tend to like trips, where they can just get on the bus and ride you know, they don't mind paying the \$10 for the trip. (Riley-C1)

In addition, some users supported others in activities they were participating in outside the center.

They actually came to my play on Friday. About 20 of them showed up. So we'll participate with different stuff, like if somebody has a party or they have an event and they ask us to come, we do. So we socialize pretty frequently. (Amy-C2)

### *Keeping up with Each Other, From Kitchen Table Conversations To Deep Bonds*

While discussing different aspects of the community center, users spoke about contacts and friendships they had developed at the centers. The physical presence of the community center formed the backdrop for interactions and bonds among users. The kinds of bonds developed at both centers vastly varied. Some users casually interacted with others during structured classes, while others met and interacted before or after classes. Center 2 was much older than Center 1, and users at Center 2 had been coming to the center a lot longer than at Center 1; hence, the bonds of friendships appeared deeper there than at Center 1. People at Center 2 seemed to know each other before coming to the center.

Most of everybody that's in my class now, a couple of them that I knew, I didn't know they was coming here, but we actually went to school together. I knew them from when I was younger. One of them here, I know her from elementary school, junior high school, and we are both seniors now. She's a couple of years older than myself and then I met her here. (Willa-C2)

Many users at Center 1 used terms like acquaintances and casual connections to discuss their interactions with others. For several older users at Center 1, the ease of access when there were fewer people around led to limited contact with other users.

My contacts with people are more transient. And I purposely try to come and work out when there are very few people so I can get access, you know. So, there were like three of us in there and one guy was on the treadmill. So, there is not much chance of interaction, and it has nothing to do with avoiding people at all. But if I could come in if I could come in and get a workout in. It's an hour and a half, if there's no one if I don't, have to wait on the machine. Otherwise, it's longer. (Peter-C1)

At both centers, users perceived others as being 'pretty cordial' and knowing 'how to share the space.' While some users at Center 1 had developed friendships, several users felt that people in the center were primarily acquaintances, and over time,

they could see these developing into friendships. One of the ladies at Center 1 mentioned that people were courteous on the walking track, shared lanes, and followed posted signs. People even waved out as they passed by on the track. People who used the fitness center expanded similarly to comment that people shared the machines and 'did not hog' them. Users at both centers discussed how the swimming pool was a place to interact. Many friendships had been developed in the pool.

I mean, it's natural that when you're swimming in between a lap or something, you're having a conversation with the person who's either sharing the lane with you or in the next lane over. (West-C1)

Basically, I get into water, and I do three up and three back. Okay. That's what I do. And then the rest of the time we spend in there it because we doing this, we yakking, that goes to the camaraderie, that goes to the support, it goes to the issues of information. (Riley-C1)

...so we real close, and everybody get along. Everybody get along. We get in that pool, we smile, we laugh, we cut up. We just have a good time. And they encourage you to come back, because when a new person... Like we had two new ladies come last week, and as soon as we see somebody new, we smiling like, "Hey, glad you here." So, they was here today, and they just come in smiling, because we make everybody feel welcome. I mean like, "Hey, how you doing?" And then everybody just join in. We become a big old family. (Daisy-C2)

While the community center provided users with an opportunity to meet new people who they may not have typically run into but had shared interests in physical and mental well-being, through the interview process and observations, I realized that many of these groups that were formed were homogenous. These groups were people in a specific age range or with similar interests who would meet and get together in and sometimes outside the center.

My network has grown because we do things together as a group, you know, we made I think it was a total of 10 of us in this little group. Well, three of us to get together four of us to go and do that, you know, we, at Christmas, all 10 of us got together, and we even some of us even brought to get our kids, you know, our

adult kids with us, but yeah, it's that kind of thing. And so, when you think about social networking, yeah. Because we get together. And it meant, like I say, we don't expect all 10 of us to get together, you know, maybe three of us to get together or four of us or six of us and go to the movies, you know, especially on a Tuesday where you only have to pay five dollars. You know, and we buy some popcorn and stuff and share it, you know. So, yeah, I will say so. (Riley-C1)

At Center 1, interactions happened around the structured activities. Users typically conversed with each other before or after a class. Many user interactions happened in structured courses, and some users developed friendships due to the classes. A few users liked to linger on after the classes as they enjoyed conversing with others and making plans for future classes.

But usually, I do like to linger around. I never try to rush out of here honestly, I like to, ..... But yeah, it's so like, even if in some class like I, I still take my time, usually FX wants to take pictures, too, of everyone together. And honestly, sometimes I just like to stick around to see like, hey, like, when are we gonna get together again, you know, or even just getting to know the people more even at cooking class, they usually stay because I like to help clean and put the tables away. And then I'll usually people just talk a little bit more. That's not just the cooking class, you know, community is huge for me. (Amy-C2)

A young man named JX, we are the two guys in the class. And of course, we got the other women in class. So, we just keep the class going. So we've developed a kinship friendship, where we engage and just have a good time and really have become more like accountability partners in our efforts to really stay fit. (Castor-C1)

For some users, the community center was the sole place where they could build their social circle. One user at Center 1 commented that since he worked from home, the community center was a place to expand relationships and friendships. Through interactions in the basketball gymnasium, users developed friendships in the community center, which extended outside the center.

I work at home, I'm, I work remotely. So, it's like, this is where I can actually have social engagement. So, it's nice.

HX, like I met him in the gym and ended up, he ended up inviting me onto his his rec league basketball team that plays in like East XXX(city name) and XXX(city

name). So yeah, from that I met a bunch of people, you know, on his team. And so, I play with them. TJ, a couple, a couple of people that I play ball with in here, we also like hanging out and chop it up after, after hours and stuff and go have a go have a beer. I am of age so, I have a beer I've had, you know, hung out watch games after, you know, after we leave after hours, whatever later with people that I've met here. So yeah, it's great. (Miles-C1)

For young mothers at Center 1, the community center allowed them to meet other parents, get kids together, have playdates, socialize, and make friends. These meetings led to the building of a grassroots network. During observations, I saw many parents who brought their children to the homeschool program (Figure 74) in the basketball gymnasium, sitting on the bleachers, engaging in conversations, and some would use the opportunity to walk with another parent on the upstairs track.

We come here because they, we want friends, they want friends, they want social. Yeah, I think that it does encourage social interaction by the nature of what is provided. I think the park does a good job at like, proposing that encouraging, lingering, you know what I mean? It definitely encourages that, we know it influences right like anytime we have a space right. (Nancy-C1)

#### **Figure 74**

*Children in the Homeschool Program with Parents on the Bleachers, Taken by*

*Riley*



Some young parents had met due to the organized soccer league and sports opportunities. These connections had developed into deeper friendships, and the families were spending time together outside the center. The children were having sleepovers and other play opportunities.

So, one particular person that I met was whenever they had the soccer league for the little kids. And we just hit it off, and she would bring her kids to my house, and they would play along and we've had, where we all go out as a family together and go watch movies, go out to eat. (Therma-C1)

While at Center 1, most of the interactions were within the community center, with a few spilling over, at Center 2, most interactions extended beyond the center, with many ladies meeting outside the center, “breaking bread together, exchanging numbers and checking on each other” (Willa-C2). Similarly, many felt part of a family in the line dancing class. During observations of the line dancing class (Figure 75), I could see the camaraderie and friendship between the dancers. They would show each other the steps, share personal stories and successes, and invite the group to events they were part of outside the center.

The people in my dance class, they're kind of like my family, actually. We do a lot of things outside of the community center. We dance at a lot of different events. They actually call for us, so we're the Center 2 Line Dancers. (Amy-C2)

We're like family, like, I got two groups of water aerobics families. It's the first group we had before the pandemic, a lot of them haven't come back yet. We go out, we go out, we celebrate each other's birthday now. We get together, we go out and eat every three months, each other's birthday, we just meet up and eat out, and we talk on the phone, we send each other birthday cards, we help each other in deaths in the family. We just like a family. So, now I got a second family, this new group. We doing the same thing. We go out and eat, we go play bingo on Wednesday nights. We meet out, and play bingo, and we just get together, go out and eat, we had brunch. So, we just go to concerts together. So, it's amazing, because you meet people and you become a family. (Daisy-C2)

**Figure 75**

*Center 2 Line Dancers, Taken by Researcher*



Many seniors at both centers discussed having a circle of friends formed in the pool, line dancing class, and senior exercise classes. Many mentioned that they spent time together at the community center after their activities, chatted, and got together outside the center. During observations, I saw many ladies at both centers sitting in the lobby, talking and having a good time. Some of the ladies mentioned that the locker rooms after swimming allowed them to socialize and unwind.

We just decided, you know, hey, we was talking to each other. And they said, why don't we form this little group called...the Divas, you know. And so, we met, and we do, we do things as a group, as like, we took months to decide an activity that we could all do. My month is March, I'm going to have them I'm gonna tell them about the play. And I'm gonna tell them, we've already got tickets for matinee, that Saturday, y'all too can get tickets, you know. (Riley-C1)

Since many seniors at Center 2 lived alone, socialization happened in the senior area of the center, where they mingled with each other. Some women worked on their hobbies independently, but being in the environment made them feel like they were part

of the community. They developed deep connections, relied on each other for support, and regarded each other as companions.

Yeah, it keeps me more active and, emotional, just being around, socializing, talking to people. Now, we were in the pool Friday, Thursday or Friday, and a couple of ladies was talking about going to this fish place, Sacks? Crab Shacks or something. So we probably going to make arrangements to do that after we get out of the pool and then go have lunch. (Pearl-C2)

### ***Helping Each Other***

At Center 1 and Center 2, users felt they received help from and gave help to others. This feeling was especially prevalent among seniors at both centers. Users helped each other out in a variety of little ways. While the help they individually gave each other was small, looking at it holistically, they seemed to benefit immensely. In the fitness center, users helped others by ‘spotting’ each other when using free weights. One user mentioned that she shares exercise techniques with others, and if she sees ‘someone not using the right techniques, I let them know so that they do not hurt themselves’ (Caley-C2).

At both centers, most users had given and received help, and much of the help happened in the programmed areas where users gathered for classes and group activities. Many users at both centers said they assisted others in the line dancing class. Center 2 users encouraged others by moving next to users who could not keep up so they could follow along. One user at Center 1 said she unknowingly assisted others in the line dancing class as they followed her moves as she danced and were able to keep up.

....there's a lot of people that come up to me saying like, hey, like, thanks for thanks for um, I'm like, helping me or something like that. It's funny, because that dance, like, I just dance, not realizing that people are watching. And so, they'll come up to me at the end of class be like, hey, thank you, because I was just

watching you the whole time. And without you there, I would not have been able to keep up. (Ann-C1)

Users also expressed similar sentiments in the swimming pool, exercise classes, and cooking club. One user at Center 2 mentioned how she had helped a friend by teaching her to float. Others talked about how the instructor in the water aerobics class had taught them how to swim. In the cooking club at Center 1, many users donated materials needed for the class. At both centers, users mentioned how staff assisted them through sharing information and resources. At Center 2, seniors discussed how they had received help from the community center manager.

...coming here, it give me a peace of mind. And it makes me feel good about myself because I can get around here. And I can do things here that I can't do. You know, I could do it at home. But I'm with peoples here. And they make me feel like we're close. And there's nothing that that I need that somebody won't help me to get it. You know, like that. Oh, yeah, girl, I got this, I get you this or something like that. Even some time, I can't get to the store. You know, I can tell Ms. JX and she get it for me. You know, like that. And, like, it's a lot of stuff that we do here. If you need help, they're gonna reach out and help you. Like that. Some of the people they won't do it, but some will you know. But like Ms. WX, Ms. RX, and Ms. JX and they're gonna make sure that we get what we need. (Lisa-C2)

Help also came in the form of information sharing among users. Some of the users worked in government agencies, and they passed on pertinent information to others. One Metro employee mentioned he let others know about his office's services and connected them to appropriate personnel. Another user mentioned how she was able to help another user secure a car during COVID-19.

When Covid hit and I was working with one of the judges down there, her assistant called me and asked me did I know anybody that needed a vehicle? Because they had a program that was giving away a few vehicles. And I called one of the ladies here and I asked her, I actually thought she was somebody else, but it was another lady and I asked her, did anything happen to her car? And she ended up getting a car out of that program. So that was really nice. I was glad to

help that. And if somebody tells me about something that I think would be beneficial for somebody, oh, I'll call and let them know. (Amy-C2)

On a personal level, users assisted each other in several ways. They gave each other rides to and from the community center. Users at Center 2 mentioned that they informed others about discounts at grocery stores and other places they visited. Sometimes they even purchased items for others who could not get to stores. One user talked about how she got Christmas help from information she had received from her friends at the community center.

Well, I had one help me with going to a place where they was giving out things for Christmas and gift cards and helping me going to get groceries, free groceries and stuff like that. Some of my friends here at the center gave me information and I was able to get the Christmas stuff. (Daisy-C2)

Seniors at Center 2 spoke about the emotional and physical help they received just by being a part of the senior program, as they found commonality with other seniors. Some helped by volunteering in the kitchen and preparing breakfast and lunch. Others helped by chatting and interacting with fellow seniors—a few assisted less mobile seniors by wheeling them around the center and bringing things for them. One senior talked about how another had taught her to crochet, and she felt good picking up a new skill.

Users at Center 1 discussed how they contributed to the center by donating money or items the center needed. One senior at Center 1 had moved several of her indoor plants to the center.

Well, I think when they opened, they had people send lots of beautiful plants, you know, as a gift. Well, over time, they were totally, truly, completely neglected. And, of course, just died in their pots where they stood. And I kept looking at these dead plants. And it was just really bothering me.....But I'm just saw so much potential here for plants. And I just hated seeing those dead plants. They were ugly. And they, they, were just like, Oh, we don't care about everything in this building just some things. And so, I finally asked Bara, "do you mind if I just

start getting rid of these dead plants?" She said, "help yourself" you know. So, I did, we got rid of them. And then I gradually started just unannounced with bringing a pot with a new plant like that one. And those are nice, because they don't need a lot of water. They like they like to just sit this one's very happy there. And so it's been kind of fun to just put a new plant in here and there and not say a word and see who notices, you know, and it's working. I think a lot of people are enjoying the plants. (Liv-C1)

Another user discussed how he assisted the center in planning a Christmas musical program. Some ladies mentioned that they donated to toy drives. Users discussed how the community coordinated with the church next door and donated canned goods to the food pantry, and a few noted that they had picked up food from the food pantry. A few users availed themselves of the excess food people brought to the center from their home vegetable gardens during summer.

And, and I look out there a lot, and it helps me because it's the gym that's helps. That helps me it's the community and its nature as well, you know. So it's, it's just a combination of everything that kinda of helps. But honestly, I'm sure that they're also here for a reason for community. So I think we also help each other not realizing that we are, you know. (Ann-C1)

### ***Shared Feelings of Belonging***

When talking about a sense of belonging, Center 1 and Center 2 participants expressed a strong sense of belonging concerning the community center.

Just the, the, the friendliness. Yeah, like I said, it is it's a place like 'Cheers', where everybody knows your name, you know? So, it's, I definitely feel like I belong when I walk in, you know, people, they recognize me and I recognize people and so, you know, everybody is friendly and it's hard not to feel like you belong. (Ross-C1)

Many factors contributed to feelings of belonging. The location of both centers in high-density neighborhoods provided easy access to users. Most people who came to the centers lived near the center, making it very convenient for them to visit and achieve their goals.

I have this facility, so close, with the amenities that it has, you know, for little, little to nothing costs. So, I do feel very fortunate that this is right here that it's like, it's so close to me, and that it's so available. So there's that feeling of, of kind of luck and pride in it is it's a cool place to like I said, like you roll up in the, the windows, the big, you know, big window walls, it's like, so feels uncommon, as a pretty cool place to feel fortunate to be able to kind of call this my spot, you know. (Miles-C1)

Users described positive social interactions at both community centers as crossing racial and age divides. While African Americans predominantly frequented Center 2, people of other races also developed a sense of belonging due to the friendly atmosphere.

Yeah, definitely. I think they're, you know, I just have an awareness of the fact that I'm not from here. And this is an extremely gentrified area. And there's a long history of the social fabric of this specific zip code getting ripped apart by the interstate, and, you know, obviously, over policing, and all of that, and I'm a white person. So that obviously has an effect on, like, me being here. But all of that aside, yes, I absolutely feel like I belong here. Everybody's friendly. I'm friendly. I'm not getting in anybody's way. So yes. (Mason-C2)

At Center 1, interactions between people from different cultures were observed in the clubs and available activities. Some participants attested to their pleasant experiences of intermingling with people of other races and cultures.

They had a table, the ladies at the table three said, "Oh, come on and join us right now we'll show you". And I said, "but I'm really sweaty". They said, "No problem". And I didn't really think about it at the time. But I was the only white person there. And but it was like, you know, no difference. No. And I think that's one of the great things about the community club. Because you have Hispanic people, you have black people, you have Asian people. I've seen a few Indian people. (Glen-C1)

At Center 2, interactions occurred among people of different generations. As part of the observations, I saw interactions between various age groups in the line dancing class. There were younger and older people dancing together, learning from each other, and enjoying each other's company.

Both community centers provided personal growth, empowerment, increased confidence, and a healthy routine for their members. The center's availability enabled seniors to leave their homes and come to a place that welcomed them and gave them a space to exercise and stay active and healthy. Many discussed the physical benefits that they experienced through their routines at the center.

If I get up early and I try, there is a couple here, and they have, they are consistent, and coming every day, they're faithful. And I have developed a bond with them. I kind of see them as members of my family sort of speak, because they'll look out for me. And if I, if I don't show up at the same time, or, or if we're in passing, let's say they're leaving and I am coming in, oh, we missed you. So they are, you know, a delight. They're kind of like a motivation for me to be steadfast in achieving my goals. (Caley-C2)

In terms of looking at what's available to the community, I think that's the belonging aspect. And then just knowing that I could come in and do the workout, and it's the community, this location is for the community, the community, take advantage of it. And it's a great resource for the community. So, I think that's the aim, plus, I live in this area as well. So that's the really, the sense of belonging that I take from it. (Cali-C1)

At Center 2, the history of the place, race, and childhood connections provided a strong sense of belonging.

I do because it has my people, African Americans, here. We got the whole history of African American people. It teaches you things. It is just, just the community I went to school in. So, from when I used to live, like I said, this street is a part of the university community, so that's just part of my heritage. (Carmine-C2)

### ***Summary***

Theme 4 highlighted the significant role that Center 1 and Center 2 played in enabling connections, facilitating solid social ties among users, particularly among seniors and families, and being an anchor for the community. Both centers provided a physical space for users to interact, create connections, and form friendships ranging from casual acquaintances to deep bonds. Social circles and interactions were fostered

through structured activities, clubs, and shared interests, forming grassroots networks and friendships that extended beyond the centers. The observations and interviews conducted at Center 1 and Center 2 brought to the forefront the dimension of neighboring through the friendships developed, the dimension of social networks through the connections fostered with staff and other users, and the dimension of sense of community through sense of belonging.

## CHAPTER 5 – DISCUSSION

This study aimed to fill the gap in the literature on the importance of the physical environment in supporting a sense of place and social capital in the context of community centers. The theoretical framework adopted for this study was adapted from Acedo et al. (2017) and guided the literature review and the data analysis for the current study. This adapted framework included place identity, place attachment, place dependence, and place satisfaction as the dimensions for sense of place. Sense of community, social networks, and neighboring were the dimensions of social capital in the framework employed for this study. The literature review brought the relationship between sense of place and social capital to the forefront, with limited studies focusing on the importance of the physical environment. The study focused on two community centers in a vibrant city in a southern state of the United States. A qualitative multi-case study was conducted with 20 respondents from Center 1 and 14 from Center 2. The respondents ages were between 25-80 and included male and female users who played a pivotal role in the study, helping answer the research questions.

### **Summary of Findings**

As previously stated, the central research question for this study was:

In what ways does the physical environment of community centers foster the feelings of connectedness to place and the development of social capital for its users?

Through the themes developed in Chapter 4, I discussed the various physical, social, and emotional aspects that users addressed concerning the community centers. In the next section, I will highlight specific connections to the sense of place and social capital dimensions. While the study focused on the physical attributes, I realized early in the

coding process that the physical, social, and emotional aspects are intertwined and cannot be discussed in isolation. I have attempted to examine each dimension separately, but some overlaps will become evident in the next section.

### ***The Physical Environment and Sense of Place***

The physical attributes of the community center and how they promoted a sense of place among users of the centers were central in Themes 1, 2, and 3. In this section, I will tie the key takeaways to available literature. As referenced in the literature review, Chen and Dwyer (2018) state that place satisfaction is the most basic level of people-place relationship. So, the discussion on the dimensions of sense of place will begin with place satisfaction, followed by place identity, place attachment, and place dependence. While each dimension has been discussed as a separate subtopic, there is a broad overlap of ideas between the dimensions.

**Place Satisfaction.** Place Satisfaction relating to the quality of place and benefits derived from the place emerged in the findings of this study. Factors that added to place satisfaction were discussed in Themes 1 and 2. In their research, Wang et al. (2022) found that community facilities were crucial in determining place satisfaction for older people, as they relied on these places to participate in social activities and maintain social networks. They used spatial analysis and a questionnaire survey of 497 participants to explore the relationship between the planning of community facilities and older adults' usage and satisfaction with such facilities. The study was conducted in two districts of Hong Kong. Their study found that commercial, municipal, and leisure facilities were the facilities most commonly used by older adults. The findings from Wang et al. (2022) were evident in the current study at both community centers. Seniors at both centers were

pleased that they had a recreational space that allowed them to get out of their houses, stay physically active, have social interaction, and be emotionally supported. Seniors at Center 2 specifically talked about the senior program and the opportunities it afforded them. They could use all the available spaces at the center and were provided a free hot lunch. The mere presence of the centers provided them with stability and support.

Place quality for users of both centers came forward through "design quality" (Beck, 2009) of the exterior and interior of both centers. Regarding the exterior, users at both centers appreciated the "modern" look and feel of the facilities. Center 2 users liked the combination of the red brick, white siding, and generous amount of glazing. At Center 1, too many users liked that the building had angles, and some liked the black metal siding, which they thought made the center look "of the times." In the interiors, users felt that the buildings were well designed, and design quality came forward through the openness of the centers, high ceilings, double-height lobby area, large windows, and glazing throughout the centers. Users also appreciated the occasional splash of colors and variation in materials interspersed throughout the centers. The findings from this study aligned with the scoping study conducted by Beck (2009). They found that a well-designed and legible public space added to place satisfaction.

As stated in the previous section, the facility's cleanliness and maintenance were essential factors for place dependence, but they were equally important factors for satisfaction with the community centers. While the general maintenance of the centers was vital to all users, those who used the swimming pool in both centers discussed the importance of the cleanliness of the changing rooms and appreciated that those areas were clean even though there was a constant flow of people in and out of the changing

areas. This finding is consistent with the findings by Beck (2009) and Wang et al. (2022), who found that care and maintenance were important to users of public spaces and facilities.

Two other factors that were found significant in Beck's (2009) study were the ecological quality and functional quality of the public space. While the current research concerned the built architectural environment, the surrounding environmental quality was also valuable for the center's users in the current study. At Center 2, users were happy that the community center was in the park surrounded by trees and that there was a long driveway leading up to the center. At Center 1, users also loved that they were close to the lake and that the land on which the community center was positioned was a donated farm with many trees. They also liked that there was an outdoor track and space where they could have outdoor activities. The functional quality of the space in addition to place satisfaction was evident, with users' needs being met through the programmed spaces such as the swimming pool, fitness centers, indoor walking track, and gymnasium. These spaces' availability allowed users to come to the centers to exercise and improve their physical health. This ties back to place dependence, where providing these spaces and enabling users to fulfill goals leads to reliance on the centers.

**Place Identity.** The physical environment was important in generating an identity with place at both community centers. Key aspects supporting place identity emerged in Themes 1, 2, and 3. The physical characteristics of the center, the image and perceptions users had of the centers, and the relationship they were forming with the centers were some key indicators of the development of place identity in the current study, which aligned with the review conducted by Peng et al. (2020). In their review of the available

literature on place identity, Peng et al. (2020) found that objective physical features of a place and subjective factors contributed to place identity. In addition, the results of the current study align with the conceptualization of place identity by Twigger-Ross and Uzzell (1996), which included four dimensions of distinctiveness, continuity, self-esteem, and self-efficacy.

Twigger-Ross and Uzzell (1996) define distinctiveness as a person's association with a specific place, which enables them to differentiate themselves. Distinctiveness was discussed under the codes Atmospherics of the Centers and Design Elements of the Centers in Theme 1. Users found the design of both centers to be unique to the area where the centers were located. At Center 1, users spoke about the unique shape of the building and its not being "just a box," which made it distinctive and contributed to the formation of place identity. According to users, the building's perch atop the hill, the black metal panels, and the extensive glazing facades made it stand out. At Center 2, users felt that the contemporary and engaging structure with different materials and glazing made it distinctive for the area. Therefore, the unique character of the physical buildings promoting place identity aligned with two studies. Gospodini (2004) used the case study of Bilbao to demonstrate that innovation in design could lead to greater place identity. In that study, most respondents found the Guggenheim Museum, designed by Frank Gehry, to be an addition to the distinct urban landscape. In their research on place identity, Dale et al. (2008) found that distinctive landscapes and unique geographical features enabled the formation of place identity.

Place-referent continuity was highlighted in Theme 3. The codes entitled, Users Feel Welcomed at the Center and The Centers are a Link to the Community brought

forward place-referent continuity, which was seen in several ways at Center 2 and to a lesser extent in Center 1. The location of the center within the park, which had been a plantation with enslaved people, provided users with a solid connection to their history. The lobby in Center 2 had installations that highlighted the history of the park and famous African Americans who were involved in the civil rights movement. Many users remembered using the original center and the outdoor pool as kids when it was the only available center for “black people.” The historical aspects of the center provided “a link to past actions and experiences” (Twigger-Ross & Uzzell, 1996, p. 207) and added to place identity. The latest iteration of the center, built in 2006, integrated the gymnasium from the older community center into the new complex. Maintaining a connection between the past and the present brought the idea of continuity to the forefront and solidified place identity for most users, which tied into the results found from the Yeung House's restoration and the front yard's repurposing. According to Ho (2024), the restoration and repurposing of the Yeung House contributed “to forming place-identity through physical continuity that embedded social memories” (p. 12). In addition to place-referent continuity found predominantly at Center 2, place-congruent continuity at both centers “was maintained via the characteristics of the place” (Twigger-Ross & Uzzell, 1996, p. 208), where users felt that the “particular place fit with aspects of the self” (Domingues et al., 2021, p. 239) and represented their values (Twigger-Ross & Uzzell, 1996). The idea of place-congruent continuity was brought forward in themes 2 and 3, where users felt welcomed and supported by the physical aspects of the centers, staff, and other users. They also felt like they belonged at the centers, as discussed in Theme 4. Users thought that the sense of belonging came about due to several factors. At Center 1,

the sense of belonging came from the center's location within the neighborhood, the presence of which encouraged users to visit and participate in activities that helped with physical fitness and general well-being. The ease of access to the centers also increased social interactions adding to the feeling of belonging.

The dimensions of self-esteem and self-efficacy were brought forward throughout Themes 2, 3, and 4. In Theme 3, the code highlighting the positive image of place and the opportunities to engage brought out several aspects of the centers that users felt added to their self-esteem. The chance to get out of their homes and come to a place where they were respected, could meet others, and could participate in social activities impacted their self-esteem, which was discussed in Theme 4. Many users, especially at Center 2, felt that the centers were a home away from home. Users at both centers could maintain self-efficacy through the fulfillment of goals. The fulfillment of goals was discussed in theme 2, where users highlighted how the available spaces and resources at both centers enabled them to meet their needs and achieve their goals. The development of place identity due to the satisfaction of needs was found by Marcouyeux and Fleury-Bahi (2011) in their study on place identity in school settings. They found that the perception of the school fulfilling their needs added to a greater identity with the school.

**Place Attachment.** For this study, place attachment was defined as the bonds that people form with others and the places they consider essential (Hidalgo & Hernandez, 2001; Jorgensen & Stedman, 2001; Low & Altman, 1992). An extensive literature review identified several physical and social factors contributing to place attachment that were used to code for place attachment. The key factors included proximity, safety and

security, amenities and spaces encouraging lingering, spatial features (cleanliness, natural light, appealing décor), social networks, emotional connection, and support.

Theme 1 highlighted the physical factors that promoted development of place attachment, while Theme 3 brought forward the feelings and emotions that these physical features evoked among users. Spatial features that users discussed included expansive glazing on the exterior, allowing natural light into the building, appealing décor of the interior of the centers, transparency, and cleanliness. These factors aligned with the top five design considerations users discussed in the study conducted by (Waxman, 2006). In her study (Waxman, 2006), explored characteristics that encouraged gathering behavior and contributed to place attachment in a coffee shop. The top five design considerations included cleanliness, appealing aroma, adequate lighting, comfortable furniture, and a view of the outside (Waxman, 2006). The interior environment at both centers was important for users. Users discussed the large windows at Center 2 and the large glass facades at Center 1, which they felt were unique and contributed positively to the environment. These large glazing areas allowed a ‘ton’ of natural light to enter the building and provided users with a connection to the outdoors. Center 2 had a more compact lobby, but the streaming in of natural light added to users' perception of openness. These findings align with Karsonoa et al. (2016) mixed methods study, which highlighted the importance of uniqueness and comfort in supporting identification with the local environment, thereby creating place attachment.

As highlighted in Theme 2, proximity was essential to the centers’ users. Living in varying degrees of proximity to the centers gave some impetus to come to the center every day, and some mentioned that being close to the center acted as a disciplining

factor in maintaining a regular schedule. Proximity as a way to increase place attachment was highlighted by Jayakody et al. (2024), who, in their study, utilized a mixed methods approach to highlight the importance of the physical characteristics and accessibility of Tasmania's east coast's natural settings in fostering strong place attachment. According to Jayakody et al. (2024), proximity to natural settings influences place attachment by providing opportunities for aesthetic appreciation, recreational activities, and personal connections with nature. While the study by Jayakody et al. (2024) focused on natural settings, a connection could be with community centers where proximity to the centers influenced place attachment by providing opportunities for recreation, exercise, and social connections.

Safety and security were essential for users' repeated visits to the center and were discussed in Theme 2. Since users felt safe at both centers, they kept coming back to the centers. At both centers, the spatial layout and the location of the reception area within the centers added to users' perception of safety. At Center 2, seniors felt safe as the reception desk acted as a check-in and check-out for all who visited the center. In addition, the segregation of the senior area from the rest of the center also added to the perception of safety. At Center 1, the location of the reception desk in the lobby, where they had a direct line of sight of the parking lot, made users feel safe inside the community center and as they walked to and from the parking lot. The open layout and the visual connection between the various spaces of the center also added to the feeling of safety for users. During observations at both centers, I noticed that visitors acknowledged the presence of the reception desk, and the location of the desk created an automatic checkpoint where users stopped at the desk without being asked to. It seemed to be a

reflex that added to the idea of safety. During different parts of the interview process, users kept mentioning the proximity to the center and the safe environment, which encouraged them to return to the center. In their study, Karsonoa et al. (2016) argue that safety was an essential factor for the development of place attachment, but their study found that people felt safe due to the presence of the tourist police. In the current study, apart from the physical factors, the presence of center staff and metro officers added to the perception of safety.

Themes 3 and 4 examined the social aspects of networks, emotional connections, and support aiding in creating place attachment. Users discussed how the physical environment allowed them opportunities to utilize available spaces and resources to participate in activities and classes and formed the backdrop for engaging with other users and expanding their social networks. The spaces also allowed users to meet others, develop friendships, and form deep bonds. This aligns with the study by Madgin et al. (2016), who found a link between physical spaces and social networks. Their study demonstrated that “attachment to recreational spaces was bound up with a complex set of social relations in which the physical structures provided a place in which people could interact and thus develop a range of lived experiences, which in turn provided layers of meanings and memories” (Madgin et al., 2016, p. 691).

**Place Dependence.** The literature discussed place dependence, direct dependence, also known as functional attachment, the quality of the space, indirect dependence related to wellbeing, and the aspirations and expectations that users have for themselves (Alrobaee & Al-Kinani, 2019; Gurney et al., 2017; Williams & Vaske, 2003). In this study, place dependence emerged from all the aspects discussed in the literature.

In their study on sense of place among university students, Khaidzir and Kamal (2023) found that the university enabled students to accomplish their goals. "As students interact with their university more often and longer, particularly in terms of classes, facilities, and surroundings, their functional attachment might gradually convert to place dependency" (Khaidzir & Kamal, 2023, p. 1029). The results from the study by Khaidzir and Kamal (2023) were supported in the current study. In Themes 2 and 3, users discussed how the community centers were essential to their daily routines. The physical factors important to fulfilling needs and goals were spaces and amenities in the centers. The availability of a clean, well-maintained, heated indoor pool was essential to most users. Seniors at both centers used the pool for water walking and exercising, which helped them achieve their health goals. Similarly, for many, the indoor walking track with views to the outside enabled them to walk and exercise in a safe environment. Many felt they could not walk on the sidewalks and in their neighborhoods as there was considerable traffic and the sidewalks were uneven in some cases. The other programmable spaces, such as the gymnasium and dance studios, enabled users to fulfill goals by participating in structured classes. The idea of dependence on place developing gradually and over time was evident in Center 2. Center 2 was a much older community center, and some users had been visiting the center for a decade or so. For many seniors, it was a way to get out of the home, participate in activities, and be physically active, leading to functional attachment and place dependence. The results from the current study were confirmed by Williams and Vaske (2003), who found that place dependence was formed by sustained association with a setting that fulfilled users' needs.

Studies conducted by Alrobaee and Al-Kinani (2019) and Casakin and Neikrug (2012) found that improved physical environment quality was essential in developing place dependence. The current study reached a similar outcome where place quality was crucial to users. Theme 1 covered the atmospheric and design elements of the centers related to place quality in detail. Regarding place quality, most users discussed the importance of clean and well-maintained centers without seeming run down. The materials used were essential physical characteristics that added to the perception that the centers were well maintained; for example, users commented that using concrete masonry block walls painted white made the centers look and feel fresh. Similarly, the occasional splash of colors also added to place quality. At Center 1, some walls were painted yellow, creating an eye-catching contrast. The newness of the center also added to place quality. Center 2's lobby had a maroon wall, making the space attractive. Since Center 2 was in a predominantly African American community, and most users felt that facilities for their community were almost always substandard, they were pleased with the condition and standard of Center 2. Most users commented that both centers were above average and better than many other places they had visited.

Similarly, in terms of indirect dependence relating to wellbeing, the physical atmosphere, open layout, availability of spaces for seating, and lingering related to quality of spaces and contributed to users' feeling welcome, a place where they could stay for as long as they wanted to. The aspects of the community centers that contributed to indirect dependence were discussed in Themes 3 and 4. In addition, the multipurpose rooms in both centers provided affordable spaces, adding to dependence on place. At Center 1, the multipurpose rooms where users met others through the card club and

cooking club activities helped them bond over a meal and a fun activity, adding to their well-being. At Center 2, the senior area where many seniors participated in the senior program allowed them to mingle in a neutral space and develop relationships and camaraderie. This aligns with the study conducted by Chen et al. (2022), where they found that public open space "creates a place that is not only relationship-rich, but also functionally important to daily living" (Chen et al., 2022, p. 10).

### ***The Physical Environment and Social Capital***

The physical attributes of the community center and how they prompted social capital among users of the centers were discussed in all the themes. In this section, I will tie the key takeaways back to the available literature on social capital through the dimensions of a sense of community, social networks, and neighboring. Using the theoretical framework adopted in the literature review, I deductively coded for all the dimensions of social capital.

**Sense of Community.** As mentioned previously, deductive coding was utilized to understand how community centers fostered a sense of community for users. Based on the literature, the domains of sense of belonging, shared emotional connection, community attachment, and community identity were coded to understand how sense of community developed for users. These codes were discussed in Themes 1, 3, and 4. McMillan and Chavis (1986) defined sense of belonging as “the feeling, belief, and expectation that one fits in the group and has a place there” (p. 10). Users at Center 2 were primarily African Americans. They discussed sense of belonging from the perspective of the center being situated in a historically black neighborhood, which made them feel like they fit in and it was their center.

At Center 1, users felt connected to the center as many lived in the neighborhood and felt relaxed in the center. This connects to the study by Tsai (2014), who found that placing public facilities close to neighborhoods enhanced the psychological sense of community. Feelings of belonging for users came about due to familiarity with the center itself and conviviality among users of the center. Many users felt very comfortable due to staff greetings, familiar faces, and smiles that awaited them when they came to the center. Users interviewed thought the centers were inclusive, where they could engage in activities regardless of age and race, creating a positive environment and encouraging people to visit the centers frequently.

Taylor-Harris and Zhan (2011) conducted a qualitative study to understand the reasons and benefits experienced by African American seniors who participated in activities in a multipurpose facility. The authors conducted the study in a predominantly African American facility in Atlanta, Georgia, which was fully funded by the county. They interviewed seventeen participants who were at least 55 years or older. The study found that race, age, and work/retirement status shaped participants' social world at the multipurpose facility, creating a common identity. In addition, past racial discrimination encouraged participants to choose a facility where they felt comfortable and like they fit in the most, forming a collective identity. In the current study, Center 2 was predominantly visited by African Americans. While users did not discuss experiencing racism in other places, they echoed the idea that the community center made them feel comfortable and they fit in. Seniors at Center 2 shared a common identity with others participating in the senior program as they were all older adults, African Americans, and retired. Most of them lived on their own. At Center 1, there was a common identity in

many of the structured classes. The exercise class for seniors comprised retired older adults, creating a shared identity.

In their study of a predominantly African-American community center, Colistra et al. (2019) observed that relationships developed from “shared emotional and symbolic connections to the community center” (p. 11). The community center was in a former high school, and users discussed playing and swimming on the property. In the current study, the interviews yielded a similar outcome at Center 2: users felt a symbolic connection to the community center due to its rich history. In addition, many users had been coming to the center when they were kids, and they remembered the center from back then. The center had become part of their identity. The new center stood in the same place as the former center. During those days, the swimming pool was outside. It was the only pool that African Americans could use during segregation, and this formed a historic connection between users and the community center, which further added to the sense of connectedness and community attachment. The idea of physical rootedness to place enhancing a sense of community was discussed in the study by Rogersa and Sukolratanameteeb (2009), who found that the length of stay in a neighborhood reflected attachment to place and improved sense of community.

Kim and Kaplan (2004) defined community identity as “personal and public identification with a specific physically bounded community with its own character.” (p. 315). This was seen at both community centers. At Center 1, the newness of the center, as well as the design of the center with angles, large glazing walls, and a contemporary interior, added to the character and uniqueness of the center. Users at Center 1 opined that the building, not being ‘just a box,’ was important to them as they felt there was

thought put into the design. Similarly, the quality of interior elements and spaces was something that users commented on several times. At both centers, users expressed pleasure about the cleanliness and maintenance. They also liked the colors, materials, and textures used around the centers. This is in line with the study by Francis et al. (2012), who found that improved quality of public spaces contributed to an increased sense of community. Regarding the physical building at Center 2, users liked that the building used a combination of red brick, white siding, and lots of glazing. They felt that it looked like a “modern” and well-maintained center. In addition, the association with historical aspects further contributed to the sense of community as users who lived nearby and used the center identified with the center.

**Social Networks.** To understand how the community centers helped generate social networks and the benefits that users derived from these networks, I coded for interactions and connections developed among users, between users and staff, and support, which included emotional enrichment highlighted in themes 3 and 4. The spaces and resources provided in the community center became the setting for the development of social ties and networks. The lobby in both centers was an area for informal gatherings. On numerous occasions, I observed users sitting in the lobby and engaging in conversations with others. People stopped by the front desk to check in and chat with the staff, who were always friendly and accommodating. The friendly and engaging nature of the staff was echoed by users, who were very appreciative of the staff.

In their study, Gothe and Kendall (2016) conducted three focus groups with 20 female participants to understand barriers, motivations, and preferences for physical activity among older African American adults. Participants were recruited from the

Detroit metro and surrounding urban communities. When discussing preferences for physical activity, dancing was the most preferred type of physical activity reported by all focus groups. Many felt it was a fun and social activity that provided a great workout. In addition, most participants preferred a group-based activity as they were more motivated to exercise when they were part of a group, which provided them with “social support and engagement with their community” (p. 5).

In the current study, users at both community centers developed social networks in the spaces where structured activities were conducted. Users who participated in group classes discussed how they engaged with each other before and after the class. They talked about the support and encouragement they received and provided during the classes. In Center 2, many seniors participated in the line dancing class, which they found helped them feel physically active and also allowed them to develop social relationships. Most enjoyed dancing and thought that this was a perfect way to blend their love for dancing with being physically active. When discussing unstructured activity, users who used the swimming pool spoke about the friendships they had developed in the pool. Many mentioned that they looked forward to coming to the center and that these were some of their most enjoyable times. The community center functioned as a “third place.” It formed the setting for developing these socializing networks, consistent with the study by Boessen et al. (2018), who found that spaces (which in their study were bars) that functioned as third places enabled the generation of social networks.

Ariyo and Faronbi (2022) found that social networks significantly influenced the quality of life among older people, and social participation and robust social networks aided in preventing depression and improving mental health among older adults. The

findings from the current study aligned with the research conducted by Ariyo and Faronbi (2022); at both community centers, users spoke about the center's importance in their daily lives. At Center 2, seniors talked about the various tragedies that had befallen them and how they felt that coming to the center, meeting other seniors and users, and engaging in activities had enabled them to cope, which added to improved mental health. A similar finding was reported by Fausto et al. (2022), who conducted a study on the effect of cardio-dance as an exercise to improve cognition and mood in older African Americans. The study included 86 participants 60 years or older in Newark, NJ. 38 participants were enrolled in the exercise intervention group, while 48 were enrolled in a no-contact control group. The exercise group participants attended a 60-minute cardio-dance exercise class twice a week. The study found that the cardio-dance exercise group demonstrated improved attention and reduced depressive symptoms compared to the control group, highlighting that being physically active and participating in routine exercises is essential for maintaining cognitive and mental health in older adults. The study also supported the argument that “group-based cardio-dance exercise may be a feasible, effective, and appealing form of exercise for community-dwelling older African Americans” (p. 501).

Users at both centers had formed robust social networks wherein they would call each other to ensure they were doing well. For many seniors, it was a home away from home as they lived by themselves, and if they were not part of the senior program, they would feel isolated without a place to go. At both community centers, other older users (not associated with any senior programs) expressed similar sentiments about the networks they had formed. Many spoke about the locker rooms becoming a place for

social interactions and plan-making while getting ready after swimming. They regularly got together to have a meal, watch a play, go to the movies, or even go out and play Bingo, aligning with the conclusion drawn by Warde et al. (2005), who found that network ties encouraged people to participate in leisure and recreation activities. Similar findings were reported by Taylor-Harris and Zhan (2011), who found that through participation in various activities, African American seniors formed and maintained social networks, thereby adding meaning to their lives. The positive experiences and environment encouraged repeated visits by participants in activities inside the center, extending their engagement outside the facility. These networks and activities would not have been possible without the presence of the community center and the programs and services that enabled them to meet and interact. These findings align with Glover's (2004) conclusions that community centers can function "as a social space" (p. 80) in which members "reinforced their social webs and articulated their moral voice" (p. 80).

**Neighboring.** Neighboring, as described in the literature, is the act of giving and receiving help from neighbors. For this study, I looked at neighboring as reported behaviors, a view espoused by Wilkinson (2007). The study used three of the four practices Kusenbach (2006) put forth: friendly recognition, parochial helpfulness, and proactive intervention.

Several users at both centers noted friendly recognition (Kusenbach, 2006) in their daily interactions with users. Users at Center 1 discussed how people waved and smiled at each other when passing on the walking track. Users at both centers talked about how they were greeted by the staff when they entered the center. Staff would typically engage in small talk with them. Users also shared their experiences in the fitness

center, where they felt that people were amiable and shared space and machines in the fitness centers. During my observations of the lobby area at both centers, I noticed these behaviors from users and staff. Users would wave at others when they passed them in the lobby while navigating to their scheduled activities. When users completed classes, they mingled briefly, talking and interacting and sometimes even walking together toward their vehicles. Users would coalesce around the reception desk, talking to staff and engaging in friendly banter. The friendly interactions between users could also be equated to low-intensity contacts, as Gehl (2011) outlined, formed at the centers just from being in the same space.

Parochial helpfulness, as defined by Kusenbach (2006), was noted when discussing help and support in theme 4 with users at both community centers. Users discussed how they helped each other in the fitness center by ‘spotting’ when using free weights or sharing exercise techniques. In the line dancing class at Center 2, users discussed how they moved next to others to help them with their dancing steps. One user at Center 1 discussed how others followed her lead during the line dancing class. They watched her moves, which helped them keep up in the class. Users also talked about how they helped others by providing information about different opportunities available in the community. These included something as simple as a sale going on in a grocery store or Christmas assistance programs. In their study investigating the mechanism of support among extended family, friendship, and church networks among African Americans, Taylor et al. (2016) found that African Americans were “involved in support exchanges within kin and non-kin networks” (p. 337). Most survey respondents reported engaging in reciprocal exchanges as both providers and recipients of support with members of their

networks (family, friends, and church). Their study also found that women were more likely than men to engage in reciprocal support (Taylor et al., 2016).

Among seniors, more users at Center 2 discussed proactive intervention (Kusenbach, 2006) than users at Center 1. Seniors discussed how others had helped them through rough times by being there for them and conversing with them. In addition, seniors talked about checking on others who were not doing well by calling them if they did not come to the center on a particular day. These interactions led to the formation of deep friendships and bonds. Many users considered people they had gotten to know at the center as family, aligning with the study conducted by Ross et al. (2020), who found that once people became familiar with others over time, it resulted in trust and exchanging favors. Users discussed other proactive intervention behaviors. Some users mentioned that if there were a death in one of the user's family, they would typically collect money and sometimes send food over. Some proactive intervention behaviors result from the formation of high-intensity contact espoused by (Gehl, 2011). Apart from seniors, some users talked about reaching out to others in the fitness center if they thought someone was using an incorrect exercise technique and were worried they would hurt themselves. Users at both centers also reported how class instructors assisted them with mobility issues and gave them exercises that benefited them. The neighboring behaviors discussed above could be considered instrumental help provided to or received from community members, as put forth by Perkins and Long (2002).

### ***Connecting Sense of Place and Social Capital at the Spatial level***

Local spatial settings bring social capital and sense of place concepts into sharper focus. In order to understand the development of social capital within the environment, it is important to identify the aspects of the environment that are

important in generating social capital, and it is in this context that SOP becomes important as it is explicitly concerned with meanings that people associate with environments. (Jorgensen, 2010, p. 565)

Through interviews, photographs, and observations, I got a first-hand view of users' perceptions of the community centers, the meanings they associated with them, and the behaviors they exhibited at them. Using detailed descriptions from users of the centers, I will connect the SOP dimensions that relate to SC within the community center environment.

According to Graham et al. (2009), social capital can be linked to sense of place through place attachment and dependence. The relationship between SOP and SC can be understood through place attachment, self-esteem, and shared pride (Graham et al., 2009). Twigger-Ross and Uzzell (1996) discussed self-esteem in relation to place identity. At Center 2, place identity was formed due to the history associated with the location of the center and the links the physical structure had to the older community center located on the site. The center was located in a historic park, a former slave plantation. The displays in the center's lobby highlighted the site's landmark aspects and connected users to the site, establishing a place identity for the users. Most of the users in the community center were African Americans, and the strong history associated with the site created an emotional connection to the center and established meaning with the center building attachment to the center. Users expressed a sense of pride in knowing and understanding the history and the struggles overcome to have a place that made them feel like they belonged, creating a sense of community and social capital for the center's users. The data brought forward a link between place attachment, place identity, and sense of community.

Center 1 was relatively new; users' place identity was formed due to the distinctiveness of the center's physical environment. The newness of the facility, the dynamic form, and the distinct materials used on the outside and inside added to users' sense of pride and esteem and created a strong identity with the center. Many users felt that the center's proximity to their neighborhoods gave them an impetus to come and use the center frequently, gradually creating an attachment to place. The proximity and the distinctive character of the center's physical environment also created a sense of community for users.

Graham et al. (2009) discussed the link between social capital and sense of place through the dimension of place dependence. The centers provided spaces and resources for users allowing them to attain their goals. Physical goals were achieved through structured classes conducted in the center and through the presence of spaces such as the walking track, swimming pool, gymnasium, and fitness center. Goals of well-being were championed through the spaces that allowed users to interact with others. The dependence on place due to "functional attachment" (Graham et al., 2009) increased users' sense of community, leading to the development of social capital.

The spaces and resources helped users "meet others through social interactions" (Graham et al., 2009, p. 4) facilitated by the place, similar to findings by Paranagamage (2014). Users at both centers participated in activities that enabled them to meet others and develop social networks. The developed social networks led to increased support users received from each other and staff. In their study, Weijs-Perree et al. (2017) and Mesch and Manor (1998) found that social networks positively affect attachment to place. In addition, the support the users received resulted in increased attachment to the

centers. The support received and attachment to the centers translated to acts of neighboring reported by community center users. A similar finding was reported by Perkins and Long (2002). They found that place attachment was significantly related to neighboring, among other dimensions of social capital.

Another way that a connection between SOP and SC was established was through place quality related to place satisfaction and sense of community. Users at both centers appreciated the condition of the centers. Users specifically spoke about the cleanliness, natural light, openness, materials, furniture, and other physical elements at each center, which resulted in users expressing satisfaction with place and increasing the sense of community of the users. Pretty et al. (2003) discussed place quality as an aspect of place dependence and found that place quality and SOC strongly predicted place identity. In this study, the identity of the place at both centers was established through the quality of the place and available spaces and resources. In addition, at Center 2, identity with place was also reinforced through the history of the place.

The discussion above reinforces several aspects brought forward in the literature. In most cases, the study found a link between the dimensions of SOP and SC. In a few instances, the study highlighted the directionality of relationships.

1. PA is related to SOC, SN, and neighboring, which Acedo et al. (2017) reported in their literature review, indicating that the attachment dimension of SOP is related to all dimensions of SC.
2. A strong relation was found between SOC, a SC dimension, and all SOP dimensions. This was seen by Bow and Buys (2003) in their study, which concluded that PA, PI, and sense of belonging lead to the development of SOC.

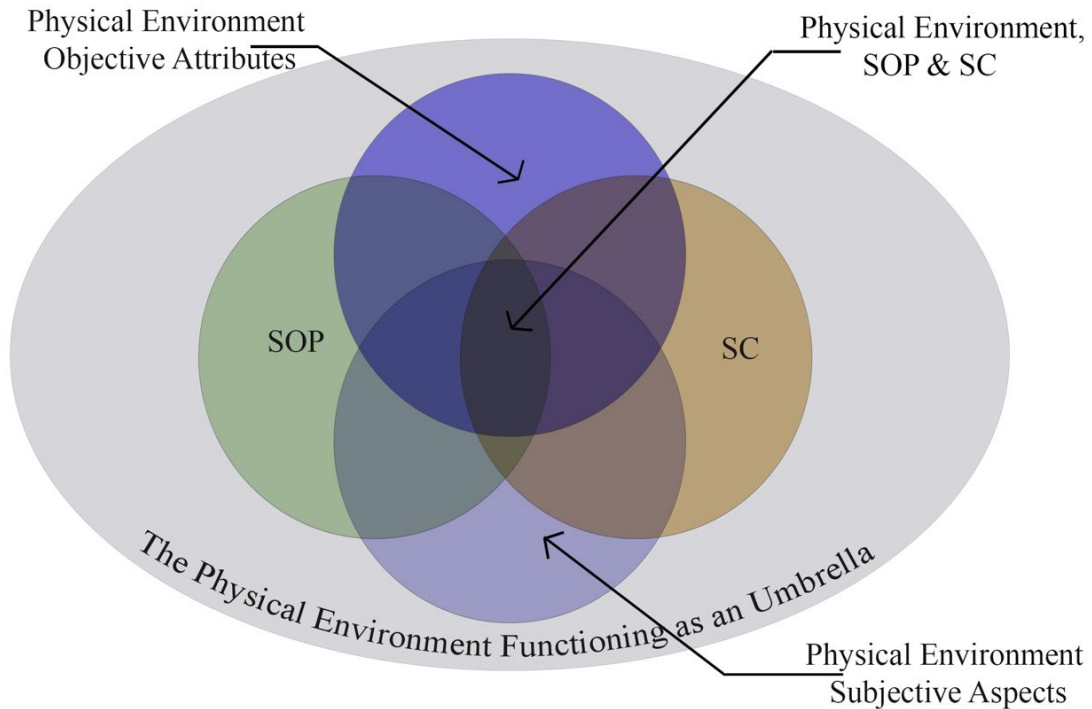
They also found that satisfaction with the place and dependence on the place came about due to fulfilling goals, leading to the development of SOC.

3. SN predicted PA and PA and SN led to acts of neighboring in the centers.
4. PD was related to SN through the spaces and resources available to users.
5. The physical environment influenced PI, PA, PS, and SOC, which was espoused by Lewicka (2011).
6. The meanings users associated with the physical environment added to PA, which Stedman (2003) found in his study.
7. In terms of the physical environment of the centers, this study found that while in some instances the physical environment of the centers were backdrops for developing SOP and SC, in most instances, the physical environment was an active force in developing SOP and SC and shaped users' behaviors. The physical environment was an active force in developing SOP and SC through the objective attributes brought forward in theme 1 and the subjective aspects expressed by users in themes 2 and 3. In addition, when reviewing the acts of neighboring users discussed how they helped and received help from others. Since they had met and gotten to know people at the centers, the center formed the umbrella under which these acts unfolded.
8. The study highlighted the importance of the physical attributes of the environment, social factors, and meanings associated with place in shaping SOP and SC. The findings also highlighted that a place's physical attributes, social factors, and meaning are intertwined, as espoused by (Stedman, 2003).

Based on the discussion above, a model was developed to highlight the importance of the physical environment in developing SOP and SC. The findings demonstrated two aspects of the physical environment of the centers: (1) the physical environment acted as a backdrop, an umbrella to the development of SOP and SC, and (2) The objective attributes and subjective aspects of the physical environment contributed to the generation of SOP and SC. Figure 76 represents the model. The encapsulating outer oval represents the overall place and is the superset wherein the physical environment is an umbrella for developing SOP and SC. Focusing on the center of the oval, there are two overlapping circles, one above the other. These represent the two aspects of the physical environment: the objective attributes and the subjective aspects. The two overlapping portions of the circle represent the interweaving of the physical environment's objective attributes and subjective aspects. The interviews highlighted the importance of the objective attributes of the physical environment, as well as the feelings and emotions these users expressed, and how they were both essential in their daily routines. The two horizontal circles overlapping each other represent SOP and SC since the study found that SOC was related to all dimensions of SOP and PA was related to dimensions of SC. The portion of overlap of all four circles represents the area where the objective attributes and subjective aspects of the physical environment have the most substantial impact on SOP and SC.

**Figure 76**

*New Theoretical Model Highlighting the Relationship between Place, SOP, and SC*



### **Theoretical Implications**

In a field dominated by quantitative studies, the current study, completed using the qualitative approach, adds to the field of research on place, SOP, and SC. Jorgensen (2010) stated, “Qualitative approaches can be employed to obtain a richer description of the human-environment relationships” (p. 565). Through interviews with 34 participants and the facility managers of two community centers in a large metropolis, this study uncovered the relationship between the dimensions of SOP and SC and the influence the place exerts on the two constructs.

Several studies have investigated PI, PA, PD, PS, SOC, SN, and neighboring in isolation. Other studies have examined the relationships between some of the dimensions

of SOC and SC. Dale et al. (2008) examined the link between SC and PI, and Pretty et al. (2003) used SOC as a dimension of SOP in their study and found a strong correlation between SOC and PA. Few studies have examined the relationship between SOP and SC as a whole. In this context, the current study adds to the ongoing research in SOP and SC.

Literature on PA has suggested that place attachment happens over time and due to repeated interactions. Since Center 2 was an older center, and users had been coming to the center for quite a few years, attachment to the center aligns with the literature. Center 1 was a much newer center, and some users had been coming to the center for less than six months, but they expressed attachment to the center; hence, the aspect of place attachment developing over time was not supported by the findings of the study. Attachment to Center 1 could be attributed to the unique design and the feeling of safety and security.

Studies attempting to understand the influence of the physical environment on the dimensions of SOP and SC have primarily focused on the natural environment. In addition, other studies have concentrated on the city or neighborhood scale. There is a paucity of studies involving the physical environment and SOP and SC of third places. Some studies on third places have involved coffee shops and libraries. Studies on community centers have been lacking and focused more on the programming offered by the centers or social relationships in community centers. This research contributes to the body of knowledge linking the constructs of sense of place and social capital and understanding the importance of the physical environment. It also brings forward the importance of a third place, community centers, to people of different ages, races, and socio-economic statuses.

Developing a place-SOP-SC diagram shows places' crucial role in people's lives and can form a framework for future research on the sense of place and social capital.

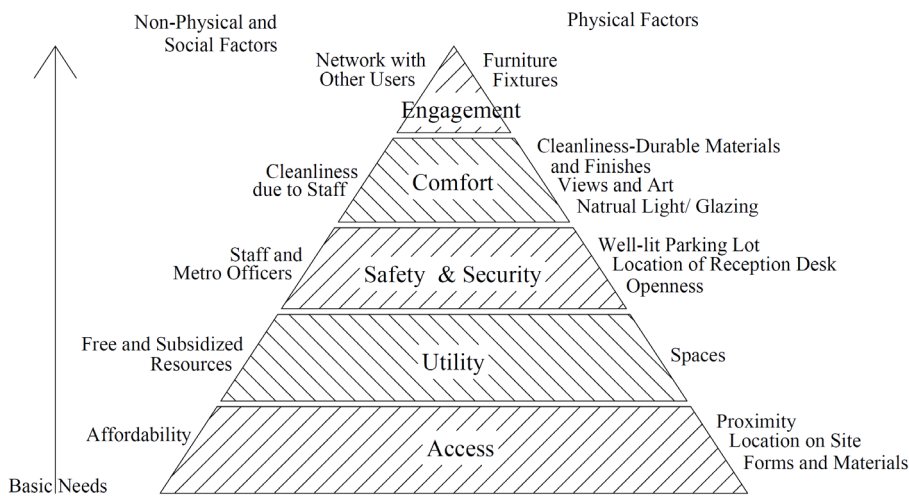
Designers and practitioners can use results from this study to plan effective third places.

**Practical Implications**

Data from the interviews, photographs, and observations brought to the forefront several critical, practical considerations for effective community center designs. In this section, I discuss the essential physical considerations using the Pyramid of Needs in Public Space model developed by Skorupka (Vos, 2017) as discussed in Waxman (2022). I also used the place attachment model developed by Waxman (2006) in her study of coffee shops and cafes. In this study, I modified the discussion to apply to community centers. The Pyramid of Needs in Public Space model has the following attributes: access, utility, safety and security, comfort, and engagement, with access at the bottom of the pyramid, suggesting the most basic need and engagement at the pyramid's pinnacle. A modified diagram pertaining to community centers is presented below.

**Figure 77**

*Pyramid of Needs Diagram Adapted from Waxman (2022)*



### *Access*

Access can be discussed in terms of physical, visual, and symbolic aspects (Waxman, 2022). At the most basic level, community centers should be easily accessible to all. They should be located conveniently within neighborhoods, encouraging users to visit the centers often and make it part of their routine. In addition, the building should be visually accessible and reflect the community. Visual accessibility and appeal could be achieved through the placement of the building on site, the form of the structure, façade materials, and glazing. A visually appealing structure supports users' and community members' belief that they matter and are respected. Community centers should be affordable and combine free and subsidized amenities and resources that symbolize accessibility.

### *Utility*

Waxman (2022) discussed utility in terms of a place being “useful and worthwhile” (p. 117). In the context of community centers, the attribute of utility can be discussed in the spaces and resources available to users.

**Spaces.** Adequate spaces must be provided in all community centers. Some of the fundamental spaces required are the indoor walking track, gymnasium, fitness centers, and dance studio. An outdoor walking track would give users a wider latitude when choosing an environment for physical activity. During my interviews with the community center managers, I was informed that not all community centers had swimming pools. Both of the community centers in this study had a swimming pool, which was very popular. Hence, the provision of a swimming pool should be seriously considered. In

addition, a game room would add to amenities for youth. The game room at Center 2 was important for families and children. A game room was not available at Center 1, which many users commented on. To compensate for the lack of a game room, the community center placed a ping-pong table and checkers mat in the lobby at Center 1. The provision of multi-purpose rooms in community centers is essential. They are used for classes and benefit the surrounding community as they can be rented out for private functions.

**Resources.** Most available spaces in the community centers should be free for users to exercise and maintain their physical health. In addition, fees should be subsidized for classes and specific resources that require instructors and additional staff. There should be programs dedicated to children, youth, and seniors. The fitness center was available for a nominal fee at both community centers, along with certain instructor-led classes held in the dance studio and the swimming pool. The senior program at Center 2 was free and provided breakfast and lunch. Both centers had a free after-school program, while Center 1 had tot-time and a homeschool program during the day that was also free.

### ***Safety and Security***

According to Waxman (2022), safety is a vital consideration for users of public spaces. Users will not visit spaces if they feel threatened. A few considerations for creating a safe and secure feeling for users are the presence of staff and security officers. The idea of locked doors and access to the center only through the front entrance could also significantly contribute to users, especially older adults, feeling secure in such facilities. In terms of design, a well-lit parking lot near the building is vital for users. In addition, strategically placing the reception desk where the staff has a direct view of the parking lot and everyone who enters the center can enhance the feeling of security.

Creating an open feeling where users have lines of sight to different areas and know what is happening throughout the building can add an additional layer of safety.

### ***Comfort***

Comfort at the community center would involve the “characteristics of the environment” (p. 118) that make users feel welcome and encourage them to stay in the place (Waxman, 2022). The following physical characteristics can add to the feeling of comfort.

**Cleanliness.** Cleanliness was a crucial aspect for users at both centers. While cleanliness can be attributed to the maintenance staff, Waxman (2006) opines that designers can “influence cleanliness through the finish materials that are specified for floors, walls, and furniture” (p. 43). Using durable materials such as cinder blocks for interior partition walls painted a neutral color like white makes the walls look fresh and clean. Using durable flooring such as polished concrete or vinyl floor tiles can also add to the notion of cleanliness and a well-maintained place.

**Natural Light and Glazing.** Users at both centers appreciated the extensive glazing on the building facades, which enabled natural light to stream into the centers. Natural light can make the interior environment bright and airy, encouraging users to work out and linger in the spaces.

**Connections between the outside and inside.** During the interviews, a multitude of users commented on the connection that the physical building afforded them. Extensive glazing on the facades will connect users to the outdoors with views of the surrounding natural elements. Facade glazing will also enable people from outside to view the spaces and encourage them to come into the centers. Using glass walls to

separate spaces in the interiors can provide a visual connection between spaces and urge users to check out available resources.

**Appealing Environment.** The appeal of the interior environment can be brought about by colors, finishes, and biophilia (incorporating nature into the environment). Using natural wood tones interspersed with neutral colors can create a connection to nature and give the space a homey feel. In addition, splashes of color dotted throughout would help liven up the place. Potted plants placed in shared spaces can bring nature into the center. Installing artwork by local artists would help animate centers and create a connection with the community. In both Center 1 and Center 2, there was artwork created by local artists and art created by the children in the after-school program, which was commented on by most users. Providing practical amenities for patrons, such as cubbies, lockers, and water bottle filling stations, can add to the environment's appeal.

### ***Engagement***

In her model, Aga Skorupka (Peeters, 2017) considered engagement at the peak of the pyramid, intending it to be one of the most critical aspects of public spaces. Engagement could be active or passive, with active engagement involving mingling and talking to users and passive involving sitting and enjoying the ambiance of the space (Waxman, 2022). At the community centers, shared spaces such as the lobby and programmable spaces can encourage user engagement. The furniture and fixtures in these areas aid in engagement.

**Furniture and Fixtures.** Various seating options in shared spaces can help people mingle and linger. Seating options could include couches, bar stool-height chairs with tables, and regular tables and chairs. Seating options should be adjustable and

movable so that the centers can mix things up to add interest ever so often. The gymnasium should have bleachers where users can rest, and parents can watch their children as they participate in sporting activities. The presence of the piano in the shared space in Center 1 added to engagement within the center. A few users would play the piano when they visited the center. One of the attention-drawing aspects at both centers was the inspirational quotes in the lobby. At Center 1, there was a blackboard wall where the staff would write user-suggested quotes. Many users commented that they enjoyed reading these quotes. Creating provisions for users to interact with staff can enhance engagement in the center.

### **Limitations**

The empirical results of this study should be considered in light of the limitations discussed below. First, this is a brief cross-sectional study conducted from the fall of one year to the spring of the following year. The two community centers were studied at different times. In the first community center, I conducted interviews and observations between November and January, and in the second center, I conducted interviews and observations between early February and June. While at one center, I could understand how the community came together for important celebrations such as Thanksgiving and Christmas; I could not get a complete picture of that at the second center, which could have added to the social capital aspects of the study. Also, I did not get a complete picture of how users used the centers in the summer months and if there was a change in usage patterns when there were summer programs for school-aged children during the long summer days.

Metro Parks and Recreation has two types of community centers: smaller neighborhood community centers and larger regional centers. The sites selected for this study were two regional centers. These centers had more amenities and resources; it is unclear how these centers could be compared to centers in other cities and if the results of this study could help smaller communities. Hence, caution should be exercised when transferring findings to different situations.

While the sites selected for the multi-case study approach were similar in available spaces and square footage, Center 1 was a newer center completed in 2018. Center 2 was much older, having been completed in 2006, and a portion of the building was even older. Center 2 was steeped in history, which came forward in the interviews and observations. This brought to the forefront the dimensions of place identity, place attachment, and dependence, but the comparison between the two centers could not be done on an equal footing due to the historic nature of Center 2 and the newness of Center 1. Hence, practitioners and researchers hoping to apply the results of this study to other settings should note that facilities' age and unique aspects require consideration.

The study was conducted at the end of the COVID-19 pandemic when users were just about starting to return to the community centers. There was a period during the pandemic when the centers were closed, and once re-opened, there were restrictions on user interaction. The senior program at Center 2 had also been inactive for a while. Most users interviewed were ecstatic that they could come into the centers and use the space without restrictions; hence, there could be a positive bias in users' responses. During the study, I tried to recruit younger adults, but as seen in Tables 6 and 7, the overwhelming number of participants were older adults. Youth, young families, and professionals are

not well represented in the sample for this study. In addition, at Center 2, I could interview just 14 patrons who were predominantly female users over 55; hence, the responses are skewed towards the opinions, needs, and requirements of female users over 55 years.

The interview process in this research study had two parts: the sit-down interviews and the photographs of the structure, spaces, and aspects patrons used and liked about the center. Since the study was conducted in the colder months, most users did not venture outside the center. They mostly took pictures of the interior spaces, resulting in limited discussions about the structure's exterior and surrounding environment. In addition, several seniors were uncomfortable using the tablet and could not take usable pictures. Many took videos that were challenging to include in the data analysis and final report.

Despite the limitations mentioned above, the findings from this study bring to the forefront aspects of the physical environment of community centers that aid in generating a sense of place and social capital for patrons.

### **Future Research**

The results of this qualitative research highlighted the importance of the physical environment of community centers in fostering feelings of connectedness to place and the development of social capital for its users. It also emphasized how the dimensions of SOP and SC were related and which dimensions were most critical in strengthening the relationship between SOP and SC.

The current study highlighted the relationship between the dimensions of SOP and SC, and the directionality of the relationship was evident between some of the

dimensions of SOP and SC, but for most of the dimensions, directionality was not established due to the qualitative nature of the research. The study found that SN predicted PA, and PA and SN led to neighboring behaviors. In addition, PS and PD enabled the development of SOC. These relationships could be further investigated by adding a quantitative approach and conducting a mixed methods study using the dimensions of SOP and SC. A mixed methods study could help clarify the established directionality uncovered in this study and use detailed descriptions to gain a deeper understanding of the constructs. Future studies can build upon this research by using the proposed framework to reexamine the relationship between SOP and SC in third places. In addition to a mixed methods approach, a literal replication of this study would add to its transferability.

This study was a snapshot in time, having completed data collection in eight months due to resource and time constraints. Future research could follow two directions: (1) a cross-sectional study, which would involve collecting data over the entire year to understand how community centers are utilized during different times of the year, and (2) a longitudinal study following users over time, which would help understand how the dimensions of SOP and SC evolve and develop over extended periods and if the influence of the physical environment continues to play a crucial role. A longitudinal study could reveal fascinating models that may evolve and enable researchers to add to the body of knowledge in the environment and behavior field.

The current study had a more homogenous demographic sample from two community centers with regard to race, sex, and age. Future research could include a more diverse sample, enabling studies to get varied perceptions that could further add to

the body of knowledge. In addition, while this study was conducted in a major city, it would be interesting to see if the framework developed and the study results could be applied to community centers in smaller towns and rural areas.

## **Conclusion**

Buildings are a physical and spatial transformation of the environment. Every aspect of this transformation (physical and spatial) has social value, and there is the possibility of further enhancing the social value by “shaping and decoration” (p. 15) of elements of the physical form and adding more complexity to the spatial form providing “spatial patterning of activities and relationships” (Hillier, 1996, p. 15). This study demonstrated the critical role of the built environment of community centers in enhancing users’ experiences and adding social value. The centers created an ambiance, provided amenities, aided in communication, and functioned as a symbol (Gutman, 1976), thereby aiding in developing sense of place and social capital for users. Through semi-structured interviews and data analysis, I developed four themes: (1) Reactions to the Physical Environment, (2) Incentives to Using the Community Center, (3) Users' Feelings about the Community Center, (4) Weaving Connections and Social Ties. These themes brought the essence of user's perceptions, emotions, and behaviors forward and laid out the crucial role of community centers.

Community centers are essential third places that play a vital role in the neighborhoods in which they are located. Users can fulfill physical goals, receive emotional support, increase their social networks, and improve their general well-being. In understanding the vital role of community centers, through the findings, this study further reinforces the idea that the built environment, resources, and communal

atmosphere create a vibrant setup that supports users, which creates a sense of place and builds social capital among patrons.

I think it has the potential to be a real watering hole for the community. You know, where you get nourishment and sustenance in. You meet and greet and all that. I think it has a potential for all of that, and it's doing it quietly now. But I think it will expand, and as more programs are brought in, it will expand until it's a busy beehive. (Liv-C1)

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## **APPENDIX A: INTERVIEW PROTOCOL**

You have been invited to participate in a study to understand how the elements of the physical environment of the community center relate to sense of place and social capital for its users.

Please read the consent information below and let me know if you agree to participate at the bottom.

### **Agreement to Participate in the Qualitative Study on Place attributes and sense of place and social capital**

**MU IRB Project No. 2093749**

#### **What is the purpose of the survey?**

The primary goal of this survey is to allow the author to understand how people relate to the community center's physical environment and develop social relations in those environments.

#### **What does this study involve?**

In this study, users of Center 1 and Center 2 will be asked to participate in a sit-down interview and take photographs of the spaces and features of the community center. You are eligible to participate if you are above 18 years of age and you visit the community center at least once a week. Your participation is voluntary. The results of this study will remain confidential and will only be shared with the Committee of Shahnaz Aly, PhD Candidate. The data from the study will be published, but all information received from the interview will be summarized. Quotes used in the final study will be anonymized. The questions are designed to understand your personal experiences and the meanings that you associate with the environment. You may skip a question if you choose to do so. Your participation in this interview is voluntary, and if at any time you would like to stop the interview, please feel free to let me know, and we will terminate the interview. The interview will be recorded for me to be able to capture all the necessary information that will be valuable to understanding the question being studied. The recording will be transcribed, and all identifiable information will be redacted. The recording will be deleted upon the completion of the study.

#### **What are the risks?**

This survey poses no more risk than normal day-to-day activities.

#### **Where is this study being done?**

This research survey is being conducted by Shahnaz Aly, PhD Candidate, Architectural

Studies at the University of Missouri.

**Who is conducting this study?**

This interview instrument was developed by Shahnaz Aly, PhD Candidate. The University of Missouri Doctoral Committee is acting as an affiliate member of the study, under the supervision of Dr. Laura Cole.

**Who do I contact if I have more questions?**

If you have any questions about this survey, you may contact Shahnaz Aly, PhD Candidate, at [sjabq2@umsystem.edu](mailto:sjabq2@umsystem.edu). If you have questions about your rights as a research participant, you may contact the University of Missouri Institutional Review Board at (573) 882-318 or email [irb@missouri.edu](mailto:irb@missouri.edu).

Thank you for your participation!

**Have you read the consent information above, and do you agree to participate?**

**Yes**

**No**

The interview consists of two parts  
(1) the first part will be the photograph collection, and  
(2) a sit-down interview.

## Photograph Collection

Please walk around the community center and take at least 10-12 photographs of areas (interior and/ or exterior) in the community center. The images could be “literal or symbolic”(Rojak & Cole, 2016, p. 40)

The prompts below will be used to probe participants on the pictures that were taken.

Distinctive spaces/ objects	Spaces you are satisfied within the community center
spaces/ objects that attract you to the place	spaces you socialize in
frequently used areas	spaces that you use to sit around and relax in
Spaces/ activities that help you attain your goals	Spaces and areas you can relate to
Spaces that you feel you belong in	Spaces and or activities that you are connected to

## Sit-down Interview with Users

Time of Interview:			
Date:			
Interviewee:			
Gender: M/F			
Age:			
Questions	Notes	The dimension that the question would potentially answer	Research Question Addressed
How frequently do you visit the CC?		Place Dependence Place Satisfaction	RQ2
What available resources do you use at the CC?		Place Dependence	RQ2
Can you please tell me about your routine while at the community center?		Background / Place Dependence	RQ1
Describe your interactions with the staff at the CC.		SOC, SN, N	RQ3
Describe your interactions with the other users of the CC.		SOC, SN, N	RQ3
What do you like about the CC?		Place Dependence Place Identity Social Networks	RQ2 RQ3

1. In terms of services provided?		
2. Friendliness of staff		
3. The architectural elements of the building		
4. Spaces for interaction.		
What does the CC mean to you?	Place Identity	RQ2
Do you frequent other CCs? If you frequent other CCs how would you compare this center with the others?	Place Satisfaction Place Dependence	RQ2
Please rank the pictures from the most important to the least important	This will aid the direction of the interview, and we will discuss the least important to the most important	
Why did you take the picture? Why did you rank the picture this way? Describe what the picture means to you.	Question pertaining to photographs The information gleaned from the questions related to the photos will potentially be able to touch on all dimensions under consideration.	

### **Interview Questions for Facility Manager**

Tell me about a typical day at the community center.

On average, how many people visit the community center every day?

Which days do you notice that the community center is more crowded?

Are there particular times of the day that you see an increase in the facility's usage?

What types of programs are offered at the facility?

What spaces are available for people to use for leisure apart from the activity spaces?

Do you notice people mingling before or after activities? If so, when and where?

While the programs are very important to the community center, in your opinion does the design of the facility aid in bringing more people into the facility?

Do people talk about the architecture and features of the community center?

Is this building an anchor in the community?

## APPENDIX B: OBSERVATION FORM

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Date of Observation:

Time of observation:

Duration of Observation:

Location of Observation:

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Descriptive Notes (Facts)

Reflective Notes (summary and conclusions)

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Number of people using the space?

Interaction among users in the space?

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Description of the physical environment being observed.

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Sketch of the area being observed

## APPENDIX C: EXAMPLE OF COMPLETED OBSERVATION FORM

Date of Observation: November 16, 2022  
 Time of observation: 10:10am  
 Duration of Observation: about 1:10hr  
 Location of Observation: Lobby of Center 1.  
 Descriptive Notes (Facts)      Reflective Notes (summary, and conclusions)

Everyone going to reception desk just to check in.  
 2 people are talking to staff at desk.

The center does not seem too busy currently but there are activities going on. Everyone who walked in chatted with staff or a few.

Number of people using the space?

Interaction among users in the space?

10-12 people are in the ~~dance~~ dance studio. Instructor is leading the class. There is one male, most females.

There are 4 people seated next to the stairs. They are eating but are not talking to each other. People in the dance studio are talking to each other as they are exercising.

Description of the physical environment being observed.

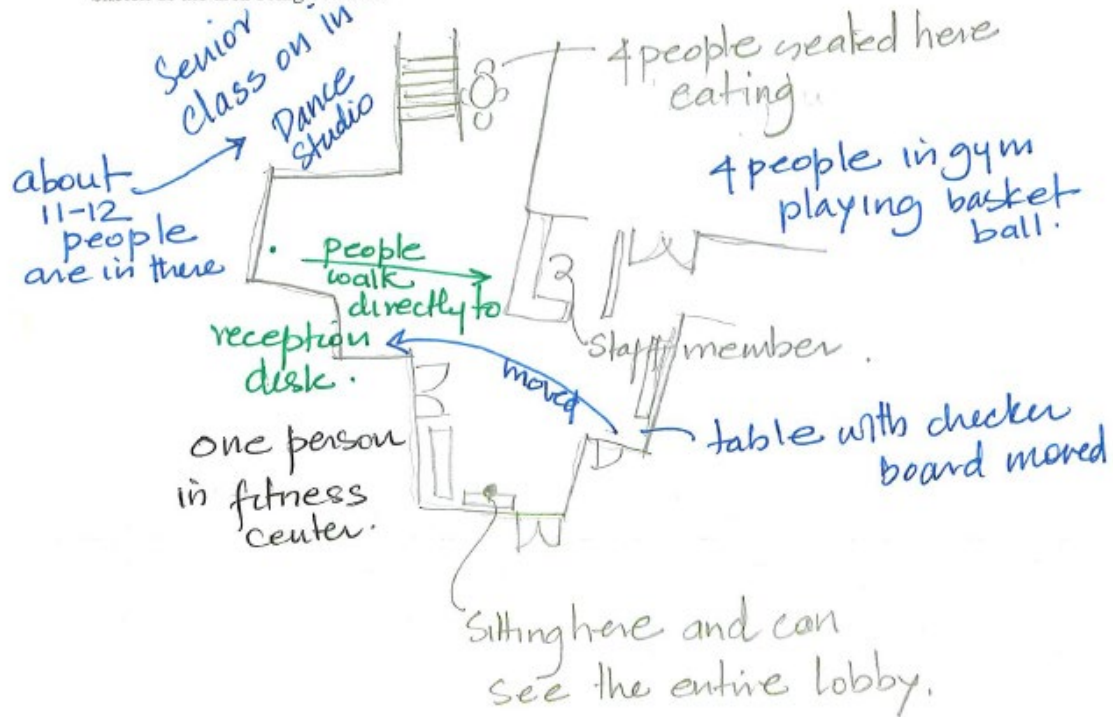
Clean.  
 They have got out the decorations for Christmas.  
 2 People are walking on the walking track.  
 the cleaning staff is around.

Staff member has joined the people playing basket ball in gym.  
 They have moved the ping-pong table from the lobby.

There is a quote on the blackboard wall.

— "Setting Goals is the first step in turning the invisible into the visible" Tony Robbins.

Sketch of the area being observed



They have moved the table which has the checker board.

lot of light is streaming into the space. It is sunny outside, so the light coming in seems even brighter.

11:05 - the homeschool kids are just coming in and going to gym.

Parents are checking in with staff.

It is getting a little noisy.

Music has just started in the gym.

## VITA

Shahnaz Aly was born in Mumbai, India. She completed a Government Diploma in Architecture from L.S. Raheja School of Architecture, Mumbai. She completed a Master's in Architecture with a Certificate in Historic Preservation from Texas A&M University, College Station, in 1999. Upon her return from the US, Shahnaz practiced architecture in Hyderabad, India, with RSP India, working on commercial projects. Shahnaz worked with HOK in Toronto, Canada, on mixed-use and commercial facilities in Dubai. She is a licensed architect in Ontario, Canada, and a LEED-accredited professional. In 2009, Shahnaz joined Western Kentucky University as an assistant professor. Shahnaz is a tenured professor in the Architectural Science program at WKU. She is also the Coordinator of the Architectural Science program and the Assistant Director of the School of Engineering and Applied Sciences at WKU. In 2016, she received the Ogden College Pre-Tenure Faculty Award for Teaching; in 2022, she received the Ogden College Faculty Award for Excellence in Teaching.