The Impact of Neighbourhood Built Environment to the Sense of Community in Malaysia: A Qualitative Study

Mohd Azli[1&2*], Jamalunlaili Abdullah[1], Yusfida Ayu Abdullah[1], Sarah Abdulkareem Salih[2], Mohd Firrdhaus Mohd Sahabuddin[3], Sharyzee Mohmad Shukri[3], Idris Taib[4]

[1]Faculty of Architecture, Planning and Survey, University Technology MARA, Malaysia,
[2]Department of Architecture, Faculty of Design and Architecture, Universiti Putra Malaysia,
[3]Department of Architecture, Faculty of Built Environment, University of Malaya, Malaysia,
[4]Faculty of Architecture and Built Environment, Infrastructure University Kuala Lumpur, Malaysia
*Corresponding Author Email: mohdazli@upm.edu.my

Abstract
Communities are vital for providing people with a sense of identity and shared purpose. Given the significant influence of neighbourhood environments on people's sense of community, this relationship needs more study. Although research suggests that the physical environment can affect neighbourhood community, the specific mechanisms and variables involved are not well understood. This study explored how the neighbourhood environment shapes the sense of community among residents in Malaysia after the COVID-19 pandemic. From June to October 2024, twelve professionals, including urban planners, architects, housing developers, landscape architects, local authorities, and policymakers, were interviewed. Thematic analysis identified five key themes: defining sense of community, the role of physical design, community engagement, challenges and successes, and future visions for community-oriented planning. The findings suggest that physical design elements like community spaces, street connectivity, and amenities are critical in shaping residents' sense of community. Participants highlighted the importance of integrating resident feedback in the planning and design process to ensure the environment meets community needs. The study also identified challenges in promoting community, including budget issues, competing priorities, and resistance to change. Overall, this study offers insights into how the neighbourhood environment can be leveraged to build a stronger sense of community, which is particularly important after the pandemic, where social connection and community resilience are vital for public health and well-being.

Background

A strong sense of community is a primary goal in urban planning and design because it leads to stronger social connections, improved mental well-being, and increased civic engagement. (Francis et al., 2012). Despite its importance, the precise ways in which the built environment affects community identity are not well-understood, especially in developing nations such as Malaysia (Cohen, 2013).

The built neighbourhood environment is acknowledged as a significant determinant in shaping residents' sense of community. Numerous studies have investigated the correlation between various attributes of the built environment, including the presence of public spaces, street connectivity, and accessibility of amenities, and their subsequent influence on residents' sense of community (Ellery & Ellery, 2019). he neighbourhood's-built environment substantially influences residents' sense of community. This is especially salient in Malaysia, where rapid urbanization and development have significantly altered the physical characteristics of numerous communities (Mohammad & Abbas, 2012). Understanding how the built environment and sense of community are related can help urban planners, policymakers, and community members build better neighbourhoods.

However, much of the existing literature originates from Western contexts, highlighting the need to examine this relationship within diverse cultural and geographical settings like Malaysia. As a rapidly urbanizing nation in Southeast Asia, Malaysia offers a distinctive setting to investigate the interplay between the built environment and sense of community.

The built environment can significantly shape residents' perceptions of their neighbourhood. A well-maintained environment, characterized by appealing architecture and ample green spaces, can foster community pride. Similarly, access to public parks, communal areas, and other amenities can cultivate a sense of community by providing settings for social interaction and gathering. Further investigation into this relationship is warranted, as the physical surroundings of communities exert a substantial influence on residents' sense of community. Research indicates that while the physical built environment can influence a neighbourhood's sense of community, the mechanisms and specific physical characteristics that have the most consistent effects require further elucidation. While various physical characteristics have been associated with a sense of community, it remains unclear which of these are most relevant and warrant consideration in contemporary research.

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been associated with a sense of community, it remains unclear which of these are most relevant and warrant consideration in contemporary research.

This study gains significance in the post-COVID-19 context, where community resilience and social connectedness have become increasingly vital. The qualitative methodology facilitates a comprehensive investigation of the intricacies involved in cultivating a sense of community through the built environment. This is crucial for guiding forthcoming urban planning and design strategies in Malaysia.

Literature Review

The idea of a "sense of community" has received considerable attention in environmental psychology, urban planning, and community development. It encompasses the feelings of belonging, connection, and commitment that individuals feel toward their local community (Du et al., 2023; Li et al., 2021; Molana & Adams, 2019; Sun et al., 2019; Wang et al., 2023). Prior research has underscored the built environment's role in influencing this sense of community. For example, Kim & Kaplan (2004) research indicates that new urbanist communities, known for their emphasis on walkability (Farahani et al., 2022; Huertas-Delgado et al., 2022; S. Li et al., 2019; McCormack et al., 2019), mixed-use development (Farahani & Lozanovska, 2014; Li et al., 2021; Saadallah, 2020), and public spaces (Farahani & Lozanovska, 2014; Li et al., 2021; McCormack et al., 2019), generally cultivate a stronger sense of community among residents when compared to conventional suburban developments.

The presence and quality of public spaces, including parks, plazas, and community centers, are particularly salient in fostering a sense of community (Farahani & Lozanovska, 2014; Hooper et al., 2020; McCormack et al., 2019; Saadallah, 2020). These venues facilitate social interaction, recreation, and community involvement, thereby strengthening residents' sense of belonging and connection (Hooper et al., 2020; Li et al., 2021; McCormack et al., 2019; Saadallah, 2020). Likewise, residential area design, encompassing housing density, layout, and accessibility, influences the sense of community (Hooper et al., 2020; Li et al., 2021; McCormack et al., 2019; Saadallah, 2020). Pedestrian-friendly neighborhoods with well-connected street networks and mixed housing types tend to foster increased social interaction and a stronger sense of community.

Additionally, the integration of natural components, like vegetation, water installations, and communal gardens, correlates with an enhanced sense of community, as they offer avenues for recreation, repose, and collective endeavours (Hooper et al., 2020; X. Li et al., 2021; Willer, 2022). Nevertheless, the prevailing scholarship on the correlation between the built environment and sense of community predominantly originates from Western perspectives, with scarce investigation into the Malaysian setting

New Urbanism and Neighbourhood

New Urbanism, an architectural and urban planning movement that emerged in the United States around the start of the 21st century, sought to counter the problems associated with urban sprawl (Hooper et al., 2020, 2020; Kim & Kaplan, 2004).. The central tenets of New Urbanism prioritize the creation of mixed-use, pedestrian-oriented, and transit-supportive neighbourhoods. These design principles are adaptable to various scales, ranging from individual buildings to entire regions, communities, districts, and corridors. The Charter of the

New Urbanism delineates ten fundamental design elements of this approach, including aspects like transit-oriented development, walkable urbanism, and sustainable design (Davies & Townshend, 2015; Talen, 2002).

New Urbanism, when applied to neighbourhood design, advocates for the blending of residential, commercial, and institutional functions within an interconnected network of streets and communal spaces (Alias et al., 2011; Hooper et al., 2020; Kim & Kaplan, 2004; Park, 2017).. It is posited that this holistic strategy cultivates an enhanced sense of community among inhabitants by stimulating social interaction, physical activity, and engagement in civic life. Prior investigations into New Urbanist communities indicate that individuals residing in these areas frequently express a more pronounced sense of community, a stronger affinity for their neighbourhood, and an elevated sense of identity in contrast to those inhabiting conventional suburban settings (Kim & Kaplan, 2004).

Chavis & Wandersman, (1990); Wood et al., (2012) delved into the correlation between neighbourhood design and the sense of community by contrasting a New Urbanist community with a conventional suburban development. Their research indicates that the physical attributes of the built environment, including natural elements, open spaces, and pedestrian-oriented infrastructure, are instrumental in shaping the sense of community.

Sense of Community
Society is composed of people, places, and communities, with the latter significantly shaping individuals' social lives. Through interaction, participation, collective action, shared interests, and conflict resolution, community members establish societal norms and cultural practices (Du et al., 2023; Molana & Adams, 2019; Saadallah, 2020; D. Wang et al., 2019). Communities, comprising homes, places of worship, and commercial establishments, reflect the values and expressions of their inhabitants, the surrounding environment, and the broader social context, thereby influencing both the environment and communal life. Community psychologists view communities as dynamic systems characterized by structural and functional elements (Affandi et al., 2019; Jamaludin et al., 2014; Kim & Kaplan, 2004; X. Li et al., 2021; Nallathiga et al., 2021). The McMillan & Chavis (1986) sense of community theory, as illustrated in Figure 1, posits four key dimensions of a community: shared emotional connections, group membership, mutual influence, and shared values. These elements are considered essential for fostering a thriving community. Strong community bonds enhance residents' sense of security and belonging, encourage participation in local events, and promote mutual support (Farahani & Lozanovska, 2014; Hooper et al., 2020; Molana & Adams, 2019; Saadallah, 2020). Moreover, resilient communities have been shown to alleviate stress, improve well-being, enhance life satisfaction, and increase self-esteem among residents (Farahani & Lozanovska, 2014; Kaczynski & Sharratt, 2010; X. Li et al., 2021; Saadallah, 2020).
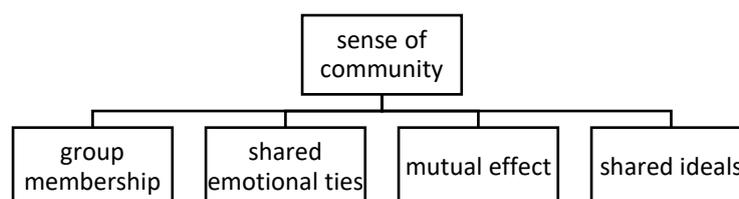

Figure 1. Four characteristics among community members (McMillan & Chavis, 1986).

McMillan & Chavis (1986) define a sense of community (SOC) as the conviction that each member is integral to the group's success and that their needs will be addressed through mutual commitment. Additionally, Sarason (1974) describes it as the attitudes held by community members towards one another and their locality. Darlaston-Jones (2007) characterizes it as the sense of community and group identification cultivated through significant interactions with others. A thriving neighborhood community is associated with several positive impacts at the local level, including reduced fear of crime, increased community participation, and greater collective resilience (Cope et al., 2020; Li et al., 2021; Obst & White, 2004).

In contemporary society, individuals often prioritize personal aspirations and career goals, potentially overshadowing the development of communal bonds. However, cultivating a sense of community offers significant advantages to both individuals and the collective. Research indicates that communities with a strong sense of community often exhibit lower crime rates and enhanced security (Ishak et al., 2018; Li et al., 2021; Mendelson et al., 2010; A Ross et al., n.d.; Saadallah, 2020; Wood et al., 2010). Furthermore, a robust sense of community can positively impact mental and physical well-being. Individuals with strong community ties are more inclined to participate in voting, recycling, and charitable activities, as these connections foster a sense of belonging (Hedayati Marzbali et al., 2021; X. Li et al., 2021; Mohamed Aris et al., 2020; Rahman et al., 2017). Strong social networks promote empathy, confidence, and fulfilment (Davidson & Cotter, 1986). Farahani & Lozanovska, (2014); Molana & Adams, (2019) research suggests that the fundamental requirements of a complex are met, with safety and security ensured by the family's continued presence, alongside high-quality public and green spaces. Individuals can strengthen ties and foster a strong sense of community by actively participating in local events, volunteering for neighbourhood organizations, and engaging with their neighbours (Li et al., 2021; Saadallah, 2020). By contributing to the well-being of themselves and those around them, individuals can contribute to creating a comfortable and secure environment (Molana & Adams, 2019; Saadallah, 2020). Given the increasing prevalence of housing developments in developing nations like Malaysia and the recognized benefits of a strong sense of community, this study is essential for fostering communities that are both psychologically and physically healthy.

Neighbourhood Built Environment (NBE) Factor and Variables
This section aims to address the central research question by identifying areas that warrant further investigation in contemporary studies. Subsequently, a comprehensive analysis of the physical variables influencing the Sense of Community will be presented. Prior research by Ashraf, Ayad, Saadallah, et al. (2017); Farahani & Lozanovska (2014); Kim & Kaplan (2004) indicates that various physical elements impact the sense of community. To ascertain the relevant physical components for this study, it is imperative to first discuss diverse theories and physical factors within related theoretical frameworks, followed by an examination of the commonalities among them. This section will categorize and discuss the elements of the neighbourhood-built environment that influence the sense of community.

According to New Urbanist planning concepts, Kim & Kaplan (2004) suggest that the way streets connect and divide a neighbourhood influences people's movements and activities, with a primary goal of enhancing the sense of community. M Southworth (1993) and Kim & Kaplan (2004) an illustrate how residents' feelings of community are influenced by feeling at

home, connecting with others, feeling part of the community, and having access to local exploration, which can foster a stronger sense of community. Kim & Kaplan (2004) have also revealed that the physical features of the built environment encompass both built environment variables and physical qualities. Their research examined the impact of seventeen different physical features on people's sense of belonging in a community. These variables include residential density, lakes and green paths, distance between sidewalks and homes, architectural style, block size, clubhouse/recreational facilities, overall layout, street trees and landscaping, the overall size and arrangement of houses, street width, garage location, on-street parking, lot size, mixture of housing types, overall design quality of houses, and the street's layout.

Ashraf et al. (2017) identified three primary factors: Aesthetics, Streets and services, and Buildings as shown in **Error! Reference source not found.**. The category of aesthetics includes physical elements such as major attractions, aesthetic appeal, the incorporation of artists in building design, harmony, architectural style, and distinctive regional features. Streets and services, the second major factor, encompasses components like mixed-use neighbourhoods, community services, accessibility, public parking, public transportation, walkable streets, activities such as street vending and public squares, parks, services and shops, and recreational facilities. Other considerations, such as length of residence, availability of affordable housing, building lines, window sizes and solid-to-void ratios, building frontage, human scale in high-rise structures, and visually distinct lower floors, are classified under the category of buildings. Arundel & Ronald (2017) utilized five physical factors to assess the influence of urban form on community sustainability. According to their study, local stores are the most significant factor, followed by the length of shoreline in each neighbourhood, automobile prevalence, housing size, and residence in historic buildings.

Ashraf et al. (2017) used three (3) main factors namely Aesthetics, Streets and services, and Buildings as shown in **Error! Reference source not found.**. Major attractions, aesthetic pleasantness, artists' involvement in building detailing, harmony, architectural style, and regional and distinctive features are some of the physical aspects that fall under the category of aesthetics. Streets and services, the second major factor, also has a few specific components, including a mixed-use neighbourhood, community services, accessibility, public parking, public transportation, walkable streets, activities like street vendors and squares, parks, services, and shops, as well as recreation. Other factors include the duration of residence, the availability of affordable housing, the building line, window sizes and solid-to-void ratios, the building frontage, human scale in high-rise buildings, and lower floors that are visually separated from the upper floors fall under the category of buildings. Arundel & Ronald (2017) applied the five (5) physical factors to examine the impact of urban form on community sustainability. Local stores are the most important component, followed by the length of shoreline in each neighbourhood, the prevalence of automobiles, the size of the housing size, and finally, residing in historic structures. A thematic analysis of peer-reviewed literature from 2017 to 2023 indicates that the built environment of a neighbourhood significantly affects residents' sense of community, with key physical features—such as street layout, green spaces, architectural style, and housing diversity—impacting community satisfaction, belonging, and perceived quality of life (Azli et al., 2024).

Upon examination of the physical parameters influencing the Sense of Community across various studies, certain similarities emerge. To elucidate these commonalities among related physical characteristics, Kim & Kaplan's (2004) comprehensive list of major physical factors will be utilized. This selection is based on the fact that Kim & Kaplan's (2004) study encompasses seventeen physical (17) characteristics, representing the most extensive compilation among comparable research efforts.

Methods
In this qualitative study, semi-structured interviews were conducted with 12 professionals from diverse fields such as urban planning, architecture, housing development, landscape architecture, local government, and policymaking in Malaysia. Participants were chosen based on their demonstrated knowledge and practical experience in shaping the built environment and their understanding of community dynamics within the Malaysian context The interviews sought to explore participants' viewpoints and lived experiences concerning the influence of the neighbourhood's-built environment on residents' sense of community. Discussions were cantered on pinpointing specific design attributes and elements that either bolster or impede the cultivation of a robust sense of community, alongside the challenges and constraints encountered in fostering community-focused built environments within the Malaysian context. A purposive sampling strategy was employed to secure a varied spectrum of perspectives and experiences, with the aim of elucidating participants' understandings of the role played by the neighbourhood's-built environment in shaping the sense of community among residents in Malaysia.

The interview data underwent verbatim transcription and was subsequently analyzed via thematic analysis. Key themes were discerned through a cyclical process of coding and categorization. The interviews explored specific design features and elements influencing the development of a robust sense of community, challenges, and limitations in promoting community-oriented built environments, and the impact of cultural and demographic factors on residents' perceptions and engagement with their local environment. A sample size of 12 participants was deemed adequate (Braun & Clarke, 2021), aligning with sample sizes reported in comparable interview-based research on neighbourhood environments (Elsawahli et al., 2017) and approved by The Universiti Teknologi Mara Research Ethics Board.

Study Design
This qualitative investigation was conducted in Setia Alam and Bukit Jelutong, located in Shah Alam, Malaysia. Situated within the Petaling District and a small portion of the adjacent Klang District, Shah Alam serves as the capital and primary metropolis of Selangor, Malaysia. Following Kuala Lumpur's designation as a Federal Territory in 1974, Shah Alam assumed the role of state capital of Selangor in 1978. After Malaysia's independence from Britain in 1957, Shah Alam emerged as the nation's inaugural planned metropolis, characterized by a tropical rainforest climate and accommodating a population of approximately 438,745 residents. Encompassing a total area of 290.3 km2, Shah Alam is geographically positioned within the state of Selangor, spanning the Petaling District and a segment of the Klang District. Bounded by the major towns of Subang Jaya and Petaling Jaya to the east, the district of Klang to the west, the districts of Kuala Selangor and Selayang to the north, and the district of Kuala Langat to the south, Shah Alam has experienced substantial recent growth. Furthermore, owing to the passage of the Klang River through its terrain en route westward to the Strait of Malacca,

Shah Alam holds a prominent position within the Klang Valley, a Malaysian region encompassing Kuala Lumpur and its suburbs, alongside neighbouring cities and towns in the state of Selangor.

Data Analysis

The study adopted a thematic analysis methodology, adhering to Braun and Clarke's six-stage framework: immersing in the data through repeated readings of interview transcripts; creating preliminary codes by systematically coding significant data features; identifying emergent themes reflecting broader patterns; assessing and refining themes; specifying and naming themes to represent their core; and developing the research report, integrating findings and participant quotations. The research team conducted consistent discussions and revisions to maintain the thematic analysis's reliability and validity.

Table **1** presents the questions utilized in the semi-structured interviews with an expert panel from related industries, such as planners, architects, designers, and local authorities, regarding the built environment's impact on the sense of community.

Table 1

The eight primary question in the semi-structured interview

No	Question	References
1	How do you incorporate the concept of 'sense of community' when planning or designing a neighborhood?	(Francis et al., 2012)
2	Can you share any examples where your design or planning initiatives led to a stronger sense of community?	(Talen & Shah, 2007)
3	Which physical attributes do you consider most influential in facilitating a robust sense of community?	(Kim & Kaplan, 2004)
4	How do you accommodate community feedback within your design or planning processes?	(Talen & Shah, 2007)
5	What challenges have you encountered in building neighborhoods that encourage a sense of community?	(Forrest & Kearns, 2001)
6	Can you recall any specific strategies or designs that failed to stimulate a sense of community? Why do you think they failed?	(Freeman, 2001)
7	Can you provide an example of a successful case where community planning/design fostered a sense of community effectively? What factors contributed to its success?	(Chavis & Wandersman, 1990)
8	Looking ahead, how do you envision integrating the idea of 'sense of community' into community planning/designing?	

Results

The responses encompass diverse subjects, including instances of effective designs, physical characteristics affecting community engagement, community perspectives, and obstacles encountered by developers and urban planners.

Table 2
Key insights overviewed from the responses.

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	Incorporating 'Sense of Community' (SOC) in Planning
	Challenges in Building SOC
	Physical Attributes Influencing SOC
	Incorporating Community Feedback
	Successful Examples
	Looking Ahead

Analysis of interview data, as summarized in Table 2, reveals that fostering a sense of community extends beyond the provision of physical infrastructure, encompassing social dimensions such as social media engagement, communal activities, and shared experiences (Akcali & Cahantimur, 2022; Li et al., 2021).. Effective community design integrates public spaces, recreational amenities, and commercial zones.

Several key impediments to cultivating a robust sense of community include the inconsistent integration and upkeep of public spaces, as well as conflicts arising between commercial and residential zones. Specific design paradigms, exemplified by Putrajaya or high-density, non-mixed-use developments, may be unsuccessful in nurturing a sense of community due to limited interaction among residents (Akcali & Cahantimur, 2022; Li et al., 2021; Rugel et al., 2019).. Developers' prioritization of maximizing housing units and profitability can also diminish the availability of space for communal engagement. Furthermore, cultural, and social divisions can impede the successful establishment of a sense of community within particular locales.

Shared amenities such as gardens, playgrounds, and clubhouses can promote interaction, while the accessibility of parks and green spaces is crucial for relaxation (Agboola et al., 2017; Can, 2016; Farahani et al., 2022; Li et al., 2021; Vaandrager & Kennedy, 2016). Commercial zones integrated with residential areas may also foster social interaction by bringing people together.

Community input is often gathered through methods like surveys, public forums, and Social Impact Assessments. Discrepancies can arise between community desires and developers' financial constraints or willingness to invest. It is essential to ensure that designs cater to the varied needs of different population segments and incorporate adaptable spaces suitable for a range of activities.

Developments such as Desa Park City, Setia Alam, and Bukit Jelutong are often cited as successful examples of integrating communal spaces. Approaches incorporating mixed-use areas and substantial community amenities have been shown to foster a heightened sense of community (Akcali & Cahantimur, 2022; He et al., 2021; Hooper et al., 2020; Li et al., 2021; Rugel et al., 2019).

Looking ahead, it's important that new urban development's consider the idea of community from the very beginning, including both physical and less obvious aspects. Developers should

think about including a sense of community as a key feature in their housing plans. It can really make a difference in how happy people are with their homes and how much their property is worth. As cities change, development projects need to do more than just make money. They should also actively improve people's lives by building social connections and strong community relationships

Figure 2. Theme from the interview data

Theme from the Interview Data
The analysis of the interview data brought to the surface several significant themes, clarifying the influence of the neighbourhood-built environment on the sense of community within the Malaysian context. These themes are detailed as follows:

Defining and Operationalizing Sense of Community
Sense of community encompasses the sentiments of affiliation, interconnectedness, and reciprocal aid among inhabitants within a specified locale. Nevertheless, the definition and operationalization of SOC are subject to variability contingent upon differing cultures, environments, and individual experiences.

According to numerous experts, a sense of community transcends mere physical infrastructure, encompassing social dimensions such as social networks fostered through shared activities, technological platforms, and collective experiences. Sense of community extends beyond geographical closeness, focusing on the quality of interactions within shared spaces (Agboola et al., 2017; Akcali & Cahantimur, 2022; Sun et al., 2019).
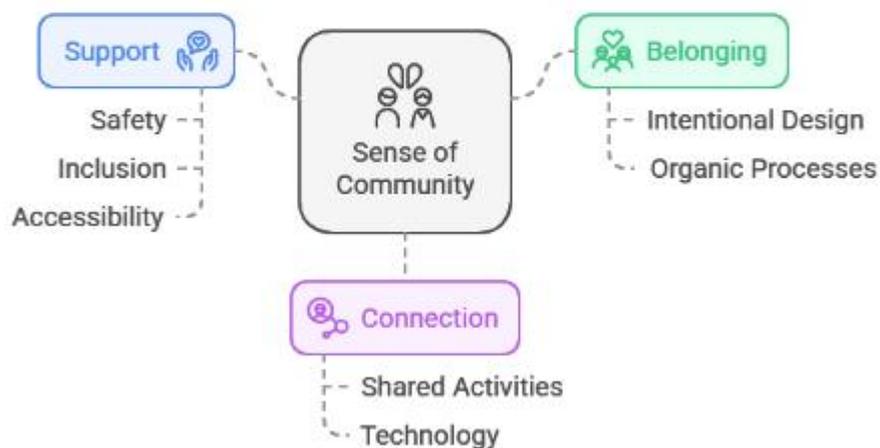
Figure 3. Understanding and Operationalizing Sense of Community.

According to several experts, cultivating a sense of community necessitates a combination of deliberate design strategies and naturally evolving social dynamics. This involves creating an environment where individuals, irrespective of their backgrounds, experience feelings of safety, inclusion, and belonging to a broader collective (Agboola et al., 2017; Ashraf et al., 2021; Du et al., 2023; Hooper et al., 2020).

Operationalizing SOC involves translating abstract concepts into concrete, measurable aspects within urban planning. This includes designing spaces that encourage interaction, promote inclusion, and ensure accessibility, while also accounting for the social dynamics that facilitate engagement, as illustrated in *Figure 3*.

The Role of Physical Design in Fostering Community
The configuration of a neighbourhood's physical environment significantly influences the extent to which residents interact. Research indicates that shared spaces like parks, clubhouses, playgrounds, and gardens foster opportunities for convergence, socialization, and the development of interpersonal connections among inhabitants (He et al., 2021; Kujawski, 2019; Li et al., 2021; Allison Ross et al., 2020).

Mixed-use developments that integrate residential, commercial, and recreational resources can improve public space utilization, encouraging spontaneous social interactions (Akcali & Cahantimur, 2022; Ashraf et al., 2021; He et al., 2021; Hooper et al., 2020; Huertas-Delgado et al., 2022; Li et al., 2021; Sun et al., 2019). The presence of commercial centres or cafes within residential areas has the potential to encourage social interaction and strengthen community bonds.

Conversely, urban planning that prioritizes elements like gated communities, an overemphasis on private property, or high-density living arrangements may diminish social

interaction, potentially resulting in feelings of isolation or deepening social divides (Khemri et al., 2020; Lusk et al., 2019; Mariadas et al., 2019; Allison Ross & Searle, 2019; Saelens et al., 2003).

Experts also highlight the importance of integrating aesthetic and functional elements in urban design. Well-kept public spaces and green areas significantly improve the community's collective well-being (Agboola et al., 2017; Akcali & Cahantimur, 2022; Hooper et al., 2020; Sun et al., 2019). Deliberate spatial design, focusing on comfort, accessibility, and safety, can strengthen the sense of community by motivating residents to engage more in outdoor activities, interact, and establish relationships, as shown in *Figure 4*.
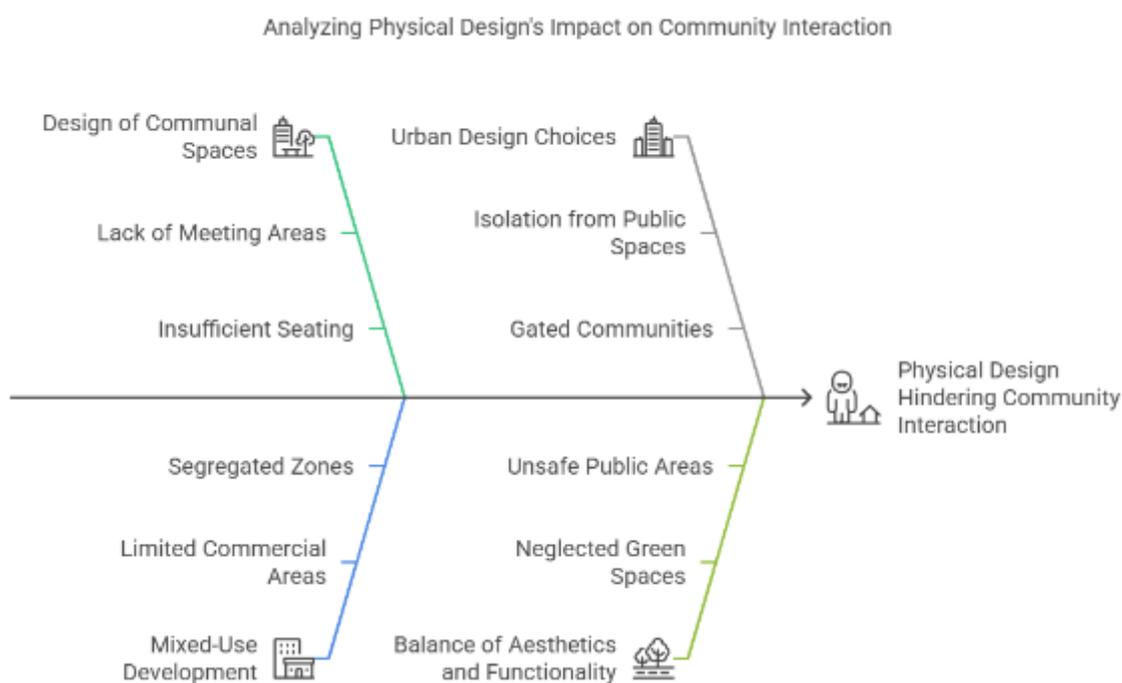

Figure 4. Analysing Physical Design Impact on Community Interaction

Community Engagement and Feedback
Engaging the community is crucial to ensure that the design and planning of spaces effectively address the needs of its residents (Chuweni et al., 2022; Lim et al., 2021; Mokhtar & Md. Dali, 2017; Allison Ross & Searle, 2019; Samsudin et al., 2021). Experts emphasized that incorporating residents in the planning phase through methods such as surveys, public hearings, and Social Impact Assessments (SIA) ensures that developments align with community expectations and priorities

Iterative feedback mechanisms via digital interfaces, such as social media platforms or dedicated applications, facilitate continuous engagement with residents, enabling planners and developers to iteratively refine designs based on community insights.

However, it was observed that challenges arose in certain instances where feedback was gathered but not consistently acted upon, leading to a disparity between community preferences and the provisions of developers or authorities. Furthermore, the feedback mechanisms may not always adequately represent the perspectives of marginalized groups

or those less inclined to participate in formal surveys, potentially resulting in an imbalanced representation in community planning.

Effective community engagement leads to the creation of spaces that residents are more inclined to utilize, as they experience a sense of involvement in the development of their surroundings. This, in turn, can cultivate a heightened sense of ownership and responsibility, thereby fostering more vibrant and supportive communities, as illustrated in *Figure 5*.

Figure 5. Building Vibrant Communities

Challenges and Success Stories
Experts identified several challenges in fostering a strong sense of community. These include: commercial pressures that prioritize profit maximization through increased density (Bakhtyar et al., 2013; Osman et al., 2017), which can limit the availability of public and communal spaces; cultural and social divides, where varying expectations among socio-economic or ethnic groups complicate the design of inclusive spaces; maintenance and sustainability issues, leading to the deterioration of community spaces due to inadequate funding or attention; and gated developments, which, while enhancing security, may create physical and social barriers that isolate residents from the broader neighbourhood. Projects like Desa Park City, Setia Alam, and Bukit Jelutong, which feature mixed-use designs and diverse communal

spaces such as parks, lakes, and multi-purpose halls, were highlighted as success stories for creating opportunities for interaction, connection, and a genuine sense of community as shown in *Figure 6*. A crucial factor in these examples was the deliberate integration of commercial, residential, and recreational spaces, alongside the incorporation of public feedback into the design process (Pineo et al., 2022; Pitchay Muthu Chelliah et al., 2016), fostering more cohesive and socially integrated communities as shown in *Figure 7*.

Figure 6. Urban Development Challenges and Successes

Figure 7. Urban Development Challenges and Successes Stories

Future Visions for Community-Oriented Planning
Future should focus on making community living better by using ideas about being sustainable, inclusive, and able to change. Experts think that city areas should be made to

help people feel good, connect with each other, and feel like they belong, instead of just trying to make the most space or money.

When planning for communities, it's important to think about being sustainable. This means adding things like green spaces, ways to get around that don't hurt the environment, buildings that save energy, and making sure development helps society and keeps up with how people are changing.

Also, more and more people realize that technology is important for communities in the future. Digital tools can make it easier for people who live in an area to talk to the people in charge, help plan social events, get feedback, and keep everyone involved. These tools can help connect people in real life and online, which makes people feel closer even when they live close together in cities.

Future planning should prioritize inclusive designs that address the diverse needs of all residents, including the elderly, disabled, and marginalized populations. A forward-thinking approach would emphasize accessible spaces, public services, and public health initiatives to foster healthier and more cohesive urban environments. Furthermore, experts underscored the necessity of revising planning guidelines to enhance their flexibility and responsiveness to evolving social needs, ensuring that the development process values social connections alongside economic objectives. By concentrating on these principles, forthcoming urban developments can more effectively integrate community-focused strategies and cultivate supportive, inclusive, and socially connected environments as shown in *Figure 8*.
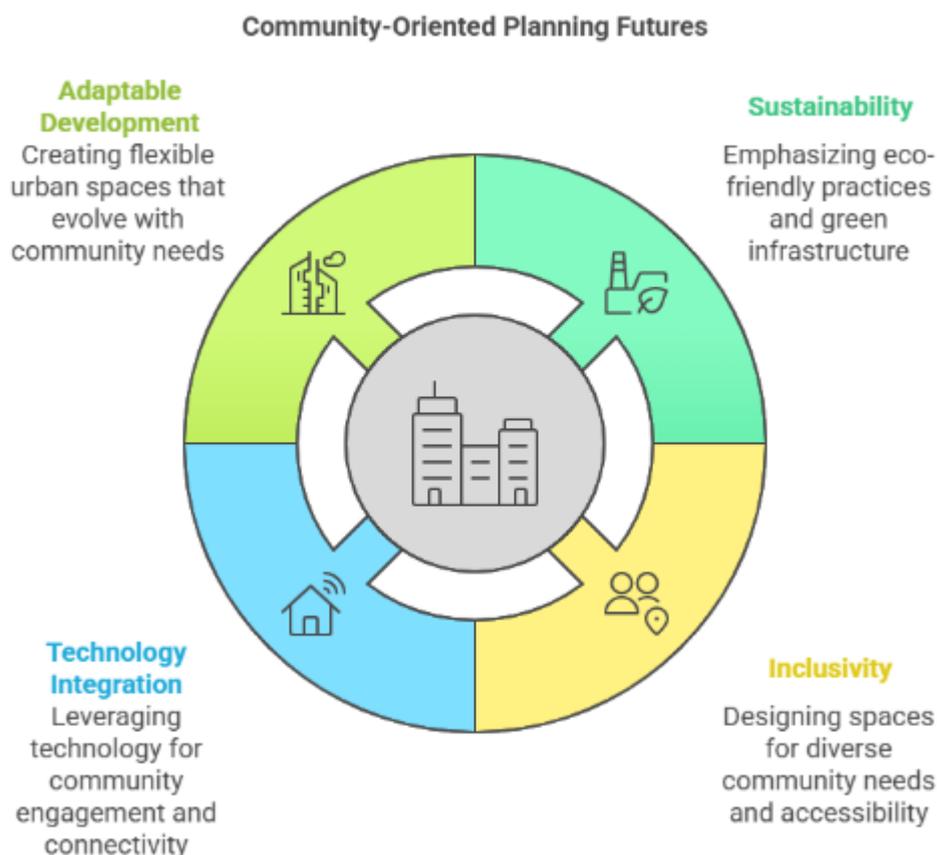

Figure 8. Community-Oriented Planning Futures

Summary of the Theme

The main ideas that came out of our study are: 1) How to define and measure a sense of community by looking at both physical spaces and social connections, and how to create ways to build it. 2) How important things like parks, mixed-use areas, and shared facilities are in helping people connect. 3) How vital it is to get the community involved and listen to what they have to say so that urban development really meets their needs and makes them feel like they belong. 4) Knowing the problems we face now, but also pointing out times when community-focused design has really made people feel more connected. 5) Thinking about new urban projects that focus on being sustainable, inclusive, flexible, and using technology to make the community feel even stronger. What we learned from talking to people show that to really build a strong sense of community, you need to think about both the physical things around you and the social relationships and experiences of the people living there.

Discussion and Conclusion

This qualitative study indicates that the built environment of a neighbourhood is instrumental in shaping the sense of community among residents in Malaysia. According to the participants, physical design elements, including community spaces, street connectivity, and access to amenities, are critical in cultivating a robust sense of community. Furthermore, the study underscores the necessity of adopting a collaborative, community-focused approach to planning and design. This approach should actively incorporate resident feedback and engagement to ensure that the built environment is aligned with the community's needs and preferences.

The challenges and successes highlighted by the participants offer crucial insights for professionals and policymakers aiming to foster a more pronounced sense of community through urban design. This is especially relevant in the post-pandemic era, where social connectedness and community resilience are of utmost importance for ensuring public health and overall well-being (Akcali & Cahantimur, 2022; Ashraf et al., 2021; He et al., 2021; Li et al., 2021). Participants in the study articulated their prospective views regarding community-oriented planning and design, emphasizing inclusive design principles, collaborative governance frameworks, and the incorporation of technology to bolster community involvement and social solidarity. These perspectives are in accordance with contemporary advancements in urban planning and design, which increasingly prioritize the collaborative creation of public spaces and the cultivation of a sense of place in conjunction with and for the community (Akcali & Cahantimur, 2022; Hooper et al., 2020; Li et al., 2021; Wood et al., 2010).

Conclusion

This qualitative study offers significant insights into how the built environment of neighbourhoods in Malaysia influences the sense of community among its residents. The results underscore the importance of physical design elements, community involvement, and collaborative governance in fostering a robust sense of community. These factors are especially pertinent in the post-pandemic era, where social connections and community resilience are vital for public health and overall well-being (Mccormack et al., 2023; Wenander, 2024). The study's conclusions add to the expanding collection of research on the correlation between the built environment and community well-being, presenting actionable

implications for urban planners, architects, and policymakers who aim to develop more habitable and inclusive neighbourhoods both in Malaysia and internationally

Study Limitations and Strengths

Several limitations of this study warrant consideration. First, the qualitative approach employed may restrict the generalizability of findings to all Malaysian neighbourhoods. Moreover, the sample size, while suitable for qualitative research, might not fully represent the range of perspectives within the broader population.

However, the study's strength lies in its comprehensive investigation of the subject matter, integrating insights from diverse experts and stakeholders in urban planning and community development. The results offer a detailed understanding of the intricate relationship between the built environment and the sense of community, yielding valuable insights for policymakers, urban planners, and community leaders. Consequently, the study's outcomes can contribute to the creation of urban planning strategies that prioritize resident well-being and engagement.

Future Research Directions

This research suggests multiple directions for future inquiry. Broadening the research scope to encompass a larger and more varied sample of residents and communities would aid in confirming and reinforcing the current findings. Furthermore, longitudinal studies that monitor the development of the sense of community in relation to alterations in the built environment over time would yield significant insights. Additionally, the incorporation of quantitative metrics for community indicators, such as survey data on resident attitudes and actions, could enhance the qualitative methodology.

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