

# Examining the Role of Community Living Arrangements in Reducing Loneliness among Young Adults in Malaysia

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## Abstract

In Malaysia, community living arrangements such as co-living and co-housing have emerged as a housing typology in response to rising housing costs, rental trends, and evolving lifestyle preferences among young adults. These arrangements seek to promote social interaction and foster a sense of community and belonging. However, despite their popularity, there is insufficient evidence on the effectiveness of these architectural interventions in addressing loneliness and mental health issues among young adults in Malaysia. Current research on community living models is limited to general concepts and lack empirically backed design strategies tailored to the specific needs and cultural dynamics of young adults. To address this gap, this research aims to develop architectural strategies for community living to foster social cohesion and reduce loneliness among Malaysian young adults, considering their unique cultural and social needs. The research results include a comprehensive framework for community living arrangements and highlighting their effectiveness in improving social connectivity and reducing loneliness. This research will offer data-driven recommendations for policymakers, practical insights for urban planners, and advance architectural design theories.

**Keywords:** Community Living, Loneliness, Young Adults, Co-Housing, Social Connectivity

## Introduction

In Malaysia, the government has initiated several community programs to provide housing support for young adults, fostering social cohesion and improving their quality of life. These programs include affordable housing schemes and initiatives promoting co-living and co-housing models designed to foster a sense of community and belonging. One example is the Penang Island City Council's initiative to repopulate George Town by converting the first floor

of shophouses into co-working and co-living spaces (Opalyn Mok, 2019). The aim is to make the inner city more liveable and promote social interaction among the residents.

Community living arrangements, such as co-living and co-housing, play a crucial role in these initiatives. According to Falkenstjerne (2020), co-housing is an intentional community of private homes clustered around shared space. Residents share communal spaces in such settings for cooking, dining, meetings and recreational activities. Conversely, co-living generally refers to individual units with shared amenities, typically targeting the urban demographic and involving more sharing of spaces, such as living rooms, to allow frequent social interactions (Kuznetsova & Nosov, 2023). While both models differ in their emphasis on housing arrangements versus lifestyle, they involve collective living that encourages a sense of community, shared responsibilities and mutual support among residents.

While these community living models are created to enhance social interaction and foster a sense of belonging, they also have the potential to address a significant societal concern: loneliness among young adults (Scanlon et al., 2021). Loneliness has emerged as a considerable issue globally, and Malaysia is no exception. This phenomenon is generally defined as a distressing subjective experience resulting from a mismatch between an individual's desired social relations and actual social relationships (Akhter-Khan et al., 2023). Architect Grace Kim elucidates this by stating, "Loneliness is not about being alone, but it is a matter of how socially connected you are to the world around you" (Kim, 2017). According to the State of Social Connections report by Meta-Gallup (2023), 13% of Malaysian adults (approximately 2.99 million people) feel not socially connected to others, and 14% of people in Malaysia (approximately 3.3 million people) report experiencing loneliness most of the time.

Although specific studies on loneliness among young adults in Malaysia are limited, global research indicates similar trends. A study by Sharma et al. (2023) found that young adults, Generation Y and Generation Z, face loneliness due to their heavy reliance on digital communication over face-to-face interaction, as they are the first cohort to grow up in the digital age. Their increasing use of social media has led to superficial connections rather than meaningful relationships, exacerbating feelings of emotional loneliness. Moreover, Fardghassemi & Joffe (2022) highlight that young adults are vulnerable to loneliness due to transitional life stages, such as entering higher education or the workforce, which often involves moving away from existing social networks. The consequences of loneliness among this demographic are far-reaching, encompassing adverse effects on mental health, physical health and overall quality of life (Park et al., 2020).

Additionally, the Deloitte Global 2023 Gen Z and Millennial Survey by Deloitte (2023) highlights that many young Malaysian adults prefer hybrid work models, combining remote and on-site work. This preference for flexibility significantly affects their lifestyles and housing preferences, with many favouring community living models that offer co-working spaces and co-living. These findings underscore the importance of community living arrangements, which offer structured environments that promote regular social interaction and a supportive network, potentially alleviating feelings of loneliness among young people.

In Malaysia, while traditional family setups still prevail in many rural areas, urban centres have witnessed a rise in community living arrangements, driven by rising housing costs that cause the trend of renting, changing lifestyle preferences among young people and the desire for social connections. Since 2016, various co-living and co-housing projects have emerged in Malaysia's urban areas. For instance, projects like "Komune Living" and "Kloe Hotel" have introduced innovative living spaces that cater to young professionals. "Komune Living", in Bangsar South, Kuala Lumpur, provides co-working and co-living spaces that attract digital nomads and young entrepreneurs, emphasizing community and networking opportunities.

Proponents of community living argue that such arrangements offer built-in social support networks, opportunities for shared activities, and a sense of belonging that can counteract feelings of loneliness and isolation (Scanlon et al., 2021). International research also supports the idea that community living settings can help alleviate adults' loneliness. For instance, Graham et al. (2014) discovered that older adults residing in community living environments, particularly the "village" model with high levels of social engagement, experienced less loneliness and had better overall well-being.

However, while the potential benefits of community living arrangements are evident, it is crucial to recognize that not all can effectively address loneliness among young adults, especially in Malaysia, where the context is different. Several factors, including community design, the composition of residents, and the availability of supportive resources, can influence the extent to which community living arrangements alleviate feelings of loneliness (Hoppenbrouwer, 2019). In Malaysia, the effectiveness depends on various factors, including cultural norms, socioeconomic disparities and urban development policies that may influence the affordability and accessibility of communal living options (Jumadi et al., 2020). Therefore, further research tailored to the Malaysian context is needed to understand the specific dynamics through which community living arrangements impact loneliness among young adults and to identify strategies for optimizing the design and implementation.

In summary, community living arrangements present a promising solution to address loneliness challenges by providing social support, fostering a sense of belonging and facilitating shared activities and interactions. However, a holistic design for community housing is still not adequately documented. Successful implementation in Malaysia would require careful consideration of the social, psychological and environmental factors that shape the experience of loneliness within communal living environments.

### **Problem Statement**

#### *Motivational Problem*

According to Fraga (2019), the constant stimulation from city living can take a big toll on the urbanites' mental health. Research has shown that urbanites are more likely to experience anxiety and mood disorders compared to rural residents (Fraga, 2019). Besides that, Poon (2023) further underscores that the way communities are built and environments are planned will significantly impact residents' well-being. Poor urban planning, which neglects communal spaces and green areas, can lead to increased stress, social isolation and loneliness. However, as much as the urban environment has been implicated in the loneliness epidemic, the built environment can also be part of the solution.

In light of this, architectural interventions like community living arrangements represent a promising solution to tackle the issue of loneliness among young adults (Ionescu, 2024). Loneliness is not solely a consequence of individual experiences but is also influenced by the collective environment individuals are associated with (Stephan Joppich, 2023). Architecture and built environment functions more than just a building. Everything from the layout of space to material finishes can profoundly influence social dynamics, emotional well-being and community integration (Harada et al., 2021). Hence, the design of architecture and built environment act as a catalyst in fostering social connections, facilitating shared activities, and cultivating a sense of belonging, ultimately alleviating loneliness.

Nevertheless, conventional high-rise residential design prioritizes spatial efficiency and convenience over community spaces and shared amenities (Kim, 2023). These isolated living spaces, with limited communal areas, can hinder the social interaction of residents and inadvertently contribute to feelings of isolation and detachment among residents. Thus, the motivation stems from designing the communal living environment to promote serendipitous encounters and facilitate spontaneous gatherings and collaborative activities, ultimately fostering a sense of belonging and interconnectedness among young adults. However, considering cultural, social, and economic factors, it is unclear how effective such interventions would be within the Malaysian context.

Although there are existing examples of co-living and co-housing high-rise projects in Malaysia, such as “Komune Living” and “Coliv Damai Residence”, their residential floor layouts mainly mirror traditional designs, with the primary distinction being the addition of a communal lounge, community kitchen and co-working space at facilities floor. The communal settings are isolated to specific facility floors rather than being spread throughout the building. This design raises doubts about their effectiveness in promoting social interaction and reducing loneliness among residents. This is because having communal spaces separate from individual living spaces limits opportunities for casual encounters, and shared amenities may not be utilized regularly.

Moreover, existing research primarily focuses on Western contexts, exacerbating uncertainty about the effectiveness of community living. While most Western concepts can still be applied, it is essential to account for distinct sociocultural dynamics and urban development challenges that shape the Malaysian experience. In addition, the existing studies have primarily concentrated on the older population in Malaysia and other countries rather than the young adults. According to Bakhtiari (2023), the younger generation (generation Z) experiences more loneliness than the older generations (millennials). The scarcity of Malaysian precedents and explorations focusing on younger demographics exacerbates this issue, leaving insufficient data for a more comprehensive strategy.

In short, while community living arrangements hold promise as a solution to address loneliness among young adults in Malaysia, a significant gap exists in research on how architectural design can effectively achieve this. Localized empirical evidence and exploration into specific dynamics of loneliness within the Malaysian context are lacking. Bridging this gap requires tailored research that explores cultural, socioeconomic, and environmental factors

and identifies effective architectural strategies. By focusing on targeted architectural strategies, we can create living environments that foster social interactions and community. These strategies include integrating communal spaces throughout residential buildings, designing flexible layouts for various social activities and ensuring easy accessibility. This approach aims to reduce loneliness and improve social connections among young adults in Malaysia.

### **Research Problem**

The research problem at hand revolves around the effectiveness of community living arrangements in mitigating loneliness among young adults in Malaysia and identifying the factors influencing their success or failure as interventions for addressing this prevalent issue. Despite the potential promise of communal living in reducing loneliness, there exist significant gaps and challenges in understanding their impact and practical implementation within the Malaysian context.

One critical aspect that contribute to the research problem is the lack of specific guidelines or framework governing community living arrangements in Malaysia. Although guidelines exist for conventional housing options such as serviced apartment and landed houses, it fails to adequately address the emerging trend towards modern housing typologies like co-living and co-housing (Sim et al., 2021). While a framework for sustainable cohousing in Malaysia has been proposed, which includes elements such as resident involvement, sustainable neighbourhood designs, community centres and self-private dwellings (Jumadi et al., 2020), there are no detailed strategies on how to effectively implement these elements in co-housing or co-living. Additionally, while there may be general principles or international best practices, the applicability and effectiveness of these guidelines within the unique socio-cultural context of Malaysia remain largely unexplored (Sim et al., 2021).

Consequently, the limited research and guidelines on how design elements and spatial configurations in community living environments can alleviate loneliness limits architects in creating socially supportive living space. While numerous studies have explored the psychological and social impacts of urban design and interior layout (Monfries & Churchill, 2020; Tawil et al., 2021), there remains a gap in understanding specific features that foster social interaction and a sense of belonging among young adults. For instance, research by Janik (2021) highlights broad concepts such as walkability and green spaces are linked with the well-being of residents, yet lacks in-depth analysis on their implementation for reducing loneliness. Overall, it underscores the pressing need for comprehensive guidelines on community living arrangements. Addressing this gap is essential for informing evidence-based design practices and interventions for creating socially supportive living environment. By examining the role of specific design features such as open space, communal areas, shared amenities, and flexible housing layouts, architects can identify effective strategies for enhancing social cohesion and reducing loneliness within diverse community settings.

Studies focusing on young adults highlight the unique challenges and needs of this demographic. Research by Fardghassemi & Joffe (2022) found that young adults are particularly vulnerable to social isolation and feelings of loneliness due to factors such as relocation for education or employment, changing social networks and the pressure of



establishing independence. Therefore, understanding the specific needs and preferences of young adults is crucial when designing community living spaces that can effectively mitigate loneliness and foster a sense of belonging.

According to a review conducted by Christy & Tan (2022), it is essential to take into account individual differences in personality and social preferences when exploring the impact of communal living on loneliness. The consideration is particularly crucial for young adults, who often have diverse and evolving social needs and preferences. Despite this, existing research on users' perceptions towards community living arrangements yields mixed findings. Some research emphasizes the positive effects of communal living on social connectivity and overall happiness (Rozewski, 2019), others highlight challenges faced by young adults such as conflicts with roommates, differences in lifestyle preferences, and privacy issues, thereby casting uncertainty on their potential to function as a sustainable living arrangement (Byun & Shon, 2022). These conflicting perspectives of young adults underscore the need for further research in Malaysia, particularly on their individual preferences and perceptions of community living arrangements to address loneliness through collective living. Understanding these preferences helps architects design communal living spaces that effectively promote social connectedness and alleviate feelings of isolation among young adults.

On top of that, cultural norms concerning privacy issues also play an essential role in shaping young adults' perceptions and social preferences towards community living arrangements. Young adults, who are in critical stage of forming their identity or independence, may have distinct needs for privacy and personal space (Bietz et al., 2019). While social interaction is undoubtedly valued among young adults, it is equally crucial to recognize and respect the need for privacy and personal space, especially in Malaysia, where the culture diversifies. Bashari et al. (2021) highlight that the significance of privacy in a traditional Islamic housing unit is necessary, delineating four main types: privacy between neighbours' dwellings, privacy between males and females, privacy between family members inside the house and individual privacy. For young adults, balancing the desire for social interaction with the need for personal space can be particularly challenging in communal living settings (Jumadi et al., 2020). This demographic may require innovative design solutions that allow for both communal activities and private retreats. Despite this emphasis, existing studies often overlook privacy concerns as cultural aspects of community living arrangement. This gap underscores the necessity of acknowledging and respecting varying cultural perspectives on privacy in shared living setups.

In summary, the research problem revolves around the absence of comprehensive guidelines for community living arrangements in Malaysia, particularly in the context of housing typologies like co-living and co-housing. Existing literature highlights a lack of specific strategies to address loneliness within collective living, compounded by conflicting perspectives on the efficacy of communal living arrangements. Moreover, there is a dearth of research exploring young adults' preferences, the impact of design elements on social interaction and spatial configurations that could alleviate loneliness. This gap underscores the importance of conducting empirical studies to assess effectiveness of community living arrangements as interventions for loneliness reduction. Addressing this gap is crucial for informing evidence-based design practices and interventions tailored to the Malaysian context. It is also essential for fostering inclusive and accessible collective living environments,

that not only support the well-being of individual residents but also contribute to the broader societal goals of promoting social cohesion, diversity, and resilience.

The research aims to explore two key questions. Firstly, it seeks to understand how different design elements and spatial configurations within community living arrangements impact the sense of belonging and social connectivity among young adults in Malaysia. Secondly, it aims to investigate the individual preferences and perceptions of these young adults regarding community living arrangements, and how these preferences influence the effectiveness of collective living as a solution for addressing loneliness.

To address these questions, the research objectives are: first, to study the existing community living arrangements in Malaysia, including co-living and co-housing, and analyze how various design elements facilitate or hinder social cohesion and collective activities within these settings. The second objective is to investigate the individual preferences and perceptions of young adults regarding communal living, focusing on their expectations for privacy, social interaction, and lifestyle compatibility.

**Literature Review**

This section reviews the existing body of knowledge related to sustainable housing models, specifically cohousing and co-living arrangements. The literature highlights the growing importance of sustainable living practices that foster social cohesion, address housing challenges, and enhance the well-being of residents in urban environments. Through the exploration of various case studies and research, the following review will critically examine key concepts, design strategies, and the impact of community living on social, economic, and environmental sustainability. The review will also identify gaps in the current research and provide insights into how these housing models can be adapted to the Malaysian context to promote inclusive, resilient, and sustainable communities.

Jumadi et al. (2020)

*An Introspective view of Sustainable Cohousing with the Malaysian Housing Concept*

<b>Background Study</b>	Sustainable development strategies are becoming demanded in assisting in wealth distribution and improving living conditions for mankind. A sustained community is one of the sustainable development agendas that encourage community involvement and participation in contributing to sustainability.
<b>Problem Statement</b>	The document addresses the issue of sustainable development in urban areas, highlighting the rapid population growth and urbanization which lead to various problems including inadequate housing, social isolation, and declining social bonds. The need for sustainable community living is emphasized as a solution to improve social well-being and create effective neighbourhoods.
<b>GAP</b>	There is a lack of a sustainable housing model that addresses the social, economic, and environmental challenges in Malaysia, and limited research on how global cohousing concepts can be adapted to the Malaysia context.

<b>P.O. D</b>	To isolate the basic concept of cohousing and develop a conceptual framework of sustainable cohousing that may apply to improving the sustainable living in Malaysia.
<b>Conclusion</b>	To isolate the basic concept of cohousing and develop a conceptual framework of sustainable cohousing that may apply to improving the sustainable living in Malaysia.

The paper provides a detailed exploration of sustainable cohousing in Malaysia, emphasizing the need for community understanding and commitment. It highlights the importance of social wellbeing in urban development and offers a tailored framework for sustainable cohousing that aligns with Malaysian culture. This makes it a valuable resource for examining innovative housing solutions that address social isolation and promote sustainability in urban areas, offering practical insights for policymakers, urban planners, and developers.

Sim et al. (2021)

*Architectural Design in Rethinking the Future of Co-Housing in Malaysia*

<b>Background Study</b>	Co-housing is a collaborative housing concept designed to foster close social bonding and sustainable communities. With the rapid population growth, urban sprawls and housing prices in Malaysia, this concept has gained traction in the housing sector as a viable housing alternative to the existing property market due to its social, economic and sustainability benefits.
<b>Problem Statement</b>	The challenge of creating sustainable co-housing communities in Malaysia, focusing on fostering social bonding and sustainable living amidst rapid urbanization and rising housing prices.
<b>GAP</b>	There is a lack of Malaysian precedents and exploration, resulting in insufficient data to develop a comprehensive strategy for co-housing in the local context.
<b>P.O. D</b>	To establish best design practices for co-housing in Malaysia by examining three local co-housing examples and their design providers. It seeks to identify key concepts, priorities, benefits, and challenges to inform future co-housing projects.
<b>Conclusion</b>	The study concludes that co-housing in Malaysia, while still in its early stages, has the potential to address urban housing challenges by promoting community building and sustainable living. It highlights the importance of demographic considerations, surrounding context, and a balanced spatial design to achieve effective co-housing solutions.

The study explores the feasibility of co-housing in Kuala Lumpur, offering valuable design principles and highlighting potential challenges. The study underscores the importance of sustainable and community-oriented housing solutions tailored to Malaysia's demographic



and environmental context. It provides a comprehensive analysis of best practices for co-housing design, emphasizing the role of demographic size, surrounding context, spatial layout, and environmental psychology in achieving effective and sustainable co-housing solutions. This makes it a crucial resource for understanding how to address urban housing challenges while promoting community building and sustainable living in Malaysia.

Christy & Tan, (2022)

*Understanding Tenants’ Motivations For Co-Living Arrangements A Case Study Of Motivations*

<b>Background Study</b>	Co-living is an emerging housing typology in response to the increasing influx of urbanization in pursuit of jobs and education.
<b>Problem Statement</b>	Cities globally are experiencing a housing crisis, making it difficult for people to find affordable, secure accommodation.
<b>GAP</b>	There is limited understanding of why tenants choose co-living in Klang Valley. Prior research has not extensively covered how physical, locational, and leasing attributes influence these decisions, especially during the pandemic.
<b>P.O. D</b>	The study aims to analyse tenants' motivations for choosing co-living spaces in Klang Valley, Malaysia, and how well these spaces meet their needs.
<b>Conclusion</b>	Tenants in co-living spaces prioritize leasing and physical attributes such as layout, bathrooms, and communal areas over locational factors. They see co-living as a cost-effective, low-commitment option during economic downturns.

The study provides crucial insights for housing developers and co-living service providers to better meet tenants' needs, especially during economic downturns. It highlights a shift in tenant priorities due to the pandemic, emphasizing the importance of flexible and adaptive housing solutions. Utilizing a mixed-method approach enhances the reliability of the findings and opens avenues for further research on the evolving dynamics of co-living arrangements post-pandemic. The practical application of these findings can help refine co-living models to address urban housing crises more effectively.

Zhang et al. (2024)

*Analysis of Cross-Generational Co-Living Space Configuration in Residential Communities—Case Study in China and Italy Based on Space Syntax*

<b>Background Study</b>	In contemporary society, a notable trend of diminishing family sizes has led to an increasing number of elderly individuals living in solitude, often facing the end of life alone.
<b>Problem Statement</b>	The growing elderly population in cities requires housing that fosters cross-generational interaction and support. Existing residential designs often inadequately address these needs, resulting in social isolation and poor community integration.

<b>GAP</b>	There is a lack of studies on how spatial configurations in residential communities can enhance cross-generational interactions in China. Existing research doesn't adequately explore design attributes that promote effective communication among age groups.
<b>P.O. D</b>	The study aims to analyse spatial configurations of cross-generational co-living spaces in China to identify design attributes that best facilitate interaction between age groups.
<b>Conclusion</b>	The study finds that spatial configurations with higher integration values enhance movement and interaction. Cluster and bilateral linear forms are best for cross-generational interactions, emphasizing the need for designs that boost social connectivity.

The study provides valuable insights into the design of cross-generational co-living spaces, emphasizing the need for careful consideration of spatial forms to foster social interactions. However, the findings are based on a limited number of case studies in Shanghai and Florence, which may not be fully generalizable. Further research with a broader sample size and diverse geographical locations could provide more comprehensive guidelines for designing effective cross-generational living environments.

Carrere et al., (2020)-

*The effects of cohousing model on people's health and wellbeing: A scoping review*

<b>Background Study</b>	Housing is widely recognised as a social determinant of health
<b>Problem Statement</b>	Health outcomes are affected by housing affordability, stability, quality and the emotional link to housing, along with the physical and social characteristics of neighbourhoods
<b>GAP</b>	While the evidence for the adverse effects of housing on physical and mental health has been reviewed, there has been little assessment of the beneficial health effects of housing arrangements where people intentionally live together in a community.
<b>P.O. D</b>	The purpose of this study was to examine all the known evidence on the relationship between communal living arrangements characterized as cohousing and health and wellbeing.
<b>Conclusion</b>	The review indicates that cohousing can enhance psychosocial health benefits through strong community dimensions and emotional bonds. However, more research is needed to provide clearer evidence on the health effects, considering various dimensions like economic aspects and environmental sustainability.

The research offers a comprehensive analysis of the effects of cohousing on people's health and wellbeing, emphasizing the role of housing as a social determinant of health. The study highlights how cohousing can enhance psychosocial health benefits through strong community dimensions and emotional bonds, while also addressing the need for further research to provide clearer evidence on health effects. It provides valuable insights into the relationship between communal living arrangements and health, making it a significant resource for understanding the potential benefits and challenges of cohousing as a sustainable housing model.

### **Theoretical Framework**

The study delves into the role of community living arrangements in reducing loneliness among young adults in Malaysia, leveraging insights from environmental psychology and architectural design theories. Environmental psychology examines the interplay between individuals and their surroundings, shedding light on how physical spaces can shape social behaviours, emotional well-being, and a sense of belonging (Gifford, 2019). In parallel, architectural design theories, mainly concerning on co-housing and co-living, highlight how spatial configurations and design elements can nurture social interactions and community cohesion.

The research framework merges two theoretical models to dissect the architectural design elements crucial for thriving community living. Drawing from Jumadi et al., (2020), the concept of Malaysian sustainable cohousing identifies seven core elements: resident involvement, sustainable neighbourhood design, shared facilities including a community centre, self-private dwellings, consensus-based decision-making, resident management and universal value. These components outlined are intrinsically tied to architectural and design considerations in creating an environment that promotes social cohesion and collective activities. For instance, the emphasis on flexible, multi-use shared facilities can bring residents together and engage with one another. Additionally, encouraging active participation from residents in the design process embodies a participatory architecture approach. This strategy ensures that the built environment reflects the needs and preferences of the inhabitants (Mariotti et al., 2023). Sustainable neighbourhood design featuring open communal areas, pedestrian-friendly pathways, and strategically placed gathering spots not only supports environmental sustainability but also bolsters social sustainability (Hooper et al., 2019), by nurturing a sense of community and thereby alleviating loneliness. This notion echoes environmental psychology principles, which suggests that specific environmental features can strengthen social ties and community bonds (Gifford, 2019). In essence, Jumadi et al. (2020) framework dovetails with the research objectives by providing a clear structure to explore how architectural design elements in community living arrangements can cultivate social cohesion and reduce loneliness among young adults in the Malaysia context.

Building on this, the second framework from Hoppenbrouwer (2019), further elaborates on the crucial social and physical factors essential for effective community living arrangements. Social aspects such as involvement in planning, efficient management, organized activities, homogeneity of shared values, resident selection, and the age of the community significantly influence its cohesion and the quality of interactions in community living (Hoppenbrouwer, 2019). On the physical side, the factors lie in the effective layout that encourages regular

interactions through closely situated living units and semi-private areas that balance privacy needs with opportunities for casual interaction. Community safety, alongside the quality and placement of communal amenities, directly affects resident engagement in the community. Besides that, the community and individual dwelling sizes are vital in facilitating meaningful interactions without feeling overcrowded. These factors underscore the critical role of architectural design in shaping social interactions and enhancing the sense of belonging among residents. By weaving these frameworks into research, we can tailor community living arrangements to individual preferences for privacy and social engagement, thereby enhancing their efficacy in reducing loneliness among young adults in Malaysia.

In summary, integrating sustainable design elements and key factors in community living arrangements can significantly influence young adults' sense of belonging and social connection. The theoretical frameworks laid out provide a solid base for analysing how thoughtful design in community living spaces can foster social cohesion and reduce loneliness.

### Conceptual Framework

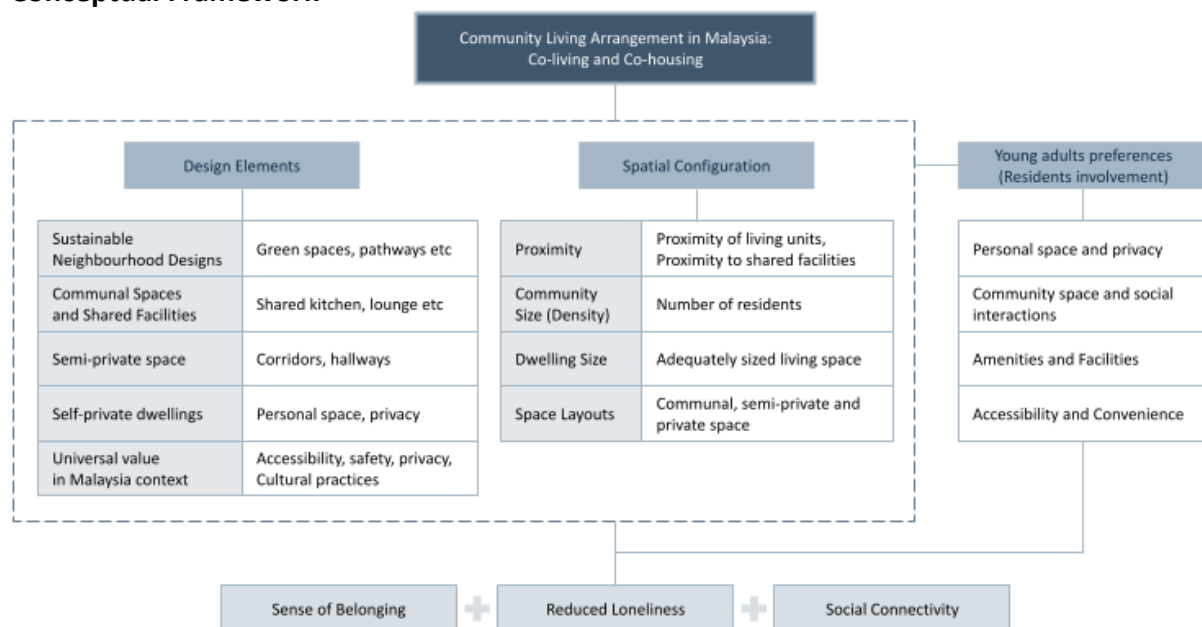


Figure 2: Conceptual Framework of Community Living Arrangement in Malaysia

The conceptual framework guiding the study of community living arrangements in Malaysia, with a special focus on co-living and co-housing, is rooted in understanding the intricate relationship between architecture design elements, spatial configurations, and the specific preferences of young adults. The relationship plays a pivotal role in fostering social connectivity and alleviating loneliness among this demographic. This framework posits that the deliberate design of living environments, accounting for sustainable community design, the balance of communal and personal spaces, and adherence to universal and local cultural values is instrumental in promoting a vibrant and connected community life.

Sustainable neighbourhood designs, characterized by open-communal spaces, green areas and well-designed pathways facilitate resident interaction and engender a strong community spirit. This design elements are seen as essential in fostering environments where social sustainability complements physical sustainability, offering spaces that not only

environmentally friendly but also conducive to build strong social ties. Central to these living arrangements are shared spaces like kitchens and lounges, which serve as a vital hub for social engagement and community activities. These areas, alongside transitional zones like corridors and hallways, are designed to serve as semi-private zones that promote casual encounters, thereby strengthening community bonds. The framework also stresses the importance of these spaces in achieving a harmonious balance between communal living and individual privacy. The self-private dwelling offers personal space and solitude essential for the long-term sustainability of communal living arrangements. Additionally, recognizing the importance of cultural values in the Malaysian context, the framework advocates for design solutions that respect local cultural norms, ensuring that communal living arrangements are accessible, safe, and private. This cultural sensitivity is crucial for the acceptance and success of co-living and co-housing within the local societal fabric.

The spatial layout plays a pivotal role in the success of community living arrangements. The arrangement of living units and shared facilities influences the frequency of social interaction, with closer proximity enhancing community ties. Community size and density also affect social dynamics, where an ideal size ensures a blend of intimacy and diversity, fostering varied yet meaningful interaction. Adequate personal living space contributes to resident comfort and satisfaction while encouraging the usage of communal space. Thoughtfully designed spatial layouts that facilitate fluid movement between private, semi-private and communal areas support both social engagement and personal privacy, leading to a balanced and harmonious community life.

However, young adults' preferences play a significant role in shaping this design and spatial elements. Involving residents in the design process ensures their needs and preferences are met, especially the need for personal space and privacy within a communal setting. This consideration increases residents' satisfaction and willingness to engage in community activities. Providing ample and attractive community spaces encourages social interactions, fostering a sense of belonging and reducing loneliness. Amenities and facilities designed with young adults' preferences in mind enhance the living experience, by catering to daily needs and supporting both individual and community activities. Ensuring accessibility and convenience are essential design considerations that promote active participation in community life, strengthening social ties and reducing isolation.

In essence, the framework articulates a vision where thoughtful integration of design elements, spatial configuration and resident preferences culminates in community living arrangements that not only reduce loneliness but also enhance social connectivity and well-being among young adults in Malaysia. By addressing both physical and social dimensions of community living, this framework aims to demonstrate the potential of architectural and design interventions in creating supportive, engaging, and harmonious living environments.

## **Conclusion**

In conclusion, this study underscores the significant potential of community living arrangements, such as co-living and co-housing, in addressing the pervasive issue of loneliness among young adults in Malaysia. Through a detailed examination of existing models and the integration of environmental psychology and architectural design theories, this research identifies critical gaps in current guidelines and practices. The proposed

conceptual frameworks emphasize the importance of sustainable neighbourhood designs, the balance between communal and private spaces, and cultural considerations in fostering social cohesion and connectivity.

The findings of this research underscore that thoughtful design and spatial configurations play a crucial role in promoting regular social interactions and a sense of belonging among residents. By addressing both physical and social dimensions of community living, the study provides evidence-based architectural strategies tailored to the unique cultural and social dynamics of young adults in Malaysia. These strategies aim to enhance the effectiveness of community living arrangements in reducing loneliness and improving overall well-being. Additionally, the research also contributes valuable insights for policymakers, urban planners, and architects, offering practical recommendations for creating inclusive and supportive living environments. By bridging existing research gaps and providing data-driven guidelines, this study advances the understanding of how architectural interventions can foster stronger community ties and mitigate loneliness among young adults in Malaysia.

Ultimately, the study contributes to the broader discourse on urban development and mental health, advocating for community living arrangements as a viable solution to the social isolation challenges faced by the younger population. The integration of design strategies that promote regular social interactions, combined with the involvement of young adults in the design process, can lead to the creation of vibrant, connected communities that enhance the quality of life for their residents.

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