Exploring the Complexities of Millennial Housing Choices: An Analysis of the Influence of Neighborhood Factors

P.C. Kaluthanthri¹

University of Sri Jayewardenepura, Sri Lanka

K.H.M.S.B Jayawardhana²

University of Sri Jayewardenepura, Sri Lanka prathap@sjp.ac.lk¹, silasnijayawardhana98@gmail.com²

Abstract

The varied behaviors and values exhibited by individuals from different age groups have had a significant impact on the availability of housing options in the residential market. Housing preferences are highly personalized, with observable differences in choices across generations. In today's housing market, the most influential consumer group is the millennial generation, born between 1981 and 1996, who are considered to be optimistic, openminded, innovative, confident, motivated, and intelligent. The housing choices made by millennials are particularly influential in the performance of the housing market, and the factors associated with neighborhoods have played a critical role in determining such choices over recent decades. Nevertheless, previous studies have primarily focused on the general housing buyer's perspective, without considering the unique perspectives of the millennial generation. In this context, this study seeks to investigate the diverse neighborhood factors that shape the housing decisions of millennials in Colombo district, Sri Lanka. Four dimensions of neighborhood factors were identified as social neighborhood, natural environment, neighborhood safety, and accessibility, and hypotheses were

Article History

Received: 29th October 2022 Received in revised form: 27th November 2022

Accepted: 29th November 2022 Published Online: 31st December 2022

Corresponding Author Contact:

DOI: 10.31357/sljre.v19i02.6356

tested for each dimension concerning housing choices, which were evaluated as a single dependent variable. The study employed a sample of 145 millennials in Colombo District, with data collected through a survey questionnaire utilizing the convenience sampling technique. PLS-SEM was used for data analysis. The results suggest that accessibility has a significant impact on housing choices, while natural environment has a moderate influence. In contrast, the research showed that neighborhood safety minimum influence on the housing choices of millennials. The finding confirms that social neighborhood does not have a significant impact on housing choice. The result of the study makes significant implications for real estate market investors and planning professionals, as it provides insight into the neighborhood factors that impact a buyer's purchasing decision and enhances understanding of millennial consumer behavior in urban areas.

Keywords: Housing Market, Millennials, Housing Choices, Neighborhood Factors

INTRODUCTION

The provision of housing constitutes a vital aspect of any economy, extending beyond mere physical accommodation and spatial considerations, given its potential to affect consumption behavior and household income. Nevertheless, due to the intensification of urbanization trends and transformations in economic landscapes, households alone are incapable of fulfilling their housing requisites. In this context, both public and private entities assume significant responsibilities in the domain of housing development. Within developed nations, developers and financiers have emerged as commoditized entities that endeavor to construct residential properties for the purpose of sale within the marketplace.

For many individuals, housing represents the single largest investment in their lifetime, making it a fundamental commodity for consumers. The study of consumer behavior is crucial in understanding how buyers make decisions when choosing between two or more alternative products. Consumers purchase products to meet both their short-term and long-term needs. The level of involvement in the purchasing decision varies

depending on the product and need. When consumers become more interested in a product, their involvement increases, and they may go through a more complex decision-making process influenced by various factors (Adenan et al., 2018). While previous research suggests a linear and direct relationship between purchase antecedents and consumer choices (Liao et al., 2016), this relationship may be more intricate when it comes to high involvement products like housing (Omeraki Çekirdekci, 2020; Amarasinghe Arachchige, et al., 2022). The current trend of urbanization and modernization has expanded the real estate market (Ronald, & Dewilde, 2017), providing housing consumers with a wide range of options. These choices are influenced not only by demographic characteristics but also by emotions, experiences, environment, and other factors (Koklic & Vida, 2011). In this context, it is argued that the high level of unsold properties in the local housing market is primarily due to a mismatch of potential buyers' needs with the housing features provided (Ismail and Shaari, 2019). Therefore, to reduce this mismatch and provide better housing, intensive studies, particularly on housing choices and preferences, are needed.

When making the decision to purchase a residential property, multiple factors significantly influence prospective buyers' preferences, ultimately leading to their final decision (Thanaraju et al., 2019). The quality of a neighborhood, which is a shared living space where individuals come together for a common purpose, plays a crucial role in determining the appeal of a residential property. It serves as a key indicator of the level of and mutual support within the community. Significantly, neighborhood-related elements assume a central position in shaping the prospective buyer's inclination towards acquiring a residential property, given their potential to impact the property's value. Currently, property buyers consider various variables such as accessibility, natural environment, and space (Ioannides, 2011), leading developers to focus on improving the quality of the neighborhood amenities. Such initiatives ensure a better quality of life for the community, with factors such as property security, demographic composition of the neighborhood, environmental characteristics, and facilities influencing the decision to purchase a property. Conversely, if the developer invests solely in housing without providing any neighborhood facilities, it can lead to a waste of resources and social problems in the country. Hence, neighborhood factors can influence economic, environmental, and social aspects of the housing market.

Housing choices can vary significantly depending on generational differences, as each generation has unique needs, tastes, and preferences (Ismail and Shaari, 2019). In Asian countries, millennials who born between 1984 and 2000 tend to postpone purchasing a property until they reach their 30s. This behavior is likely due to various economic and financial obstacles, such as high inflation rates, global economic downturns, and a high level of unemployment, which make it more challenging for them to acquire a home compared to their parents' generation. As the one of largest active population group in Sri Lankan housing market, which is about 23% of total population (Department of Census and Statistics, 2022) millennials' opinions and decisions have a significant impact on the residential market's housing choices. As they are in the early of their career life, this generation considered to be optimistic, open-minded, innovative, confident, motivated, and intelligent (Istikomah, 2019) group and identified as most influential consumer group in the housing market. However, it is noted that most of previous studies have disregarded the reasons behind millennials' preference for specific neighbourhoods where those studies have primarily focused on the general housing buyer's perspective, without considering the unique perspectives of the millennial generation. Despite the increasing research interest in the housing purchase patterns of millennials, there is a noticeable gap in the literature regarding the influence of neighborhood factors on their housing choices. While various studies have explored the impact of individual factors such as affordability, proximity to amenities, and property characteristics, there is a dearth of research that investigates how neighborhood-level factors such as safety, social cohesion, and access to public transportation affect millennials' decisions when purchasing a home. Given the significant role that neighborhood characteristics play in shaping one's quality of life, it is essential to understand the extent to which these factors impact the housing choices of this generation. Therefore, further investigation into the neighborhood-level factors that influence the housing purchase patterns of millennials is crucial in developing a

comprehensive understanding of their preferences and behaviors in the housing market.

In this context, the objective of the study is to identify the influence of neighborhood factors on the housing choices of millennials in Colombo, Sri Lanka, to fill the gap in understanding these factors that drive millennials' choices in the residential market. Accordingly focus of the study on exploring neighborhood factors namely safety, accessibility, environment, and social aspects, and aims to provide insights into how these factors affect the housing choices of millennials. By understanding these influences, policymakers and developers can make informed decisions to create housing that better meets the needs of this important consumer group.

LITERATURE REVIEW

According to a recent study by Dunuwila (2022), the real estate market has evolved significantly over time due to cultural and generational changes that have influenced consumer attitudes towards housing. Demographics have been found to play a significant role in housing demand, with age being a critical factor that affects the residential sector. Millennials who born between 1984 and 2000 are the largest population group and are considered a crucial target for many consumer businesses due to their growing numbers and purchasing power. Millennials have been found to have unique housing habits and preferences. They tend to purchase homes later in life and prioritize flexible and community areas with modern, livable surroundings over traditional house characteristics (Dunuwila, 2022). The desire for flexibility and mobility has led to a rise in demand for rental properties and co-living spaces that offer short-term leases and flexible arrangements. Additionally, many millennials prefer urban living and have a strong preference for apartments and condos in downtown areas or mixed-use developments that combine residential, commercial, and retail spaces.

In recent years, the Sri Lankan real estate market has seen significant changes, with an increasing number of services and amenities being offered to consumers. This has led to more people seeking the best environment for a luxurious and comfortable lifestyle. As a result, it has become increasingly important to find a suitable and comfortable house to live in. Moreover, the

housing choice among buyers is crucial in the housing market as it predicts housing demand, which indirectly helps the government to stabilize housing policy and promote homeownership. According to Thanaraju et al., (2019), when deciding to buy a house, several factors have a significant impact on the preferences of prospective buyers, which ultimately lead to their decision to purchase a housing unit. These factors include the neighborhood characteristics, accessibility, and space. Furthermore, cultural and generational differences have a significant impact on housing choices. For instance, the millennial generation, born between 1984 and 2000, has attracted much attention and controversy from design scholars due to their distinctive preferences and values. As the largest population group, millennials' opinions and decisions have a substantial impact on residential market housing choices (Istikomah, 2019).

Millennials are a generation that places a high value on social connections and community engagement, and their housing choices reflect this perspective. They seek neighborhoods that provide them with easy access to a diverse range of amenities that enhance their daily lives. In particular, walkability, public transportation, parks and green spaces, entertainment options are highly sought after by millennials, as they are key components in creating vibrant and inclusive communities. Moreover, young families prioritize access to quality schools and healthcare facilities when choosing where to live, reflecting their desire for a safe and nurturing environment for their children. The importance of natural spaces, such as parks, trails, and other outdoor recreation areas, cannot be understated, as these amenities have been shown to have a significant impact on physical and mental well-being. As such, millennials often seek out neighborhoods that offer easy access to these natural areas, recognizing the value they bring to their quality of life. Ultimately, the neighborhood factors that millennials prioritize in their housing choices reflect their desire for a dynamic and connected community that offers a high standard of living.

Not only that, natural environment of the neighborhood also important dimension of neighborhood which influence the housing choice. The natural environment can also have a significant impact on mental health and wellbeing, with green spaces and natural amenities providing opportunities for relaxation and stress relief. Overall, the natural environment is an essential neighborhood dimension that can significantly impact the housing choices. Using hedonic techniques, researchers have examined the relationship between air quality and property values and found that air pollution is a relatively significant variable in explaining residential property values. Noise, air pollution, and traffic issues are of particular concern to house buyers, who generally prefer a peaceful living environment free from these factors. Quiet neighborhoods with scenic value are the most important attributes for consumers, and the location of such spatial features directly affects buyer attitudes and property values.

Studies have consistently shown that neighborhood factors are a crucial determinant of housing values and purchasing decisions, particularly among millennials. For instance, Thanaraju et al., (2019) found that the quality of a neighborhood has a positive impact on housing values, underscoring the significance of neighborhood factors in the housing market. Additionally, Rahman et al., (2012) highlighted the importance of neighborhood considerations in influencing the purchasing decisions of homebuyers. Safety and security are key factors that are at the forefront of millennials' minds when choosing a neighborhood. They seek out neighborhoods with low crime rates and well-lit streets, as these factors can significantly affect their sense of security and overall quality of life. Furthermore, millennials value neighborhood factors that foster a sense of community, such as access to shared spaces and amenities that promote social interaction and connectedness. These factors can contribute to a fulfilling and satisfying lifestyle that is essential for this generation. Real estate developers and agents can leverage these insights to develop properties that cater to the unique needs and preferences of millennials, thereby fostering a more vibrant and inclusive community.

Additionally, social and cultural diversity is highly valued, with many millennials seeking out neighborhoods that offer a vibrant mix of different cultures and lifestyles. Social factors such as community engagement, social interaction, and a sense of belonging are essential for many young adults when choosing a neighborhood to live in. Access to vibrant social networks and cultural diversity is also highly valued, with many millennials

seeking out communities that offer a range of social and cultural opportunities. Walkability, public transportation, and access to local amenities such as shops and restaurants are also key factors that contribute to a strong social neighborhood. Overall, the social neighborhood dimension is critical for many millennials when choosing a place to call home, and developers and agents must take these factors into account when designing and marketing properties to this demographic.

In this context four neighborhood determinants could identify as accessibility, natural environment, neighborhood safety and social neighborhood which have an impact on housing choice of the millennials.

Accessibility

The location of a house goes beyond mere convenience and can have a significant impact on one's quality of life. Accessibility, which refers to the availability and proximity of essential services and amenities necessary for an individual's well-being, is a crucial factor to consider in choice of house location. When selecting a place to live, it's essential to consider factors such as access to education, transportation, healthcare, religion, shopping, and entertainment facilities, as they can profoundly affect an individual's daily routine, social life, and overall happiness. Furthermore, accessibility is not just a consideration for homeowners but also for architects, developers, and policymakers. The design and construction of houses and neighborhoods can impact the accessibility of essential services and amenities, and in turn, affect the quality of life of residents. As such, it is essential to prioritize accessibility when designing and building houses and neighborhoods to ensure that individuals have access to the resources they need to thrive. Moreover, the quality and range of amenities in the surrounding area can significantly influence the decision to purchase a particular property. Modern and attractive amenities can enhance the quality of life for residents, increasing the overall value of the residential property.

The proximity of a home to daily activities is a crucial factor to consider when searching for a new residence. Numerous studies have shown that the quality of schools in the neighborhood can increase the value of residential properties (Haurin & Brasington, 1996; Black, 1999). However, it has also

been noted that "year-round school" can have negative externalities on residential properties in the surrounding areas (Clauretie and Neill, 2000). Proximity to shopping complexes can generate both positive and negative externalities (Des Rosiers et al., 1996). Nevertheless, the size of a shopping center has been found to have a positive contributory effect on the values of surrounding residential properties (Sirpal, 1994; Des Rosiers et al., 1996). Additionally, places of worship, such as temples and churches, appear to positively impact residential houses (Carroll and Kimball, 1996). Urban forests have been found to exert positive externalities as well (Tyrväinen, et al., 2005; Ridker and Henning, 1967; Anderson and Crocker, 1971; Chay and Greenstone, 2005; Chattopadhyay, 1999; Zabel and Kiel, 2000; Murty et al., 2004). Individuals often seek out specific neighborhoods that are within close proximity to their workplace, school, or local markets. As highlighted by Mulyano et al., (2020), accessibility to transportation systems, including main roads, train stations, and public transportation, is also a critical consideration for consumers. Meantime Huang and Du's (2015) recent study in China revealed that public facilities not only impact the level of convenience in daily life but also significantly influence residential satisfaction. Similarly, Wang et al., (2016) noted a noteworthy correlation between local area facilities and residential satisfaction. The importance of public facility access for residential satisfaction appears to vary across different countries. For instance, Ibem and Amole (2013) found that most residents of public housing in Nigeria were dissatisfied with infrastructure facilities, while Mohit and Nazyddah's (2011) study in Hulhumale, Maldives, revealed that residents of public housing were more content with their public facilities than their housing conditions. Meanwhile, Khan et al., (2017) and Rahadi et al., (2015) conducted studies that substantiated the preeminent influence of accessibility as a determinant factor in the housing selection process for first-time homebuyers.

The availability and accessibility of essential services and amenities, transportation systems, and educational facilities are all critical factors that can significantly influence an individual's decision to purchase or rent a house. Ensuring that individuals have access to the resources they need to

live a comfortable and fulfilling life is crucial and should be a top priority when selecting a new residence.

The youngest generation is exhibiting a shift in their housing and transportation preferences, and communities have yet to accommodate these changes. Nelson (2013) highlights this point, and notes that millennials are willing to explore other options such as public transit, biking, or walking, making centrally located neighborhoods more attractive. Furthermore, there is a significant difference in the percentage of individuals who prefer living in the heart of the city between the two age groups, with 23% of those under 40 compared to only 7% of those over 50, as reported by the National Association of Realtors (2013). Recent studies have shown that millennials have a strong preference for denser and walkable environments over neighborhoods consisting of single-family housing that require extensive driving. According to a survey conducted jointly by the National Association of Realtors and planners at Portland State University (National Association of Realtors & Portland State University, 2015), 51% of millennials expressed a desire for such environments compared to only 44% of Gen X and 43% of baby boomers. Additionally, millennials were more likely to live in apartments compared to older generations. These findings highlight the need for real estate developers and agents to understand and adapt to the changing preferences of millennials in order to create more livable and sustainable communities.

Accordingly, a hypothesis proposed as

H1: There is a significant relationship between accessibility and the housing choices of millennials.

Natural Environment

Environmental factors, such as air quality, noise levels, availability of open spaces, and greenery of the surrounding area, are among the most crucial considerations in the purchasing decisions of most house buyers (Lim & Kim, 2020). The quality of the surrounding environment has a significant impact on the decisions made in the real estate market. Emissions from road, air, and rail transportation are the primary sources of photochemical smog released into the lower atmosphere, which is considered a negative factor in

residential location (Opaluwa & Aribigbola, 2015). Previous studies have demonstrated the significance of environmental factors on the home purchase decision. Many homebuyers value the opportunity to live in a serene environment free from noise, traffic, and pollution. Noise levels, air pollution, and traffic difficulties are major concerns for homebuyers, with peaceful surroundings and scenic value being the most critical environmental attributes (Lim & Kim, 2020). Privacy, open space, ventilation, noise levels, and waste disposal are critical factors that must be considered in residential building design as they significantly influence residents' perceptions and experiences of their living environment (Ghebremeskel and Mehreteah, 2022). Furthermore, the convergence of processes and the possibility of urban intensification have highlighted the importance of factors such as traffic noise, green spaces, and social interactions, which have been identified as key contributors to residents' levels of satisfaction with their living environment (Li et al., 2021).

Studies have also shown that the younger generation, particularly the millennials, demonstrate a significant level of environmental consciousness and commitment (Taylor & Keeter, 2010). Zhang et al., (2020) confirmed that when purchasing a house, millennials tend to prefer more natural landscapes than congested built environments. Therefore, a thorough consideration of environmental factors is crucial in residential building design and the real estate market, as they play a significant role in shaping the overall living experience of residents. The inclusion of green spaces and other natural features can lead to a healthier, more comfortable living environment, which can ultimately lead to increased satisfaction among residents (Opaluwa & Aribigbola, 2015).

Accordingly, hypothesis two proposed as

H2: There is a significant relationship between the natural environment and the housing choices of millennials.

Neighborhood Safety

Ensuring neighborhood safety is essential for creating a sustainable and desirable living environment in a residential community. Neighborhood safety is a multifaceted concept that encompasses various factors, including crime prevention strategies, security measures, hazardous exposures, and protection against industrial risks. The importance of neighborhood safety is underscored by the critical role it plays in the housing market. Multiple studies have demonstrated that crime incidence and proximity to hazardous areas adversely affect the value of residential property (Bamiteko & Adebiyi, 2020).

In addition to crime prevention strategies and security measures, buyers also consider the cleanliness and safety of the neighborhood when selecting a property. Previous research confirms that poor cleanliness and safety standards can negatively impact property prices and damage the area's reputation (Al-Nahdi et al., 2015). Consequently, buyers are willing to pay a premium for a residential property located in a secure neighborhood that is free from crime, natural disasters, and other unsafe conditions (Mariadas, et al., 2019).

The safety of a neighborhood, particularly in terms of low crime incidence, is a significant consideration for prospective buyers of residential property (Haider, & Iamtrakul, 2022). The safety of a neighborhood also influences investors' decisions when selecting properties to invest in, as neighborhoods with high safety levels are perceived as more profitable (Kurniawan, & Fanani, (2022). In Malaysia, for example, homebuyers' demand for gated and guarded properties has risen, particularly in Kuala Lumpur, due to their community facilities and security features (Teck-Hong, 2011).

Moreover, safety considerations vary among different generations of housing consumers. A study by Ismail and Shaari (2020) identified the safety of the neighborhood as an essential factor for all generations, including Baby Boomers, Gen-X, Gen-Y, and Gen-Z, when choosing their preferred housing options. This highlights the critical role that neighborhood safety plays in shaping housing preferences and underscores the importance of creating safe and secure living environments that cater to

diverse housing consumer preferences. The value of residential properties is significantly impacted by crime incidence, proximity to hazardous areas, and other unsafe conditions. Thus, it is crucial to prioritize neighborhood safety in housing development by implementing crime prevention strategies, security measures, and community facilities that cater to diverse housing consumer preferences.

Accordingly, hypothesis proposed as

H3: There is a significant relationship between the neighborhood safety and the housing choices of millennials.

Social Neighborhood

The quality of a neighborhood is influenced by a range of social factors, including residents' demographic backgrounds, community interactions, and place attachments. Various studies have explored residents' satisfaction with their homes and localities by examining socio-demographic data. For example, Ismail and Shaari (2019) and Rahman et al., (2012) define social neighborhoods using sociodemographic characteristics, including culture, ethnicity, education level, and family size.

Furthermore, Opaluwa and Aribigbola (2015) and Rahman et al., (2012) investigated the relationship between sociodemographic factors such as age, education, health, marital status, gender, and race on neighborhood quality. These studies indicate that community engagement plays a significant role in shaping the quality of neighborhoods. In recent times, social media usage and online community engagement have emerged as important factors influencing neighborhood satisfaction. Zhao et al., (2021) examined the impact of social media platforms and online communities on residents' satisfaction with their neighborhoods. The study found that social media platforms and online communities provide new channels for people to participate in their communities, which in turn can help improve neighborhood satisfaction.

Moreover, Clark et al., (2022) conducted a study on the matching of Australian households to their neighborhood social environments. The research found that there was considerable diversity in the levels of

matching among households. The study also revealed that households generally do not make major changes to increase matching when controlling for housing tenure and other household characteristics. However, some previous scholarly research suggests that people prefer living in homogenous environments where their neighbors are similar to them. For instance, Hipp and Boessen (2012) and Hipp and Perrin (2009) found that greater social distance between households in a neighborhood led to lower housing demand and weaker social connections among neighbors, respectively. Blokland (2003) also discovered limited interaction between different population strata in neighborhoods. This highlights the impact of the preference for homogeneity on residential mobility decisions.

Accordingly, a hypothesis proposed as

H4: There is a significant relationship between the social neighborhood and the housing choices of millennials.

The conceptual framework of the study is constructed based on the four hypotheses developed by the authors. These hypotheses define the conceptualized relationships between each constructs in the study. Each hypothesis is operationalized by reflective indicators of each construct, as shown in Table 01. Refer Fig 01 for conceptualization.

Table 1: Conceptualization of the Construct of the Study

Variables	Sources	Measurement	
Social	Rahman et al., (2012)	Five Points	
neighborhood	Opaluwa and Aribigbola, (2015)	Likert Scale	
Natural	Opaluwa & Aribigbola, (2015),	Five Points	
environment	Ghebremeskel and Mehreteah, (2022), Li et	Likert Scale	
	al., (2021), Lim & Kim, (2020)		
Neighborhood	Bamiteko & Adebiyi, (2020), Al-Nahdi et al.,	Five Points	
Safety	(2015), Mariadas, et al., (2019)	Likert Scale	
Accessibility	Thanaraju et al., (2019), Clauretie and Neill,		
	(2000), Tyrväinen, et al., (2005), Ridker and	Likert Scale	
	Henning, (1967), Anderson and Crocker,		
	(1971) Chay and Greenstone, (2005)		
	Chattopadhyay, (1999), Zabel and Kiel,		
	(2000), Murty et al., (2004).		

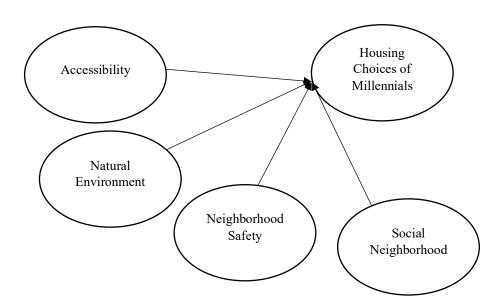


Figure 1: Conceptual Framework of the Study

STUDY AREA

The housing market of Colombo district defined as the study area. The housing market in Colombo is shaped by various factors that affect the decision-making of potential house buyers. The residential sector in the Colombo district, which is a part of the Western Province, is rapidly expanding, with new startups seeking commercial space in the city (Niriella, 2011). The construction of housing complexes in the central business district is noteworthy. The domestic real estate industry is a highly competitive and valuable sector in Sri Lanka, contributing significantly to the country's economic growth. As the commercial hub of the country, Colombo carries out most administrative tasks. Urban migration in Colombo has been on the rise due to economic growth and infrastructural development, resulting in a rapid increase in low-income and lower-middleincome populations, who are in search of better economic opportunities (Rathnayaka et al., 2020). According to the Department of Census and Statistics, approximately 600,000 individuals move to Colombo each year (Niriella, 2011). The district is characterized by mixed land use, including commercial and industrial activities, as well as issues such as air pollution, contaminated water bodies, noise pollution, and community engagement, which contribute to its status as one of the most congested areas in Sri Lanka. Thus, when selecting a residence in the Colombo district, these factors must be considered.

METHODOLOGY

The present study is primarily based on quantitative data and utilizes non-probability sampling techniques. To collect data from the study population, which comprised all millennials residing in the Colombo district, convenience sampling was employed. The minimum sample size was estimated as 129, with an accuracy level of 0.95, using the G-Power statistical analysis. A total of 175 questionnaires were distributed, and 145 millennials responded, which is well above the required sample size.

To test the hypothesis of the study, the multiple regression model was used. The study employed SmartPLS, a widely used structural equation modeling (SEM) software that is particularly well-suited for leaner regression analysis. According to Hair et al., (2017), SmartPLS is an appropriate choice when the sample size is relatively small (n < 250), which is often the case in leaner regression analysis. The software offers several advantages over traditional regression analysis methods, including a robust approach to model estimation and validation.

SmartPLS offers various validation methods, such as bootstrapping and cross-validation, that can help to identify and correct any issues that may arise during the model estimation process. Hair et al., (2017); Ringle et al., (2015); and Ramayah et al., (2018) have highlighted the usefulness of SmartPLS in analyzing and modeling complex relationships, as well as its user-friendly interface that simplifies the process of model construction and analysis. The use of SmartPLS allowed for a robust approach to model estimation and validation, ensuring reliable and valid results.

RESULTS AND DISCUSSION

The profile of respondents is a critical aspect of any research study, as it provides valuable insights into the characteristics of the sample population. Upon examination of Table 02, it is evident that a significant portion of the

participants, 55 percent, were male. The age distribution of respondents is also noteworthy, with around 90 percent of participants belonging to the 18-29 age category. Specifically, 33 percent of participants reported being married, and 38 percent reported having obtained a first-degree level of education.

Table 2: Demographic Distribution of Respondents

Profile Category	Frequency	Nos Respondents
Gender		•
Male	55	80
Female	45	65
Age Group		
18-21	12	17
22-25	50	73
26-30	28	41
above 30	10	15
Material Status		
Single	67	97
Married	33	48
Divorced	0	0
Widow	0	0
Education		
Ordinary Level	2	3
Advance Level	31	45
Undergraduate	38	55
Postgraduate	29	42
Employment		
Public Sector	17	25
Private Sector	62	90
Self-employed	17	25
unemployed	4	6
Income		
Less than 50000	17	25
50000-100000	72	104
100001-150000	17	25
higher than 150000	4	6
Race		
Sinhala	89	129
Tamil	6	9
Muslim	4	6
Other	0	0

Measurement Model

Measurement model of the Partial Least Squares (PLS) assessment of the study designed in reflective mode. In reflective mode it is required to assess the internal consistency and reliability of the model and to conduct an analysis of internal consistency reliability, convergent and discriminant validity. In other words, the PLS assessment aims to determine if the indicators of the model are measuring the same underlying construct, and whether the construct is distinct from other constructs that it is theoretically supposed to be different from. This analysis is an essential step in validating the accuracy and consistency of the measurement model, which is critical in ensuring the reliability and validity of the research findings.

Cronbach's alpha and composite reliability (CR) is with the threshold of 0.7 used to measure the internal consistency. The analysis results of cronbach's alpha values are ranging from 0.815 to 0.954 confirmed that all variables have value greater than 0.7 which means they are suitable for this investigation. The composite reliability value ranges from 0.877 to 0.967. this also confirmed the sufficient level of composite reliability. The composite reliability and Cronbach's Alpha of the five constructs of the measurement model are shown in the Table 03.

Table 3: Results of Cronbach's Alpha, Composite Reliability and Average Variance Extracted (AVE)

Construct		Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Social Neighborhood (SN)		0.954	0.967	0.88
I think about how friendly and welcoming the				
neighborhood is before choosing where to live	0.928			
I would consider the community behavior when I				
chose a house	0.960			
The social environment of a community plays a				
crucial role in my decision-making process when it				
comes to selecting a suitable residence.	0.937			

I would consider community movements, activities				
and living style when I chose a house.	0.926			
Natural Environment (NE)	0.720	0.835	0.881	0.601
I consider the quality of the neighborhood when		0.000	0.001	0.001
selecting the house.	0.729			
When deciding to purchase a house, I consider the				
quality of the surrounding natural environment to be				
an important factor.	0.895			
Greenery of adjacent street is considered as an				
important attribute when making a purchase				
decision.	0.701			
The standard of the natural environment in the				
vicinity is a critical aspect that I take into account				
while making a decision to buy a house.	0.706			
Cleanliness of the surrounding is considered as an				
important attribute when making a purchase				
decision.	0.875			
Accessibility (AC)		0.873	0.909	0.667
When selecting a place to live, it is important to take				
into account the level of accessibility.	0.806			
When choosing a place to live, it's important to think				
about how easy it is to get around and access				
important places and resources.	0.914			
As I think about choosing a place to live, I realize the				
importance of considering the accessibility of the				
home.	0.862			
The accessibility of a potential living space should				
be carefully considered when choosing a place to				
live, as it can impact an individual's ability to access				
essential resources, move around safely and				
comfortably, and overall, enhance their quality of				
life.	0.772			
When searching for a new home, it is important to				
prioritize accessibility factors such as location,				
safety, and ease of movement, as they can greatly	0.011			
impact one's quality of life.	0.811	0.015	0.077	0.640
Neighborhood Safety (NS)		0.815	0.877	0.642
I take serious concern on security of the	0.000			
neighborhood when making a purchase decision.	0.889			
I am in search of safety of the neighborhood when	0.706			
making a purchase decision.	0.796			
The safety of the neighborhood is the most crucial				
factor I take into account when choosing a house to live in.	0.729			
Ensuring that the area is secure and free from	0.729			
potential dangers is a top priority, as it directly				
impacts the well-being and peace of mind of myself				
and my loved ones.	0.873			
and my loved ones.	0.073			

Housing Choice (HC)		0.863	0.902	0.65
I am currently looking for a house on internet and				
other social media	0.779			
I want to buy house as soon as possible.	0.886			
I want to buy for house rental only.	0.907			
I always make a comparison among other product				
brands before I purchase.	0.727			
I often seek information before making a purchase				
decision.	0.725			

Source: Survey Data (2022)

Convergent validity refers to the extent to which the measured variables correspond to the theoretical variables. It is evaluated by examining the factor loadings and the average variance extracted (AVE) of each construct. To establish acceptable convergent validity, factor loadings and AVE should exceed 0.7 and 0.5, respectively (Sarstedt, et al., 2020). The results given in Table 03, indicates that factor loading values range from 0.701 to 0.960. All factor loadings are above 0.7 and the AVE for each construct is greater than 0.5, indicating satisfactory convergent validity. Thus, the constructs of the study confirmed the convergent validity.

The discriminant validity of the study estimated using the Fornell-Larcker criterion, which estimates the measures discriminate well empirically.) It is noted that square root of the of the AVE of each construct should be higher than the Construct's highest correlation with any other construct in the model (Sarstedt, et al., 2020). The results given in Table 04 confirmed the discriminant validity of the measurement model.

Table 4: Discriminant Validity: Fornell-Larcker Criterion

Factor	AC	HC	NE	NS	SN
Accessibility	0.817				
Housing choice	0.806	0.824			
Neighborhood Environment	0.799	0.776	0.824		
Neighborhood Safety	0.301	0.417	0.405	0.801	
Social Neighborhood	0.765	0.780	0.807	0.382	0.938

The establishment of internal consistency, convergent validity, and discriminant validity are critical steps in the research process. The

successful confirmation of these measures ensures that the research findings are reliable, valid, and reflective of the phenomena under investigation. These assessments serve as a foundation for the evaluation of the structural model, which aims to uncover the underlying relationships among variables.

Results of Structural Model

The coefficient of determination (R2) indicates the extent to which the variation in the dependent variable can be explained by the independent variables. A higher value of R2 indicates a better predictive ability of the structural model. Sarstedt, et al., (2020) suggested R2 values of 0.75, 0.50, and 0.25 for significant, moderate, and weak endogenous latent variables, respectively, in previous studies. The findings of the study indicate that the R2 value for millennial's housing choices is 0.766, which is a strong value. This means that 76.6% of the variables have been explained, and there is a good correlation between independent and dependent variables according to this model.

The Q² value in PLS predict compares the prediction errors of the PLS path model against simple mean predictions (Shmueli et al., 2019). The Q2 criterion recommends that the conceptual model should be capable of predicting endogenous latent constructs, and for a particular endogenous latent construct, the Q2 values measured in the SEM must be greater than zero. Table 05 confirmed that the Q2 Predict values for the model were greater than zero, which exceeded the threshold limit, indicating that the predictive relevance of the path model was sufficient for the endogenous construct.

Table 5: Results of Q² Predict

Endogenous Latent Variables	Q ² Predict
Accessibility	0.269
Neighborhood Environment	0.622
Neighborhood Safety	0.625
Social Neighborhood	0.332
Housing Choice	0.500

Based on the results of the hypothesis testing, it can be concluded that accessibility, natural environment, and neighborhood safety are all significant factors that influence housing choice. In contrast, social neighborhood does not appear to have a statistically significant impact on this decision. These findings highlight the importance of physical and safety-related attributes when individuals make decisions regarding housing. It suggests that social factors, such as demographics and community interactions, may not carry as much weight in this decision-making process. Refer to Table 6 for details.

Table 6: Results of Hypothesis Testing

Hypotheses	Path Coefficient	T statistics	P Value	Decision
H1: There is a significant	0.458	5.299	0.000	Supported
relationship between				
accessibility and the housing				
choices of millennials.				
H2: There is a significant	0.350	2.902	0.004	Supported
relationship between natural				
environment and the housing				
choices of millennials.				
H3: There is a significant	0.111	2.677	0.007	Supported
relationship between				
neighborhood safety and the				
housing choices of				
millennials.				
H4: There is a significant	0.070	0.609	0.543	Not
relationship between social				Supported
neighborhood and the housing				
choices of millennials.				

The finding of the study aligns with previous research that has identified these factors as key determinants of housing choice. However, the analysis showed no significant impact of social neighborhood on the housing choice of millennials, which contrasts with some previous studies that have suggested a relationship between social factors and housing choice (Gordon & Richardson, 1997). This disparity may be due to differences in the

population of the study or the operationalization of social neighborhood. Previous studies defined population as in general context, but this study focused on the millennial's choice only. Further, other studies have measured social neighborhood through variables such as social cohesion or sense of community (Hipp, & Perrin, (2009), whereas in the current study, it was measured as the perceived quality of social interactions. Therefore, future research could benefit from further examining the operationalization and measurement of social neighborhood in relation to housing choice.

CONCLUSION

The study sheds light on the complex and multifaceted decision-making processes of real estate consumers, particularly among the millennial generation in Colombo, Sri Lanka. By identifying and analyzing the impact of neighborhood factors on housing choices, the study reveals that accessibility, natural environment and safety play significant roles in shaping these decisions. These findings provide valuable insights for stakeholders in the real estate industry, from developers and investors to policymakers and decision-makers.

Moreover, the study's practical and managerial implications extend beyond the confines of the real estate industry, pointing to the broader importance of understanding millennials decision-making processes. This understanding is critical for managing and optimizing resources in any industry or sector, from energy and infrastructure to healthcare and education. It underscores the value of evidence-based decision-making, which can lead to more efficient and effective resource allocation, as well as better outcomes for consumers and society as a whole.

In this way, the study offers profound insights into the complexities of consumer decision-making and their implications for real estate and beyond. By advancing understanding of these processes, it points towards a more sustainable and equitable future, where resources are allocated more

efficiently, and millennials housing needs and preferences are better understood and met.

ACKNOWLEDGEMENT

The author wishes to express gratitude to the Center for Real Estate Studies (CRES) of the University of Sri Jayewardenepura, Sri Lanka, for providing research assistance during the study.

REFERENCE

- Adenan, M. A., Ali, J. K., & Rahman, D. H. A. A. (2018). Country of origin, brand image and high involvement product towards customer purchase intention: empirical evidence of east malaysian consumer. Jurnal Manajemen dan Kewirausahaan, 20(1), 63-72.
- Al-Nahdi, T. S., Ghazzawi, O. H., & Bakar, A. A. (2015). Behavioral factors affecting real estate purchasing. International Journal of Business and Social Science, 6(8), 146-154.
- Amarasinghe Arachchige, J., Quach, S., Roca, E., Liu, B., Liew, A. W. C., & Earl, G. (2022). Understanding high-involvement product purchase through an innovative machine learning approach: A case of housing type choice. Journal of Consumer Behaviour, 21(5), 1057-1074.
- Anderson Jr, R. J., & Crocker, T. D. (1971). Air pollution and residential property values. Urban Studies, 8(3), 171-180.
- Bamiteko, O. D., & Adebiyi, O. O. (2020). Effect of neighbourhood security on housing price in Lagos. American Journal of Environmental and Resource Economics, 5(4), 80-85.
- Black, S. E. (1999). Do better schools matter? Parental valuation of elementary education. The Quarterly Journal of Economics, 114(2), 577-599.
- Blokland, T. (2003). Ethnic complexity: routes to discriminatory repertoires in an inner-city neighbourhood. Ethnic and Racial Studies, 26(1), 1-24.

- Carroll, C. D., & Kimball, M. S. (1996). On the concavity of the consumption function. Econometrica: Journal of the Econometric Society, 981-992.
- Chattopadhyay, S. (1999). Estimating the demand for air quality: new evidence based on the Chicago housing market. Land Economics, 22-38.
- Clark, W. A. V., Ong ViforJ, R., & Truong, N. T. K. (2022). Neighbourhood selection and neighbourhood matching: Choices, outcomes and social distance. Urban Studies, 59(5), 937–955. https://doi.org/10.1177/00420980211044029
- Clauretie, T. M., & Neill, H. R. (2000). Year-round school schedules and residential property values. The Journal of Real Estate Finance and Economics, 20, 311-322.
- Chay, K. Y., & Greenstone, M. (2005). Does air quality matter? Evidence from the housing market. Journal of Political Economy, 113(2), 376-424.
- Des Rosiers, F., Lagana, A., Thériault, M., & Beaudoin, M. (1996). Shopping centres and house values: an empirical investigation. Journal of Property Valuation and Investment, 14(4), 41-62.
- Department of Census and Statistics, Sri Lanka, (2022). Mid-Year Population Estimated by district and Sex, available at http://www.statistics.gov.lk/ Population/StaticalInformation/VitalStatistics/ByDistrictandSex
- Dunuwila, S.R. and Devapriya, K., (2022). Analysis of the current housing market in Colombo metro region to enhance the prospective consumer satisfaction. In: Sandanayake, Y.G., Gunatilake, S. and Waidyasekara, K.G.A.S. (eds). Proceedings of the 10th World Construction Symposium, 24-26 June 2022, Sri Lanka. [Online]. pp. 102-112. DOI: https://doi.org/10.31705/WCS.2022.9. Available from: https://ciobwcs.com/2022-papers/
- Ghebremeskel, F., & Mehreteab, H. T. (2022). Choice of transport mode by residents of the city of Asmara-Eritrea. Journal of Management and Economic Studies, 4(2), 146-156.

- Gordon, P., & Richardson, H. W. (1997). Are compact cities a desirable planning goal?. Journal of the American planning association, 63(1), 95-106.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.
- Haider, M. A., & Iamtrakul, P. (2022). Analyzing street crime hotspots and their associated factors in Chittagong City, Bangladesh. Sustainability, 14(15), 9322.
- Haurin, D. R., & Brasington, D. (1996). School quality and real house prices: Inter-and intrametropolitan effects. Journal of Housing Economics, 5(4), 351-368.
- Hipp, J. R., & Boessen, A. (2012). Immigrants and social distance: Examining the social consequences of immigration for Southern California neighborhoods over fifty years. The Annals of the American Academy of Political and Social Science, 641(1), 192-219.
- Hipp, J. R., & Perrin, A. J. (2009). The simultaneous effect of social distance and physical distance on the formation of neighborhood ties. City & Community, 8(1), 5-25.
- Huang, Z., & Du, X. (2015). Assessment and determinants of residential satisfaction with public housing in Hangzhou, China. Habitat International, 47, 218-230.
- Ibem, E. O., & Amole, D. (2013). Residential satisfaction in public core housing in Abeokuta, Ogun State, Nigeria. Social Indicators Research, 113, 563-581.
- Ioannides, Y. M. (2011). Neighborhood effects and housing. In Handbook of social economics Vol. 1, pp. 1281-1340. North-Holland.
- Ismail, H. and Shaari, S.M. (2019). Housing decision: the choice between location, house and neighbourhood among malaysian generations, MATEC Web of Conferences, 266, p. 01026. Available at: https://doi.org/10.1051/matecconf/201926601026.

- Ismail, H., & Shaari, S. M. (2020). The location, house, or neighbourhood choice preferences among Malaysian housing generations. Journal Of Surveying, Construction And Property, 11(2), 64-74.
- Istikomah, K. (2019). The millennial generation buying behaviour in purchasing houses case of modest housing industry in Indonesia'. Available at: https://doi.org/10.4108/eai.20-1-2018.2281883.
- Khan, P. A., Azmi, A., Juhari, N. H., Khair, N., & Daud, S. Z. (2017). Housing Preference for first time home buyer in Malaysia. International Journal of Real Estate Studies, 11(2), 1–6.
- Koklic, M. K., & Vida, I. (2011). Consumer strategic decision making and choice process: prefabricated house purchase. International Journal of Consumer Studies, 35(6), 634-643.
- Kurniawan, A., & Fanani, D. (2022). Examining resident's perception of sustainability tourism planning and development: the case of malang city, Indonesia. Geo Journal of Tourism and Geosites, 40(1), 242-252.
- Li, X., Chen, H., & Zhu, Z. (2021). Exploring the relationship between life quality and the perceptions of living-environment crises. BMC Public Health, 21(1), 1-10.
- Liao, C., To, P. L., Wong, Y. C., Palvia, P., & Kakhki, M. D. (2016). The impact of presentation mode and product type on online impulse buying decisions. Journal of Electronic Commerce Research, 17(2), 153.
- Lim, S. H., & Kim, D. J. (2020). Does emotional intelligence of online shoppers affect their shopping behavior? From a cognitive-affective-conative framework perspective. International Journal of Human–Computer Interaction, 36(14), 1304-1313.
- Mariadas, P. A., Abdullah, H., & Abdullah, N. (2019). Factors influencing the first home purchase decision of middle-income earners (M40) in Selangor, Malaysia. e-BANGI, 16(1), 1-11.
- Mohit, M. A., & Nazyddah, N. (2011). Social housing programme of Selangor Zakat Board of Malaysia and housing satisfaction. Journal of Housing and the Built environment, 26, 143-164.

- Mulyano, Y., Rahadi, R. A., & Amaliah, U. (2020). Millennials housing preferences model in Jakarta. European Journal of Business and Management Research, 5(1).
- Murty, M. N., Gulati, S. C., & Banerjee, A. (2004). Measuring benefits from reduced air pollution in the cities of Delhi and Kolkata in India using hedonic property prices model. Institute of Economic Growth.
- National Association of Realtors. (2013). National community preference survey, 2013. Retrieved from http://www.realtor.org/sites/default/files/reports/2013/2013-community-preference-analysis-slides.pdf
- National Association of Realtors and Portland State University. (2015). Community & transportation preferences survey: U.S. metro areas, 2015. Retrieved from http://www.realtor.org/reports/nar-2015-community-preference-survey
- Nelson, A. C. (2013). Reshaping metropolitan America. Washington, DC: Island Press.
- Niriella, N.C. (2011). 'Housing market in metropolitan Colombo: New trends', Sri Lanka Journal of Advanced Social Studies, 1(1). Available at: https://doi.org/10.4038/sljass.v1i1.3815.
- Omeraki Çekirdekci, Ş. (2020). There is no place like home: Poverty and the squatter house. Journal of Consumer Behaviour, 19(3), 252-263.
- Opaluwa, A. I., & Aribigbola, A. (2015). Factors affecting the choice of residential housing in Lokoja, Kogi State, Nigeria. International Journal of Innovative Science, Engineering & Technology, 2(10), 850-859.
- Rahadi, R. A., Wiryono, S. K., Koesrindartoto, D. P., & Syamwil, I. B. (2015). Factors influencing the price of housing in Indonesia. International Journal of Housing Markets and Analysis, 8(2), 169–188
- Rahman, N. A., Omar, D., & Salleh, A. G. (2012). Determinant factors of neighbourhood quality. Planning Malaysia, 10.

- Ramayah, T. J. F. H., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. An updated guide and practical guide to statistical analysis. (2nd ed). Kuala Lumpur, Malaysia: Pearson.
- Rathnayaka, R. M. K. B., Ariyawansa, R. G., & Endagamage, D. (2020). Factors Affecting To Buying Decision Of Middle-Income House Buyers: Study On Selected Middle-Income House Projects In Colombo, Proceedings of International Conference on Real Estate Management and Valuation.
- Ridker, R. G., & Henning, J. A. (1967). The determinants of residential property values with special reference to air pollution. The Review of Economics and Statistics, 246-257.
- Ringle, C. M., Wende, S., & Will, A. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH.
- Ronald, R., & Dewilde, C. (2017). Why housing wealth and welfare?. In Housing wealth and welfare (pp. 1-34). Edward Elgar Publishing.
- Sarstedt, M., Ringle, C.M. and Hair, J.F. (2020). Handbook of market research,. Available at: https://doi.org/10.1007/978-3-319-05542-8.
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. European Journal of Marketing, 53(11), 2322-2347.
- Sirpal, R. (1994). Empirical modeling of the relative impacts of various sizes of shopping centers on the values of surrounding residential properties. Journal of Real Estate Research, 9(4), 487-505.
- Taylor, P., and Keeter, S. (2010). Millennials: confident. connected. open to change. Pew Research Center (2010).
- Teck-Hong, T. (2011). Neighborhood preferences of house buyers: the case of Klang Valley, Malaysia. International Journal of Housing Markets and Analysis, *4*(1), 58-69.

- Thanaraju, P., Khan, P. A. M., Juhari, N. H., Sivanathan, S., & Khair, N. M. (2019). Factors affecting the housing preferences of homebuyers in Kuala Lumpur. Planning Malaysia, 17.
- Tyrväinen, L., Pauleit, S., Seeland, K., & De Vries, S. (2005). Benefits and uses of urban forests and trees. Urban forests and trees: A reference book, 81-114.
- Wang, Y., Chau, C. K., Ng, W. Y., & Leung, T. M. (2016). A review on the effects of physical built environment attributes on enhancing walking and cycling activity levels within residential neighborhoods. Cities, 50, 1-15.
- Zabel, J. E., & Kiel, K. A. (2000). Estimating the demand for air quality in four US cities. Land Economics, 174-194.
- Zhang, J., Li, H., Lin, J., Zheng, W., Li, H., & Chen, Z. (2020). Metaanalysis of the relationship between high quality basic education resources and housing prices. Land Use Policy, 99, 104843.
- Zhao L., Liang C., Gu D. (2021). Mobile social media use and trailing parents' life satisfaction: Social capital and social integration perspective. International Journal of Aging and Human Development, 92(3), 383–405.