

The Roles of Reference Group towards the First-Time Homebuyers' Purchase Decision of Wellness Real Estate in Bangkok, Thailand

Kongkidakarn Sakulsinlapakorn

International College, Burapha University, Thailand

*Corresponding author: kongkidakarn.sa@go.buu.ac.th

Abstract

The growing wellness trend has heightened people's awareness of the importance of enhancing their quality of life, particularly in their plans to purchase wellness real estate. This study aims to investigate how wellness condominium attributes influence purchase intentions, with customer-perceived value acting as a mediator. Additionally, it explores the moderating roles of reference groups, specifically informative influence and normative influence, in the relationship between wellness condominium attributes and customer-perceived value. We conducted a questionnaire survey among 400 respondents in Bangkok, Thailand. Hierarchical regression analysis was employed to test our research hypotheses. The results indicate that a strong understanding of wellness condominium attributes positively influences the perception of wellness condominium value, which, in turn, leads to purchase intention. Furthermore, our findings reveal that both informative influence and normative influence act as positive moderators, strengthening the link between wellness condominium attributes and purchase intention. The findings offer valuable insights to real estate developers on how to effectively communicate the value of residential wellness through reference groups, enhance the sustainable development of wellness residential areas, and contribute to the overall well-being of residents, both physically and mentally.

Keywords: Wellness condominium, Wellness real estate, Customer perceived value, Informative influence, Normative influence, Purchase intention.

Introduction

The COVID-19 pandemic has significantly impacted both society and the economy (Verma and Naveen, 2021), reshaping lifestyles worldwide and leading to a gradual adaptation to the 'New Normal.' Individuals are continuously adjusting their living arrangements to prioritize good health. Responding to these changes, real estate developers are increasingly focusing on residential housing development as part of their corporate social responsibility efforts, with the aim of enhancing residents' well-being (Global Wellness Institute, 2018; Patrick et al., 2020).

Wellness real estate, often referred to as residential properties designed to promote well-being, includes housing and condominium developments that incorporate elements to enhance physical, mental, and emotional health (Kyricos, 2018). This sector is experiencing rapid growth in North America, Asia-Pacific, and Europe, with North American and Asian markets doubling their growth rates from 2017 to 2020 (Bergeron, 2021). In 2021, the global wellness real estate market reached a value of \$279.4 billion USD and is projected to exceed \$863.9 billion USD by 2028 (Facts and Factors, 2022). This industry has been growing at an impressive annual rate of approximately 20.70% during the forecast period (Facts and Factors, 2022). Notably, North America played a dominant role in the global wellness real estate market in 2021, accounting for 38% of the market's growth (Bergeron, 2021).

Furthermore, Thailand transitioned into an aging society, with over 20% of its population aged 60 or older in 2021 (Pornchokchai, 2022; Thailand Real Estate, 2022). Projections indicate that by 2040, one-third of Thailand's total population will be aged 60 or over (Thailand Real Estate, 2022). Consequently, there has been a growing demand among Thai citizens for wellness real estate, especially in the Bangkok metropolis and surrounding areas (Pornchokchai, 2022; Thailand Real Estate, 2022). These developments are expected to usher in a new era for the real estate sector in Southeast Asia, particularly in Bangkok City (Pornchokchai, 2022; Thailand Real Estate, 2022). Living in wellness residential areas can provide people with the care they need, improving their quality of life, increasing life expectancy, and preventing diseases (Pitisuttithum et al., 2018). This meets the needs of both the modern and aging population.

In the context of first-time homebuyers, it is essential to acknowledge the challenges they face, particularly those who lack prior home-buying experience and find themselves inundated with an excess of information and a multitude of options (Ding et al., 2020; Wei et al., 2021). This information overload can lead to confusion, significantly complicating the purchase decision-making process. Furthermore, the purchasing behavior of first-time homebuyers is strongly influenced by the attitudes and perceptions of their peers (Al-Nahdi et al., 2015). These individuals often employ a product evaluation standard that involves comparing value, attitude, and behavior with a reference group, encompassing both informative and normative influences (Al-Nahdi et al., 2015; Kembau and Mekel, 2014; Aral and Walker, 2014; Du et al., 2009; Chen et al., 2017; Toelch and Dolan, 2015).

In today's world, although people's life expectancy has increased, many may still grapple with feelings of loneliness, poor health, and unhappiness (Big Chilli, 2019). The rising health consciousness among individuals has spurred the development of

wellness real estate projects, providing dedicated spaces for individuals to reside in health-focused environments. Thus, there is an imperative need for research in this realm, seeking solutions for the burgeoning field of wellness real estate. Notably, within the extensive marketing and management literature, there is a conspicuous research gap as no prior studies have delved into the moderating impact of reference groups, specifically informative and normative influences, on the relationship between wellness condominium attributes and customer perceived value.

This study aims: (1) to identify the significant attributes of wellness condominiums that impact first-time homebuyer purchase decisions; (2) to investigate how the moderating roles of reference group influence (i.e., informative influence and normative influence) affect the link between wellness condominium attributes and customer-perceived value; and (3) to examine how wellness condominium attributes lead to first-time homebuyer purchase intentions via customer-perceived value as a mediator. In summary, this research venture addresses a critical gap in the existing literature by scrutinizing the intricate interplay of factors within the context of wellness real estate, thereby contributing valuable insights to marketing, management, and real estate literature. Its potential extends to informing marketing strategies, guiding real estate development, and shaping housing policies that ultimately enhance the satisfaction and well-being of residents in wellness condominiums.

Literature Review

Wellness Condominium Attributes

The wellness condominium is defined as a building with a collection of individual housing units and shared areas designed to support personal health and nurture healthy behaviors (Akaramanee, 2019). The developers of wellness lifestyle real estate are more concerned about the residents' holistic health (Akaramanee, 2019). Condominium attributes relate to intrinsic and extrinsic aspects that determine the properties (Botschen et al., 1999; Valette-Florence and Rapacchi, 1991). Firstly, intrinsic aspects of wellness condominiums refer to the interior living spaces of a house (Cupchik et al., 2003) with the universal design (Global Wellness Institute, 2018). Universal design relates to the concept of designing living spaces and environments that would be beneficial for the broadest range of people regardless of age, gender, or disability (Mace et al., 1996). Secondly, extrinsic aspects refer to the exterior design, exterior space, environment, and location (Bhatti and Church, 2004). For an extrinsic aspect of wellness condominium, the developers usually provide easy access to local and residential amenities, including restaurants, swimming pool, park, guest rooms, health club facilities, well-integrated public transport, hospitals, shopping malls, etc. (Aluko, 2007; Naderi et al., 2012; Roslan et al., 2020).

Customer-Perceived Value

The perceived value refers to consumers' perception and evaluation of the utility of a product they received from the providers (Zeithaml, 1988). Aulia et al. (2016) investigated customer-perceived value through three measurements: product-related value, social-related value, and personal-related value. First, product-related value refers to a product's attributes that meet customers' needs and expectations. The

needs and expectations can be found in benefits, aesthetic design, the value of experience, convenience, sacrifice, and accessibility of a specific product (Creusen and Schoormans, 2005; Sanchez-Fernandez and Iniesta-Bonillo, 2007; Wang et al., 2018). Second, social-related value refers to the advantages of a product recognized by a consumer from the standpoint of social value on one's current consumption. At the same time, it helps to enhance a consumer's social self-concept (Sweeney and Soutar, 2001). Third, personal-related value encompasses the fundamental motivations guiding people's everyday choices (Huber et al., 2001; Carlson et al., 2018). These motivations manifest in the characteristics and behaviors of individuals who consistently make choices that lead to happiness (Khalifa, 2004; Leckie et al., 2018). Notably, these dimensions serve a dual purpose: effectively segregating inquiries and allowing for a succinct encapsulation of customers' perceptions of value toward wellness condominiums.

Reference Group Influence

The reference group refers to groups of all sizes from whole societies that directly and indirectly influence an individual's attitude and perception of social pressure (Kotler and Armstrong, 2012). The reference group includes family, friends, coworkers, celebrities, idols, and so forth, which directly influence an individual's decision and selection of a specific brand (Kotler and Keller, 2006). It has a direct or indirect influence on the value and behavior of an individual (Kotler and Armstrong, 2012). A reference group brings an individual to new behavior and lifestyle as an individual's behavior results consistent with the reference group (Kim and Han, 2010; Tuwo and Pandowo, 2015). Consistent with previous studies, the reference group's influences on customer's behaviors can be categorized into two dimensions: informative influence and normative influence (Aral and Walker, 2014; Du et al., 2009; Chen et al., 2017; Toelch and Dolan, 2015).

Informative influence, the first dimension, emerges when groups provide information and insights that shape an individual's choices. These groups often comprise experts or knowledgeable peers whose input influences the decision-making process (Toelch and Dolan, 2015; van den Bulte and Wuyts, 2007). The second dimension, Normative influence, centers on the pressure to conform for social acceptance. Individuals align their choices with group norms to fit in and gain approval, thereby strengthening group cohesion (Hu and Van den Bulte, 2014; Toelch and Dolan, 2015). Together, informative and normative influences underscore the significant impact of reference groups on attitudes, behaviors, and decisions. These dimensions frequently operate in conjunction, with informative influence laying the foundation for normative influence, guiding individuals toward conformity with group norms (Aral and Walker, 2014; Du et al., 2009; Chen et al., 2017; Toelch and Dolan, 2015).

Homebuyer Purchase Intention

Intention can be defined as the determination of an individual to have the actual behavior under a specific context (Karunaratne and Ariyawansa, 2015). In this study, "customer purchase intention" is used interchangeably with the term "homebuyer purchase intention," which refers to the tendency of customers to buy a product or service based on the perception of a product or service's information (Ramayah et al., 2010). Also, it refers to the attitude of customers toward a specific product or service

that causes them to have a solid feeling to make a purchase (Idham et al., 2013).

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) links beliefs to behavior and has found wide application across fields such as management, public relations, and healthcare (Loureiro and Araújo, 2014; Salem and Salem, 2018). It posits that an individual's intentions and behaviors are shaped by three key variables: attitude, subjective norm, and perceived behavioral control (Ajzen, 1991; Canguende-Valentim and Vale (2022); Pourmand et al. (2020)). (1) Attitude refers to the individual's evaluation of specific behavior (Ajzen, 1991; Salem and Salem, 2018), providing insights into how first-time homebuyers' attitudes towards purchasing wellness condominiums are influenced by wellness attributes and reference groups. (2) Subjective norms encompass the perceived social pressure or influence to engage in a particular behavior (Ajzen, 1991; Salem and Salem, 2018). This study explores how the opinions and preferences of reference groups (informative and normative influences) impact the subjective norms of first-time homebuyers. (3) Perceived behavioral control reflects an individual's perception of their ability to perform the behavior (Ajzen, 1991; Salem and Salem, 2018).

The Linkage of Wellness Condominium Attributes, Customer-Perceived Value, and Homebuyer Purchase Intention

In recent years, housing research has experienced a significant transformation, with an expanded focus on exploring various dimensions of properties, particularly within the condominium and housing sectors. These dimensions encompass both intrinsic and extrinsic attributes. Intrinsic attributes represent inherent property qualities such as design, layout, and features, while extrinsic attributes encompass external factors like location, surroundings, and community amenities that collectively contribute to the property's perceived value.

This evolving research landscape now places a greater emphasis on analyzing diverse facets of housing, including structural, functional, and physical aspects, as well as understanding the broader housing environment's impact on human well-being. As highlighted by Roslan et al. (2020), housing transcends its traditional role of providing shelter; it is intricately linked with human wellness. This perspective is further underscored by Henilane (2015), who emphasizes how economic and political factors influence housing concepts, and how residents increasingly prioritize housing satisfaction tied to overall well-being.

Numerous studies have attempted to uncover the interaction between these attributes and customer-perceived value in the context of purchasing decisions and overall satisfaction with residential properties and condominiums. For example, Sangvimonmas and Panichpathom (2020) explored preferences regarding condominiums among the elderly population in Thailand and found that intrinsic attributes such as proximity to parks and natural surroundings, along with the quality of facility offerings, significantly influence customer preferences. Kamal and Pramanik (2015) conducted research in Dhaka City, Bangladesh, revealing that extrinsic attributes such as property facilities, location, communication, and intrinsic attributes like physical quality significantly shape customers' buying attitudes. Iman et

al. (2012) identified a range of intrinsic and extrinsic attributes as key influencers on middle to high-income buyers' residential property preferences.

Turning our attention to customer-perceived value, other studies have provided valuable insights. Siahaan et al. (2019) offered insights into housing preferences in Indonesia, outlining how economic and locational factors emerge as primary determinants shaping customer perceptions of value. Lundgren's (2013) work on residential development in Sweden emphasized the influence of both intrinsic and extrinsic attributes on customer-perceived value.

In order to comprehensively explore the nuanced aspects of customer-perceived value in the context of wellness condominiums, this study employs the framework established by Aulia et al. (2016). This framework categorizes customer-perceived value into three distinctive dimensions: product-related, social-related, and personal-related value. Capitalizing on the innovative nature of wellness real estate in the business landscape, this research embraces the opportunity to delve into customer preferences and collect valuable data regarding both intrinsic and extrinsic attributes associated with wellness condominiums in Thailand. In pursuit of this endeavor, the following hypothesis is formulated:

H1 Wellness condominium attributes have a positive effect on customer-perceived value.

In marketing research, value perception can be established through product consumption (Huber et al., 2001). A customer with a strong intention to purchase a specific product is willing to allocate more resources to it (Paladino and Ng, 2012). For example, a customer interested in green products is more likely to invest in environmentally friendly options. Customer behavior aligns with their purchase decision-making process (Chan and Lau, 2000). A prior study by Wibowo et al. (2020) on Green Residences in Indonesia found that perceptions of novelty and price significantly influence value perceptions, ultimately impacting purchase intentions.

In the context of wellness real estate, there is a scarcity of research focusing on first-time homebuyers. A study by Rieger et al. (2019) explored housing selection trends among first-time homebuyers from 1997 to 2017. It revealed that over half of homebuyers tended to purchase homes with less than 2,000 square feet during this period, with a primary consideration being house size for their family, without extensive regard for other factors, such as residential neighborhood or housing features, that contribute to improved quality of life or increased life expectancy. Understanding an individual's purchase intention is pivotal for predicting specific behavior (Francis et al., 2004). Building on this literature and prior research, we propose the following hypothesis to examine the relationship between customer-perceived value and homebuyer purchase intention:

H2 Customer-perceived value has a positive effect on homebuyer purchase intention.

Moderating Effect of Reference Group Influence

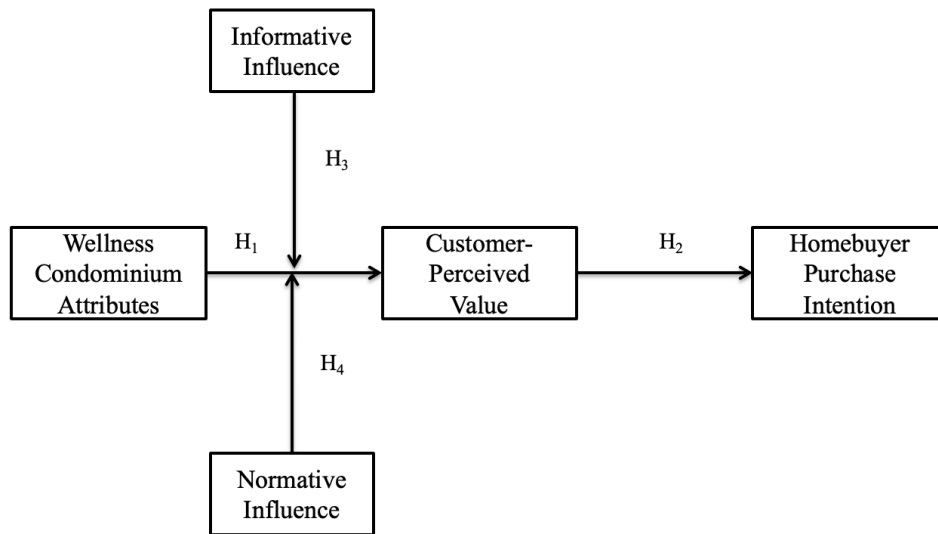
In this study, the researcher focuses on two dimensions of reference group influence: informative and normative influence. Informative influence pertains to the new information or arguments provided by reference groups, which individuals receive in the form of words, opinions, or actions, capable of altering individual attitudes (Toelch and Dolan, 2015). When individuals seek new information to make informed decisions, they often align with reference groups to access relevant and helpful insights (Goel and Goldstein, 2014; Price et al., 2006). Normative influence, on the other hand, relates to a group's social norms and standards that directly influence individual behavior because individuals tend to act in ways that conform to these norms (Hu and Van den Bulte, 2014; Toelch and Dolan, 2015). In social contexts, group members value their self-identity and aspire to form a social identity with fellow group members (Harmeling et al., 2017; Kuan et al., 2014). Consequently, group members tend to compare and adapt their behaviors to align with the reference group (Harmeling et al., 2017; Kuan et al., 2014).

The selection of these moderating variables was grounded in their potential significance within the realm of wellness condominiums. Informative influence has the capacity to provide buyers with valuable insights regarding the wellness attributes of such condominiums, potentially enhancing their perceived value. Normative influence, on the other hand, is instrumental in shaping individuals' behaviors based on societal norms, which can further impact how they perceive the value of wellness condominiums. Our choice of these moderating variables aligns with the goal of this study: to contribute new knowledge to the field by examining these underexplored dimensions and their influence on the relationship between wellness condominium attributes and customer-perceived value. By shedding light on the moderating effects of informative and normative influences, we aim to provide a more comprehensive understanding of customer behavior in the context of wellness real estate.

Notably, there is a notable absence of studies within the marketing and management literature that have explored the moderating roles of reference group influence, specifically informative and normative influence, on the relationship between wellness condominium attributes and customer-perceived value. The scarcity of prior studies addressing these specific dimensions within the context of wellness condominiums underscores the novelty and potential impact of our research. This study bridges this gap by systematically investigating how informative and normative influences moderate the relationship between wellness condominium attributes and customer perceived value.

H3 Informative influence positively moderates the relationship between wellness condominium attributes and customer-perceived value.

H4 Normative influence positively moderates the relationship between wellness condominium attributes and customer-perceived value.

Figure 1: Conceptual framework

Methodology

Questionnaire Design

This study developed a survey questionnaire (close-ended questions) to acquire responses from participants. The questionnaire consisted of six parts, including home buying experience (1 item) - serving as a filter to identify first-time homebuyers, demographic profile (6 items), wellness condominium attributes (13 items), customer-perceived value (9 items), reference group influence (8 items), and homebuyer purchase intention (3 items). To ensure the questionnaire's content validity, it was reviewed by three qualified content experts in the field of business and marketing, using the Indexes of Item-Objective Congruence (IOC). The experts found that the survey questionnaire had excellent content validity. Respondents were asked to rate their level of agreement with each statement using a scale ranging from 1 (not at all important or strongly disagree) to 5 (very important or strongly agree). Additionally, the measurement scales used in the questionnaire were adapted from various existing studies in the respective fields, with thirteen wellness condominium attributes items adapted from Aluko (2007), Kapedani et al. (2019), Naderi et al. (2012), and Roslan et al. (2020), nine customer-perceived value items adapted from Lundgren (2013) and Siahaan et al. (2019), eight reference group influence items adapted from Ding et al. (2020), Sajjanit (2020), and Wang et al. (2019), and three homebuyer purchase intention items adapted from Chia et al. (2016), Karunarathne and Ariyawansa (2016), and Zhang et al. (2020).

Data Collection

A questionnaire survey was used as the primary data-gathering method, targeting individuals in central Bangkok, Thailand. The approach involved randomly approaching potential respondents at department stores. Participation was voluntary, with assurances of strict confidentiality and anonymity. In this study, department stores were intentionally chosen for the diverse cross-section of the population, including potential first-time homebuyers from various backgrounds. This approach

aimed to ensure a representative sample of the target group. The questionnaire included a dedicated question to confirm respondents' eligibility as first-time homebuyers, aligning with research objectives. The sampling approach received approval from BUU Research Ethics Committees at Burapha University, emphasizing ethical rigor and data validity.

Population and Sampling Information

The researcher determined the sample size by employing an equation by Yamane (1973) proposed at a confidence level of 95% and a precision level of 0.05. This formula is used to find the sample size.

Formula,	$n = N / (1 + Ne^2)$
Where	n = sample size or respondents for this study
	N = a population size
	e = the level of precision (A 95% confidence level or 5% precision level)
	$n = 5,588,222 / (1 + 5,588,222 (0.05)^2)$
	n = 399.97

The total sample size, n = 400

The data of Bangkok's population in 2020, male population = 2,625,938 and female population = 2,962,284 (Department of Provincial Administration, 2021). A total number of 400 respondents were asked to answer the questionnaire.

Data Analysis

In this study, Structural Equation Modeling (SEM) has been used to assess the reliability and validity of the construct measures. Furthermore, Hierarchical Regression Analysis has been employed to analyze the hypotheses to get the hypothesis tests' results in this study.

Results

Characteristics of Respondents

The respondent selection aimed to encompass a diverse cross-section of the population to understand first-time home purchases in wellness real estate. This study included individuals of various ages, marital statuses, education, occupations, and income levels, providing insights into evolving homebuying behavior. Table 1 presents the fundamental characteristics of 400 respondents, encompassing gender, marital status, age, education level, occupation, and monthly income. The sample consisted of 67.75% female and 32.25% male respondents, with a majority being single (45.25%) and in a relationship (32.25%). Most respondents fell within the 50 – 59 age group (31.75%), closely followed by those aged 40 to 49 (22.75%). Furthermore, the highest percentage held a Bachelor's Degree (67%), and a significant portion worked in the private sector (39%), while 28% were employed in the public sector. In terms of income, the majority earned over 55,000 Baht per month (29.5%), with the next largest group earning between 45,001 and 55,000 Baht (21.5%).

Table 1: Characteristics of respondents

Classification	Frequency	Percentage (%)
Gender		
Male	129	32.25
Female	271	67.75
Marital status		
Single	181	45.25
Married	79	19.75
In a relationship	129	32.25
Divorced	8	2.00
Widowed	3	0.75
Age (Years old)		
Under 18	0	0
18-29	34	8.50
30-39	65	16.25
40-49	91	22.75
50-59	127	31.75
60-69	83	20.75
70 or older	0	0
Education level		
High school or lower	18	4.50
Bachelor's Degree	268	67.00
Master's Degree	100	25.00
Doctoral Degree	14	3.50
Occupation		
Student	2	0.50
Public sector	112	28.00
Private sector	156	39.00
Unemployment	10	2.50
Self-employed	51	12.75
Freelance/part-time	47	11.75
Housewife	4	1.00
Retired	18	4.50
Income per month (Baht)		
Less than 15,000	24	6.00
15,001-25,000	46	11.50
25,001-35,000	59	14.75
35,001-45,000	67	16.75
45,001-55,000	86	21.50
More than 55,000	118	29.50

Reliabilities and Validities of Measurement Scales

Confirmatory factor analysis and descriptive analysis are used to assess all scales' reliabilities and validities, as shown in Table 2 and Table 3. Table 2 indicates that CFA yields a model that fits the data well, with GFI, NNFI, and CFI all exceeding 0.90, RMSEA, and RMR not exceeding 0.08. All item loadings ranging from 0.73 to 0.95 are significant at the 0.01 level, which indicates convergent validities of all the measures, and all the measures are acceptable.

As shown in Table 3, all the constructs' Cronbach's alpha coefficients (ranging from 0.821 to 0.967) and the composite reliabilities (CRs) (ranging from 0.829 to 0.963) indicate that each exceeds the accepted reliability threshold of 0.70. In addition, all of

the Average Variance Extracted (AVEs) are greater than the 0.5 cutoffs (ranging from 0.581 to 0.819). In addition, all the measures demonstrate adequate reliabilities. Finally, all diagonal elements representing the square root of AVEs are larger than any corresponding row or column entry, meaning each construct sufficiently differs from other constructs; therefore, the discriminant validities of all measures are established.

Table 2: Measurement scale items and CFA results

Latent variables	Observed variables	SLC (t-value)
Wellness condominium attributes	1. Bathroom, kitchen, and bedroom with accessible layout and barrier-free.	0.77 (17.93)
	2. Universal design for a variety of users.	0.81 (19.36)
	3. Structure and wall material allows for easy functional adaptation.	0.85 (20.97)
	4. Physical condition of the house meets your need.	0.84 (20.72)
	5. Smart-home features.	0.86 (21.42)
	6. Environmentally friendly house design and features.	0.88 (22.08)
	7. Ergonomic design for user diversity.	0.86 (21.48)
	8. Residential amenities (including restaurants, swimming pools, parking lot, guest rooms, fitness, and health club facilities) meet your needs.	0.81 (19.53)
	9. Convenient access to hospitals, health care centers, and clinics.	0.80 (18.99)
	10. Easy access to shopping malls, recreational areas, and public transportation.	0.82 (19.96)
	11. Safe and no crime rate.	0.87 (22.01)
	12. Healthy physical environment, well-maintained property, beautiful landscape, and green areas.	0.82 (19.95)
	13. Residential areas with green technology for a sustainable lifestyle.	0.77 (17.97)
Customer perceived value	1. I feel it is suitable for both single-person and family.	0.77 (17.93)
	2. I feel it is comfortable as a place to rest.	0.75 (17.56)
	3. I feel satisfied with the layout and functional interior design.	0.78 (18.23)
	4. I feel people who live in this condominium will be more appreciated by friends and family.	0.73 (16.56)
	5. Relatives who visit this condominium will give compliments for the wellness condominium.	0.77 (18.04)
	6. People in this residential area can easily socialize with one another.	0.84 (20.32)
	7. Staying in this condominium makes me/family more relaxed.	0.74 (17.00)
	8. This condominium creates a feeling of well-being.	0.74 (16.99)
	9. This house helps me prepare for the wellness lifestyle.	0.80 (18.91)
Informative influence	1. When I want to know the information about wellness condominium, I frequently ask my friends or colleagues.	0.87 (21.88)
	2. Before I buy wellness condominium, I often gather information from friends or family.	0.95 (25.33)
	3. Before I buy, I tend to follow information available on online consumer groups, online reviews, and blogs.	0.89 (22.80)
	4. I always consult other people to help me choose the best	0.85 (20.71)

	thing.	
Normative influence	1. I often identify myself with celebrities, friends, or others by purchasing the same things they purchase.	0.81 (18.83)
	2. If I want to have a better quality of life like someone, I will try to buy the same wellness condominium.	0.83 (19.76)
	3. When my family members, friends, or celebrities buy a wellness condominium, it makes me feel confident that it is a good product.	0.90 (22.05)
	4. I achieve a sense of belonging by purchasing the same wellness condominium as others purchase.	0.78 (18.21)
Homebuyer purchase intention	1. If wellness condominium is at a good distance from all the necessary amenities, I intend to buy it.	0.77 (17.62)
	2. If wellness condominium has all necessary features which I like, I intend to buy it.	0.83 (19.76)
	3. If wellness condominium provides residents with beautiful landscape, green areas, green technology for a sustainable lifestyle, I intend to buy it.	0.78 (16.25)

Note: $\chi^2=682.23$; $df=449$; $\chi^2/df=1.52$; GFI=0.91; NNFI=0.99; CFI=0.99; RMSEA=0.036; RMR=0.072; SRMR=0.038; SLC: standardized loading coefficient

Table 3: Descriptive analysis, correlations, reliabilities, and discriminant validities of measurements

Model constructs	(1)	(2)	(3)	(4)	(5)
(1) Wellness condominium attributes	0.817^a				
(2) Customer perceived value	0.751 ^b	0.762			
(3) Informative influence	0.779	0.663	0.905		
(4) Normative influence	0.508	0.557	0.387	0.848	
(5) Homebuyer purchase intention	0.629	0.710	0.595	0.456	0.786
Cronbach's alpha (α)	0.967	0.930	0.941	0.895	0.821
Composite reliability (CR)	0.963	0.925	0.948	0.911	0.829
AVE	0.667	0.581	0.819	0.719	0.618

Note: ^aDiagonal elements (in bold) represent the square root of the AVE; ^bOff-diagonal elements (including the lower triangle of the matrix) represent the standardized correlations among constructs

The Results of Research Hypothesis Testing

This study employs hierarchical regression analysis to examine all research hypotheses. As depicted in Table 4, the initial regression analysis within Model 1a includes two control variables: age and gender. The results indicate that age does not exert a significant influence on customer perceived value. However, gender exhibits a statistically significant negative relationship at the 0.001 significance level ($\beta = -0.194$, $t = -3.927$). This finding suggests that male respondents tend to have a different perspective when evaluating the value of wellness condominiums compared to their female counterparts. Specifically, male respondents demonstrate a heightened perception of the value of wellness condominiums. The second regression of Model 2a adds an independent variable (wellness condominium attributes) to test the first direct effect. It shows wellness condominium attributes positively impact customer perceived value ($\beta = 0.741$, $t = 22.540$) at 0.001 significance level, supporting *H1*. The third regression of Model 2b adds an independent variable (customer perceived value) to test the second direct effect. It shows customer perceived value positively impacts homebuyer purchase intention ($\beta = 0.795$, $t = 25.908$) at 0.001 significance

level, supporting *H2*. The fourth regression of Model 3a adds the first interaction term of an independent variable (wellness condominium attributes) and the first moderating variable (informative influence); which are mean-centered before the calculation to avoid multicollinearity interference. It shows that informative influence positively moderates the link between wellness condominium attributes and customer perceived value ($\beta = 0.299$, $t = 9.189$) at 0.001 significance level, supporting *H3*. The fifth regression of Model 4a adds the second interaction term of an independent variable (wellness condominium attributes) and the second moderating variable (normative influence); which are mean-centered before the calculation to avoid multicollinearity interference. It shows that normative influence positively moderates the link between wellness condominium attributes and customer perceived value ($\beta = 0.278$, $t = 9.027$) at 0.001 significance level, supporting *H4*.

Table 4: Results of hierarchical regression analysis: Standardized regression coefficients (t-value)

Variables	Dependent variable: Customer perceived value			
	Model 1a	Model 2a	Model 3a	Model 4a
Control variables				
Age	0.031 (0.630)	0.056 (1.707)	0.034 (1.144)	-0.019 (0.724)
Gender	-0.194 (-3.927) ^{***}	-0.107 (-3.263) ^{**}	-0.085 (-2.864) ^{**}	-0.076 (-2.866) ^{**}
Main effect				
Wellness condominium attributes		0.741 (22.540) ^{***}	0.476 (9.807) ^{***}	0.409 (8.996) ^{***}
Moderating effects				
Informative influence			0.389 (7.538) ^{***}	0.227 (4.620) ^{***}
Wellness condominium attributes x Informative influence			0.299 (9.189) ^{***}	0.169 (5.202) ^{***}
Normative influence				0.295 (7.921) ^{***}
Wellness condominium attributes x Normative influence				0.278 (9.027) ^{***}
VIF (\leq)	1.002	1.015	1.241	1.384
R²	0.038	0.579	0.664	0.732
R² change	0.038	0.541	0.086	0.068
F change	7.816	508.047	50.288	49.345
Sig. F change	0.000	0.000	0.000	0.000

Dependent variable: Homebuyer purchase intention				
Variables	Model 1b	Model 2b	Model 3b	–
Control variables				
Age	0.003 (0.063)	–0.022 (–0.715)	–	–
Gender	–0.182 (–3.693) ^{***}	–0.028 (–0.927)	–	–
Main effect				
Customer perceived value		0.795 (25.908) ^{***}	–	–
VIF (\leq)	1.002	1.039	–	–
R²	0.033	0.641	–	–
R² change	0.033	0.608	–	–
F change	6.816	671.211	–	–
Sig. F change	0.001	0.000	–	–

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Discussions and Conclusions

Nowadays, a growing trend of healthcare and wellness increases people's awareness, prompting them to seek ways to enhance their quality of life for better health. Living in wellness residential areas can contribute to getting the necessary care, improving one's quality of life, increasing life expectancy, and preventing diseases (Pitisuttithum *et al.*, 2018). Consequently, individuals are adjusting their lifestyles to prioritize health, particularly in their plans to invest in wellness real estate. For first-time homebuyers, the opinions of others can significantly influence their perception of societal pressures when choosing one house over another (Al-Nahdi *et al.*, 2015). This influence extends beyond fulfilling basic physical needs; it involves identifying with societal roles and preferences (Kembau and Mekel, 2014). Reference groups, including informative and normative influences, play a pivotal role in shaping a homebuyer's decisions (Aral and Walker, 2014; Du *et al.*, 2009; Chen *et al.*, 2017; Kim and Han, 2010; Toelch and Dolan, 2015; Tuwo and Pandowo, 2015). This study investigates how wellness condominium attributes and reference groups can assist first-time homebuyers in making the best investment for their health and well-being while aligning with Sustainable Development Goals (SDGs) 3 and 11 – 'Good Health and Well-being' and 'Sustainable Cities and Communities', respectively. The SDGs were established by the United Nations in 2015 to advance human well-being, economic prosperity, environmental protection, and global peace and prosperity by 2030. These 17 interconnected goals underscore the importance of harmonizing these fundamental elements of sustainability (Pradhan *et al.*, 2017).

First and foremost, this research delves into the pivotal wellness condominium attributes that sway the decisions of first-time homebuyers. By examining factors that drive first-time homebuyers to opt for wellness condominiums, this study directly addresses SDG 3, which focuses on ensuring healthy lives and promoting well-being for all at all ages. This investigation reveals the top five factors, among the thirteen considered, that resonate with first-time homebuyers and encourage them to choose

wellness condominiums: (1) “Environmentally friendly house design and features” emerges as the most compelling factor, with a mean value of 3.31. This discovery closely aligns with Rashid and Shahrudin (2017) on green home purchases, reinforcing the significance of sustainability and eco-conscious features within the real estate market. This corresponds with SDG 11, which seeks to make cities and human settlements inclusive, safe, resilient, and sustainable. (2) “Structure and wall material that allows for easy functional adaptation” scores a substantial 3.30. This finding is in line with Tarpio and Huuhka (2022) on housing functions and features, which also highlights the adaptability of housing structures as a primary driver of future purchases, reinforcing the relevance of the study’s findings in alignment with SDG 11’s emphasis on sustainable infrastructure. (3) “Universal design for a variety of users”, rated at 3.27, gains prominence in light of Tarpio and Huuhka (2022) on housing functions and features. This emphasizes the pivotal role of universal design in accommodating all family members. It aligns with SDG 11’s focus on inclusivity and community integration. (4) “Residential amenities (including restaurants, swimming pools, parking lots, guest rooms, fitness, and health club facilities) meet your needs” (3.22) corresponds with the creation of inclusive and sustainable communities, as encouraged by SDG 11, and aligns with Kamal and Pramanik (2015), emphasizing the substantial influence of these amenities on customers’ purchase decisions, underscoring the paramount importance of incorporating such amenities in wellness real estate development. (5) “Convenient access to hospitals, health care centers, and clinics” (3.18) aligns with SDG 3, which promotes good health and well-being by ensuring access to quality healthcare services, and is supported by Njo and Sugeng (2022) on housing purchase intentions during the pandemic. The research reveals that customers highly prioritize such access, significantly influencing homebuyer purchase intentions, as proximity to health facilities facilitates easy access to the growing demand for healthcare services.

Second, the researcher examines how wellness condominium attributes generate homebuyer purchase intention through customer-perceived value as a mediator. Empirical findings show that wellness condominium attributes positively affect customer-perceived value (*supporting H1*), and customer-perceived value positively affects homebuyer purchase intention (*supporting H2*). In this regard, when customers highly evaluate the attributes of wellness condominiums offered by developers, they usually form impressions that can increase their interest and perception of the value of wellness condominiums (Siahaan *et al.*, 2019). This is consistent with previous research by Rashid and Shahrudin (2017), Sangvimonmas and Panichpathom (2020), Siahaan *et al.* (2019), and Tarpio and Huuhka (2022), who found that customers’ favorable evaluations of real estate attributes significantly influence their purchase intentions. Additionally, Tuwo and Pandowo’s (2015) research highlighted the essential role of customer perception in determining their future purchasing choices.

Third, no previous studies in the extent of marketing and management literature have examined the moderating roles of reference groups (i.e., informative influence, normative influence) on the linkage between wellness condominium attributes and customer perceived value. The findings show that informative influence, as the first moderator, positively moderates the relationship between wellness condominium attributes and customer-perceived value (*supporting H3*). The first moderator helps strengthen the perception of the value of wellness condominiums, leading to future purchase intention. Additionally, a previous study on informational factors confirms

that informative influence (as an independent variable) and perceived value (as a mediator) are considered strong drivers in generating customer purchase intention (Yang, 2020). Generally speaking, homebuyers usually obtain relevant information from online groups, reviews, or blogs, which is helpful for decision-making (Goel and Goldstein, 2014; Price *et al.*, 2006). It helps reduce uncertainty and guides future purchasing direction and intention (Goel and Goldstein, 2014; van den Bulte and Wuyts, 2007).

Finally, the investigation reveals that normative influence, acting as the second moderator, positively moderates the relationship between wellness condominium attributes and customer-perceived value (*supporting H4*). This finding underscores the importance of social norms and peer influence in shaping consumers' attitudes and behaviors. The impact of normative influence on purchase intention has been well-documented in previous studies, such as Vongurai's (2021) research on consumer attitudes and purchase intentions. This emphasizes the pivotal role of norms and peer pressure in influencing consumer behavior. Normative influence, rooted in a reference group's social norms and standards, motivates individuals to align their actions with these norms (Hu and Van den Bulte, 2014; Toelch and Dolan, 2015). Moreover, within the context of social interaction, group members often seek to establish a social identity with others in the group (Harmeling *et al.*, 2017; Kuan *et al.*, 2014). This implies that consumers in Thailand are indeed influenced by the norms and standards set by their reference groups when making purchasing decisions.

Theoretical Contributions

This study offers theoretical contributions to marketing and real estate literature, particularly in the context of wellness condominiums for first-time homebuyers. First, this study underscores the pivotal role of reference groups in influencing first-time homebuyers' decisions within the wellness real estate context. It advances the understanding of reference group in the context of wellness real estate. Second, the study introduces a comprehensive framework that incorporates reference group and various aspects of wellness condominium decision-making. This framework elucidates how these factors impact customer-perceived value and purchase intentions, providing a valuable reference for future research. Third, there is a growing interest in wellness marketing within the marketing literature. This study adds value by providing guidance to businesses on effectively communicating wellness values to prospective buyers. It also offers a detailed explanation of the specific attributes that enhance the perceived value of wellness condominiums. Next, this study contributes to the literature on sustainable development within wellness residential areas. It outlines practical steps for real estate developers to align their projects with sustainability goals, meeting the preferences of environmentally-conscious consumers. Lastly, this study primarily focuses on the Asian market, particularly Bangkok, Thailand. This location has unique cultural and demographic characteristics. By addressing the rising health and wellness trends in this area, the study significantly enhances the comprehension of how businesses can adapt and cater to the specific needs of the Bangkok and Thailand markets and, by extension, the broader Asian market.

Limitations and Future Research Directions

The researcher addresses three limitations of the present study and provides suggestions for future research directions. First, the survey primarily covered Bangkok, Thailand, possibly limiting its generalizability due to cultural variations across Asian regions. Future studies should expand to diverse locations for broader insights. Second, this study primarily investigated the main effect of wellness condominium attributes on customer-perceived value and, subsequently, on homebuyer purchase intention. It also examined the moderating roles of informative influence and normative influence in the relationship between wellness condominium attributes and customer-perceived value. Future researchers should explore additional independent, dependent, or moderating variables to gain a more comprehensive understanding of the multifaceted factors influencing homebuyers' decision-making processes. Lastly, this study solely utilized a quantitative questionnaire approach. Future research may benefit from mixed methods, incorporating both quantitative and qualitative approaches to provide a deeper, holistic understanding of wellness condominium preferences, customer-perceived value, and purchase intentions.

Practical Implications for Asian Business

The study's findings hold valuable practical implications for a diverse audience, including academic scholars, marketing managers, real estate developers, government policymakers, and Asian market businesses. The implications cover various aspects, with a specific focus on aligning with Sustainable Development Goals (SDGs) while striving to boost the overall well-being and satisfaction of housing market residents.

To address SDG 3: Good Health and Well-being, businesses in the Asian market should prioritize conveying wellness values, enhancing wellness residences, and delivering value within wellness condominiums. By effectively communicating the perception of residential wellness values through various reference groups, businesses can contribute to the improved health and well-being of residents. This involves identifying the superior attributes of wellness condominiums and employing marketing strategies to convey them to potential buyers. Additionally, real estate developers should focus on designing universally accessible interior living spaces, promoting physical and mental health, fostering community among residents, and providing opportunities for personal growth, aligning with the goal of ensuring good health and well-being for all.

In line with SDG 11: Sustainable Cities and Communities, businesses should also emphasize sustainable development in wellness condominium projects. This includes promoting eco-friendly construction practices, incorporating sustainable materials, enhancing energy efficiency, and fostering environmentally friendly habits among customers. By prioritizing sustainability, businesses contribute to the development of sustainable cities and communities, creating housing options that align with environmental and community well-being goals.

The broader practical implications in this context encompass: (1) Sustainable Development: Recognizing the increasing importance of sustainability in the wellness condominium sector and emphasizing eco-friendly construction practices, including sustainable materials, energy efficiency, and environmentally friendly habits. (2)

Delivering Value: Managers should focus on delivering product-related, social-related, and personal-related values to meet customer needs. This includes offering facilities and services promoting physical and mental health, fostering community among residents, and providing opportunities for personal growth. (3) Leveraging Reference Groups: Increasing the perception of the value of wellness condominiums through different reference groups is essential. Informative and normative influences play a significant role in strengthening this perception. Businesses should utilize effective marketing strategies to leverage recommendations and reviews from trusted sources, such as friends, family, colleagues, celebrities, online consumer groups, reviews, or blogs, to drive future purchase intentions effectively.

By integrating these practical implications, policymakers in the government sector can play a pivotal role in implementing these recommendations to align housing policies with evolving resident preferences and well-being. In addition, stakeholders in the real estate industry and government sector can collaborate effectively to create a housing landscape that not only meets current consumer demands but also contributes to the overall well-being, sustainability, and prosperity of residents, ensuring a sustainable and prosperous future for the housing market in Asia.

References

- Ajzen, I. (1991), "The Theory of Planned Behavior the Theory of Planned Behavior", *Organizational Behavior and Human Decision Processes*, vol. 50, pp. 179-211.
- Akaramanee, N. (2019), "The attitude of the residents towards wellness condominium", *Sarasatr Academic Journal*, vol. 2, no. 3, pp. 339-351.
- Al-Nahdi, T. S. and Abu Bakar, A. (2014), "Factors Influencing Purchase Intention of Real Estate in Saudi Arabia", *Journal of Applied Science and Agriculture*, vol. 9, no. 17, pp. 27-39.
- Al-Nahdi, T.S., Ghazzawi, O.H. and Bakar, A.H.A. (2015), "Behavioral Factors Affecting Real Estate Purchasing", *International Journal of Business and Social Science*, vol. 8, no. 1, pp. 146-154.
- Aluko, B.T. (2007), "Examining valuer's judgment in residential property valuations in metropolitan Lagos", *Nigeria, Property Management*, vol. 25, no. 1, pp. 98-107.
- Aral, S. and Walker, D. (2014), "Tie strength, embeddedness, and social influence: A large-scale networked experiment", *Management Science*, vol. 60, pp. 1352-1370.
- Aulia, S.A., Sukati, I. and Sulaiman, Z. (2016), "A Review: Customer Perceived Value and its Dimension", *Asian Journal of Social Sciences and Management Studies*, vol. 3, no. 2, pp. 150-162.
- Bergeron, P. (2021), "Wellness Real Estate Market Nearly Doubles In Last Few Years", available at <https://www.globest.com/2021/09/30/wellness-real-estate-market-nearly-doubles-in-last-few-years/?slreturn=20230104025029> (accessed 27 January 2023).
- Bhatti, M. and Church, A. (2004), "Home, the culture of nature and meanings of gardens in late modernity", *Housing Studies*, vol. 19, no. 1, pp. 37-51.
- Big Chilli. (2019), "Wellness Real Estate: A \$134 Billion Business with Proven Financial and Physical Benefits That's Booming Worldwide", available at <https://www.thebigchilli.com/feature-stories/wellness-real-estate-a-134-billion-business-with-proven-financial-and-physical-benefits-thats-booming-worldwide> (accessed 19 January 2023).
- Botschen, G., Thelen, E.M. and Pieters, R. (1999), "Using Means-End Structures for Benefit Segmentation and Application to Services", *European Journal of Marketing*, vol. 33, no. 1-2, pp. 38-58.

- Bou-Hamad, I., Hoteit, R. and Harajli, D. (2021), “Health worries, life satisfaction, and social well-being concerns during the COVID-19 pandemic: Insights from Lebanon”, *PLoS ONE*, vol. 16, no. 7, pp. 1-16.
- Canguende-Valentim, C.F. and Vale, V.T. (2022), “Examining the Intention to Purchase Luxury Goods Based on the Planned Behaviour Theory”, *Open Journal of Business and Management*, vol. 10, pp. 192-210.
- Carlson, J., Rahman, M., Voola, R. and De Vries, N. (2018), “Customer engagement behaviours in social media: capturing innovation opportunities”, *Journal of Services Marketing*, vol. 32, no. 1, pp. 83-94.
- Chan, R.Y.K. and Lau, L.B.Y. (2000), “Antecedents of green purchases: a survey in China”, *Journal of Consumer Marketing*, vol. 17, no. 4, pp. 338-357.
- Chen, X., Van der Lans, R. and Phan, T.Q. (2017), “Uncovering the importance of relationship characteristics in social networks: Implications for seeding strategies”, *Journal of Marketing Research*, vol. 54, pp. 187–201.
- Creusen, M.E.H. and Schoormans, J.P.L. (2005), “The different roles of product appearance in consumer choice”, *Journal of Product Innovation Management*, vol. 22, no. 1, pp. 63-81.
- Cupchik, G.C., Ritterfeld, U. and Levin, J. (2003), “Incidental learning of features from interior living spaces”, *Journal of Environmental Psychology*, vol. 23, no. 2, pp. 189-197.
- Department of Provincial Administration. (2021), “ประกาศจำนวนประชากร ปี 2542 – 2563 Thailand Population Announcement”, available at: <https://stat.bora.dopa.go.th/stat/statnew-/statMenu/newStat/sumyear.php> (accessed 25 August 2021).
- Du, W., Yu, C. and Zhao, P. (2009), “The Influence of Different Kinds of Reference Groups on Self-Brand Connections”, *Acta Psychologica Sinica*, vol. 41, pp. 156–166.
- Facts and Factors (2022). “Wellness Real Estate Market Size, Share Global Analysis Report, 2022 – 2028”, available at: <https://www.fnfresearch.com/wellness-real-estate-market> (accessed 31 January 2023).
- Francis, J.J., Eccles, M.P., Johnston, M., Walker, A., Grimshaw, J. and Foy, R. (2004), “Constructing questionnaires based on the theory of planned behavior: A manual for health services researchers”, *Centre for Health Services Research*, pp. 1-42.
- Global Wellness Institute (2018), “Build well to live well: wellness lifestyle real estate and communities”, available at: https://globalwellnessinstitute.org/wp-content/uploads/2018/06/2018Research_BuildWelltoLiveWell_v12FINAL53118_web.pdf?inf_contact_key=37cf2daddbfbad9173d1378c5755429409c74070ac2bf3cfa7869e3cfd4ff832 (accessed 21 June 2021).
- Goel, S. and Goldstein, D.G. (2014), “Predicting individual behavior with social networks”, *Marketing Science*, vol. 33, no. 1, pp. 82–93.
- Harmeling, C.M., Palmatier, R.W., Fang, E. and Wang, D. (2017), “Group marketing: Theory, mechanisms, and dynamics”, *Journal of Marketing*, vol. 81, pp. 1–24.
- Henilane, I. (2015), “The Evaluation of housing situation in Latvia” in Towards Smart, Sustainable and Inclusive Europe: Challenges for Future Development (Eds.), *Turiba University*, Riga, Latvia, pp. 93–106.
- Hu, Y. and Van den Bulte, C. (2014), “Nonmonotonic status effects in new product adoption”, *Marketing Science*, vol. 33, pp. 509–533.
- Huber, F., Herrmann, A. and Morgan, R.E. (2001), “Gaining competitive advantage through customer value oriented management”, *Journal of Consumer Marketing*, vol. 18, no. 1, pp. 41-53.
- Idham, M., Razak, Ibrahim, R., Shaifa, N., Abdullah, H., Hoo, J., Osman, I. and Alias, Z. (2013), “Purchasing Intention towards Real Estate Development in Setia Alam, Shah Alam: Evidence from Malaysia”, *International Journal of Business, Humanities and Technology*, vol. 3, no. 6, pp. 66-75.
- Iman, A.H.M., Pieng, F.Y. and Gan, C. (2012), “A conjoint analysis of buyers’ preferences for residential property”, *International Real Estate Review*, vol. 15, no. 1, pp. 73-105.
- Kamal, M. and Pramanik, S.A.K. (2015), “Customers’ intention towards purchasing

- apartment in Dhaka City, Bangladesh: offering an alternative buying intention model”, *European Journal of Business and Management*, vol. 7, no. 35, pp. 45-58.
- Karunarathne, H.M.L.P. and Ariyawansa, R.G. (2015), “Analysis of house purchase intention”, *Sri Lankan Journal of Management*, vol. 20, no. 3-4, pp. 28-51.
- Kembau, A. and Mekel, P.A. (2014), “Reference groups, family, roles and status on young consumer behavior towards purchase intentions of luxury fashion brands”, *Jurnal EMBA*, vol. 2, no. 2, pp. 1169-1179.
- Khalifa, A.S. (2004), “Customer value: A review of recent literature and an integrative configuration”, *Management Decision*, vol. 42, no. 5, pp. 645-666.
- Kim, Y. and Han, H. (2010), “Intention to pay conventional-hotel prices at a green hotel - a modification of the theory of planned behavior”, *Journal of Sustainable Tourism*, vol. 18, no. 8, pp. 997-1014.
- Kotler, P. and Armstrong, G. (2012). *Principles of Marketing*, Fourteenth Edition, Pearson, New York.
- Kotler, P. and Keller, K.L. (2006). *Marketing Management*, Twelfth Edition, Prentice-Hall, New Jersey.
- Kuan, K.K., Zhong, Y. and Chau, P.Y. (2014), “Informative and normative social influence in group-buying: Evidence from self-reported and EEG data”, *Journal of Management Information Systems*, vol. 30, pp. 151–178.
- Kyricos, M. (2018), “The Growing Phenomenon of Wellness Communities and Lifestyle Real Estate”, *International Journal of Spa and Wellness*, vol.1, no. 2, pp. 144-151
- Leckie, C., Nyadzayo, M.W. and Johnson, L.W. (2018), “Promoting brand engagement behaviors and loyalty through perceived service value and innovativeness”, *Journal of Services Marketing*, vol. 32, no. 1, pp. 70-82.
- Loureiro, S.M.C. and de Araújo, C.M.B. (2014), “Luxury Values and Experience as Drivers for Consumers to Recommend and Pay More”, *Journal of Retailing and Consumer Services*, vol. 21, pp. 394-400.
- Mace, R.L., Hardie, G.J. and Place, J.P. (1996). *Accessible environments: toward universal design*, Van Nostrand Reinhold, New York, NY.
- Melnikas, B. (1998), “Management and modernization of housing facilities: specific features of central and eastern European countries”, *Facilities*, vol. 16, no. 11, pp. 326–333.
- Naderi, I., Sharbatoghlie, A. and Vafaeimehr, A. (2012), “Housing valuation model: an investigation of residential properties in Tehran”, *International Journal of Housing Markets and Analysis*, vol. 5, no. 1, pp. 20-40.
- Njo, A. and Sugeng, K. (2022), “House purchase intention during pandemic COVID-19 in Surabaya, Indonesia”, *Property Management*, vol. 41, no. 2, pp. 191-211.
- Paladino, A. and Ng, S. (2012), “An examination of the influences on ‘green’ mobile phone purchases among young business students: an empirical analysis”, *Environmental Education Research*, vol. 19, no. 1, pp. 118-145.
- Patrick, S.W., Henkhaus, L.E., Zickafoose, J.S., Lovell, K., Halvorson, A., Loch, S., Letterie, M. and Davis, M.M. (2020), “Well-being of parents and children during the COVID-19 pandemic: a national survey”, *Pediatrics*, vol. 146, no. 4. DOI: <https://doi.org/10.1542/peds.2020-016824>
- Pitisuttithum, O., Chantaraprateep, P. and Neeser, K.J. (2018), “Prevalence of healthy aging and factors associated in Thai urban elderly, Bangkok, Thailand”, *Journal of Health Research*, vol. 32, no. 2, pp. S167-S176.
- Pornchokchai, N. (2022), “Wellness Real Estate”, available at <https://www.eventpop.me/e/12653> (accessed 19 January 2023).
- Pourmand, G., Doshmangir, L., Ahmadi, A., Noori, M., Rezaeifar, A., Mashhadi, R., Aziminia, R., Pourmand, A. and Gordeev, V.S. (2020), “An application of the theory of planned behavior to self-care in patients with Hypertension”, *BMC Public Health*, vol. 20, pp. 1-8.
- Pradhan, P., Costa, L., Rybski, D., Lucht, W. and Kropp, J.P. (2017), “A systematic study of sustainable development goal (SDG) interactions”, *Earth’s Future*, vol. 5, pp. 1169–1179.

- Price, V., Nir, L. and Cappella, J.N. (2006), "Normative and informational influences in online political discussions", *Communication Theory*, vol. 16, no. 1, pp. 47-74.
- Ramayah, T., Lee, J.W.C. and Mohamad, O. (2010), "Green product purchase intention: Some insights from a developing country", *Resources, Conservation and Recycling*, vol. 54, no. 12, pp. 1419-1427.
- Rashid, N.R.N.A. and Shaharudin, M.R. (2017), "Customer's purchase intention for a green home", *International Journal of Procurement Management*, vol. 10, no. 5, pp. 581-599.
- Rieger, S., Spader, J., & Veal, S. (2019), "The shifting profile of first-time homebuyers: 1997-2017", *The Joint Center for Housing Studies*, pp. 1-22.
- Roslan, S.N.M., Wan, W.N.A., Kari, F. and Satar, N.M. (2020), "Assessment of housing attributes towards neighbourhood satisfaction in The Klang Valley", *International Journal of Property Science*, vol. 10, no. 1, pp. 1-15.
- Salem, S.F. and Salem, S.O. (2018), "Self-identity and social identity as drivers of consumers' purchase intention towards luxury fashion goods and willingness to pay premium price", *Asian Academy of Management Journal*, vol. 23, pp. 161-184.
- Sanchez-Fernandez, R. and Iniesta-Bonillo, M.A. (2007), "The concept of perceived value: A systematic review of the research", *Marketing Theory*, vol. 7, no. 4, pp. 427-451.
- Sangvimonmas, N. and Panichpathom, S. (2020), "The preferred attributes of the elderly condominium: baby boomer generation", *APHEIT International Journal*, vol. 9, no. 1, pp. 34-46.
- Siahaan, E., Fachrudin, K.A., Sibarani, M.L.L. and Muda, I. (2019), "Evaluating customer perceived value of housing based on location factor and economic value", *Problems and Perspectives in Management*, vol. 17, no. 3, pp. 196-206.
- Sweeney, J.C. and Soutar, G.N. (2001), "Consumer perceived value: The development of a multiple item scale", *Journal of Retailing*, vol. 77, pp. 203-220.
- Tarpio, J. and Huuhka, S. (2022), "Residents' views on adaptable housing: A virtual reality-based study", *Buildings and Cities*, vol. 3, no. 1, pp. 93-110.
- Thailand Real Estate. (2022), "Real estate for health – A new trend", available at <https://thailand-real.estate/news/real-estate-for-health--a-new-trend/> (accessed 19 January 2023).
- Toelch, U. and Dolan, R.J. (2015), "Informational and normative influences in conformity from a neurocomputational perspective", *Trends in Cognitive Sciences*, vol. 19, no. 10, pp. 579-589.
- Tuwo, H.J. and Pandowo, M. (2015), "The influence of social factors on customer purchase intention in using wedding organizer in Manado", *Jurnal EMBA*, vol. 3, no. 3, pp. 29-38.
- Valette-Florence, P. and Rapacchi, B. (1991), "Improvements in means-end chain analysis", *Journal of Advertising Research*, vol. 31, no. 1, pp. 30-45.
- van den Bulte, C. and Wuyts, S.H.K. (2007). *Social Networks in Marketing*, Marketing Science Institute, Cambridge, UK.
- Verma, M. and Naveen, B. R. (2021), "COVID-19 Impact on Buying Behaviour", *The Journal for Decision Makers*, vol. 46, no. 1, pp. 27-40.
- Vongurai, R. (2021), "Factors influencing consumer attitudes and purchase intentions of flash sale through online shopping platforms", *Journal of humanities and social sciences Nakhon Phanom University*, vol. 11, no. 1, pp. 1-20.
- Wang, Y.Y., Lin, H.H., Wang, Y.S., Shih, Y.W. and Wang, S.T. (2018), "What drives users intentions to purchase a GPS Navigation: The moderating role of perceived availability of free substitutes", *Internet Research*, vol. 28, no. 1, pp. 251-274.
- Wei, H.L., Hai, C.Y., Zhu, S.Y. and Lyu, B. (2021), "The impact of consumers' choice deferral behavior on their intertemporal choice preference", *Frontiers in Psychology*, vol. 12, pp. 1-13.
- Yamane, T. (1973). *Statistics: An Introductory Analysis*, 3rd Edition, Harper and Row, New York.
- Yang, X. (2020), "Influence of informational factors on purchase intention in social

- recommender systems”, *Online Information Review*, vol. 44, no. 2, pp. 417-431.
- Zeithaml, V.A. (1988), “Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence”, *Journal of Marketing*, vol. 52, pp. 2–22.
- Zinas, B. Z. and Jusan, M. M. (2017), “Choice behaviour of housing attributes: theory and measurement”, *Asian Journal of Environment-Behaviour Studies*, vol. 2, no. 2, pp. 23-37.