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Factors Affecting Consideration to Switching from Condominium to Townhome for High-Class Market in Bangkok Area During COVID-19 Pandemic

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Abstract

Purpose: Housing estates such as detached houses, townhouses, and townhomes have become more marketable lately, and the popularity of condominiums has declined from the COVID-19 pandemic. In this situation, the keys to the success of both townhomes and condominiums are attracting new consumers and retaining the existing ones. The main purpose of this study is to inspect three categories of antecedents for condominiums consumers' switching intention: push (i.e., satiation), pull (i.e., perceived value), and mooring (i.e., subjective environmental characteristics) factors using push-pull–mooring (PPM) model. Design/Methodology/Approach: High-class townhomes have been selected as the research context. An online survey was proceeded to inspect the proposed research model and hypotheses. The data were collected from 478 respondents living and/or working in Bangkok, who have a monthly family income of 150,000 Thai Baht and above using convenience sampling and snowball sampling methods. This study applied the Structural Equation Model (SEM) and Confirmatory Factor Analysis (CFA) to certify the goodness-of-fit of the model and hypothesis testing. Findings: The outcomes revealed that satiation with amenity has the most significant impact on subjective environmental characteristics, followed by satiation with decoration among the push factors. While among pull factors, hedonic value has the highest significant impact on subjective environmental characteristics, followed by perceived privacy and security. Subjective environmental characteristics also significantly impact switching intention. Originality/Value: The researcher used the PPM model to construct the research framework to understand consumers' switching intentions comprehensively. This study enhances the understanding of consumers' switching intention by locating the push and pull factors based on the differences between condominiums and townhomes in correspondence to subjective environmental characteristics.

Keywords: Switching Intention, High-Class Townhome, Real Estate, COVID-19, Bangkok
JEL Classification Code: H2, H21, J54, Q13

1. Introduction

In the past year, the COVID-19 outbreak has completely changed people's way of living worldwide. Every business segment, including Thailand real estate market, need to adapt to the "New Normal" to support the changing behaviors and needs of a new type of consumer. (Knight Frank Thailand, 2020). The popularity of home buying among Thai people began to change again after nine years before the Thailand Floods in the second half of 2011. Many Thais chose to sell detached houses, townhouses, and townhomes to be moved to condominiums or highlands areas to avoid the flood, making condominium sales rise and become popular. Recently, the situation has changed. When the COVID-19 pandemic occurs, Thais have started to turn back to housing estates for social distancing to lower the risk of COVID-19 Infection from living with many people in the condominium.

Given that new houses in the suburbs are increasing in popularity, the housing transfers in the first quarter of 2020 show that the condominiums dropped to 28,107 units, or minus 1.9%, while housing sales went up 4.7% with 60,917 units. (REIC, 2020).

Since early 2020, the demand for housing products has increased despite the severe economic crisis, especially from April to May 2020, as evidenced by the number of visitors to the residential project on the website. (www.home.co.th). From January to May 2020, the increase was 10% from the same period of the previous year. The search log indicated that houses of the cost 10-20 Million Thai Baht range had the total number of visitors increased by 25% during this five-month window from 86,696 people to 116,264 people. (home.co.th, 2020). In 2020 Thailand's real estate market segmentation was shifting; for example, the townhome & home office segment price ranged between 7 - 15 Million Thai Baht, classified as "High Class" (thinkofliving, 2020). If calculating the approximate house installment, it will be 7,000 Thai baht per month for a house that cost 1,000,000 Thai baht; therefore, for the houses that

cost between 7 - 15 Million Thai Baht, The monthly house payment rate will be from 49,000 baht to 105,000 baht (DDproperty, 2020).

Target groups of these high-priced products If not the business owner, it must be the organization's top executive. These people are considered to be in a stable financial status and have savings in the bank, so in an economic crisis, they have little effect and the unique characteristics of the high-class housing projects located in a good location. However, when location potentially changes, these houses will become more and more expensive as the value of the land increases. Therefore, these assets are considered safe investments because they could be sold for a remarkable profit (home.co.th, 2020).

The main purpose of this research is to study and indicate the importance of factors that affecting consumers' consideration to switching from condominiums to townhomes, including the consumers' who are looking for housing in the high-class market in the Bangkok area, to help the real estate developers in planning and development of their future projects to meet consumer needs.

The researcher did not include foreigners as respondents because Thai laws prohibit foreigners from owning land under their names. The possible option for foreigners is to set up a Thai Limited Company, which foreigners can own not exceeding 49% to own the land or enter into a long-term leasehold with the Landowner (thaiembassy.com, 2020).

2. Literature Review and Research Framework

2.1. Literature Review

2.1.1. Push-Pull-Mooring Theory of Migration

The push-pull–mooring theory of migration (PPM) model originated from the "Laws of Migration" (Ravenstein, 1889), which describes the factors that affect migration. That later becomes the foundation for the push-pull model applied in many human migration types of research as the "dominant paradigm in migration research" (Bansal et al., 2005). Afterward, the concept of mooring elements that could support or obstruct the effect on population migration behavior in terms of personal or social factors is also added to fill in the gap that the push-pull model was not enough to estimate its complicated characteristics.

PPM model was first debuted in 'Migrating' to new service providers: towards a unifying framework of consumers' switching behaviors (Bansal et al., 2005). which study about switching behavior betwixt service providers with three ingredients structure: push, pull, and mooring factors.

Push factors are defined as negative elements which shove individuals to abandon their current places. On the other hand, pull factors have been defined as positive elements drawing individuals to destinations, and mooring factors are personal and social factors that support or obstruct switching intention (Bansal et al., 2005). Therefore, the PPM model is considered a clear framework for researchers to inspect switching behavior through only three ingredients. PPM model is further of a comprehensive framework without a designated push, pull, or mooring factors. This framework requires interpreting research conditions to additional designated push, pull, and mooring factors (Xu et al., 2014).

Dissimilar to other theories that deal with particular variables, for instance, the tenet of deliberated behavior contains attitude, behavioral intention, perceived behavioral control, and subjective standards.

Several scholars use the PPM model to prove user switching behavior in several conditions, for instance, (Bansal et al., 2005)'s switching towards offline service, switching behavior in the airline market (Jung et al., 2017), and shopping behavior in a various channel (Chou et al., 2016). Moreover, in terms of marketing and information systems, the PPM model was utilized in numerous research to study switching behavior in the IT services market; examples include "mobile instant messaging" (Sun et al., 2017), "e-commerce and social commerce" (Li & Ku, 2017), "business applications" (Bhattacherjee & Park, 2014), "social networking sites" (Chang et al., 2014; Xu et al., 2014), "technology standards" (Lin & Huang, 2014), and "blogs" (Zhang et al., 2012), which refers that push, pull and mooring components from PPM model are very useful for study contexts.

The PPM model offers an effective theoretical framework to describe individuals' switching behaviors, which helps the marketers pinpoint the matching potencies that influence their consumer base's action (Bansal et al., 2005). However, even though the studies on marketing and information systems have delivered helpful information towards the spectacle of switching behavior, only a few pieces of research are concerned about consumers' switching intention from hotels to P2P accommodation. Therefore, a prior PPM study inspected outstanding PPM factors such as discontent with the current service, attraction

of substitutes, and switching cost (Bansal et al., 2005; Bhattacherjee & Park, 2014; Lin & Huang, 2014) as these researches gave essential contribution in defining switching behavior in numerous research contexts, according to "P2P accommodation context" (Li & Ku, 2017). mentioned to investigate more context-specific factors. According to this perspective, this research considers significant distinctions between condominiums and townhomes. The researcher indicated context-specific factors to measure push (i.e.satiation) and pull effects (i.e., benefit) to improve the understanding of consumer switching from condominiums to townhomes.

In summary, the researcher assumed that it is necessary to use the PPM model to study the elements that affect consumers' switching intention in terms of theory and practice. The outcomes obtained from this study will help real estate developers understand the trends and consumer demand and plan for improving and designing the products that meet the needs of consumers.

2.1.2. Moderation Role of Mooring Factor

Many migration studies from the past represented mooring elements to play a major role between push and pull elements as the moderator in the relationships and migration behavior (Bansal et al., 2005). Different optimal stimulation levels (OSL) on people tend to react to external stimuli in various ways (Ha & Jang, 2013a). Compared to consumers with weak OSL to consumers with strong OSL, the second one has lower risk recognitions concerning new products or services (Sharma et al., 2014). However, consumers with strong OSL tend to seek new and variant activities, while consumers with weak OSL tend to feel at ease with conversant situations and stimuli (Raju, 1980). Consequently, even though switching intention is directly influenced by push/and pull factors, there are possibilities that the effects may vary depending on consumers' OSL level.

Various researches have studied the moderation role of OSL. For instance, (Ruihe et al. 2019) revealed in the studies on consumers' intention to switch from hotels to peer-to-peer accommodation. OSL has a positive moderation impact on the relationship between pull elements and switching intention of consumers. (Richard & Chebat, 2016) showed that between informativeness and purchase intentions, there is an OSL performed a moderating role. (Ha and Jang, 2013) indicated that OSL reinforces the bond betwixt wearied with restaurant compositions (i.e., food, restaurant environment, and service) and variety-seeking intentions and moderates the bond betwixt demanded consumption value (i.e., hedonic and utilitarian value), and diversity-seeking intentions.

2.1.3. Push Factors

Push factors have been indicated by (Ruihe et al. 2019) as customers' negative emotional response as satiation on hotels services, decorations, and amenities. On the other hand, it has optimistic effects on customers' switching intention to P2P accommodation. For this research in the real estate industry, given the high monotonous decoration and crowd amenity of condominium attributes, that might result in consumers starting to form a negative emotional attitude towards condominiums in the form of satiation or boredom. After consumers perceive weariness regarding condominiums, their intentions for switching to substitutes such as townhomes might increase.

Previous researches have studied the relatedness between satiation and investigating consumer behaviors. For example, (Ha & Jang, 2013b) marked monotony with restaurant compositions (i.e., service-related, restaurant environment-related, and food-related attributes), causing more intentions in diversity-seeking. Likewise, (Park and Jang, 2014a) suggested that satiation has positive effects on switching intention. Which switching intention may be considered a form of exploratory behavior (Steenkamp & Baumgartner, 1992). Therefore it is a belief to estimate that wearied with condominiums' decoration and amenity will bring on switching intention of the consumer to the townhome. The researcher proposes the following hypothesis:

H1: Satiation: Decoration has a significant impact on Subjective Environmental Characteristics.

H2: Satiation: Amenity has a significant impact on Subjective Environmental Characteristics.

2.1.4. Pull Factors

The researcher referred to pull factors as the elements of a townhome that attract potential consumers. As mentioned in the PPM model, consumers will show switching action when they perceive they could earn more benefits from a substitute product or service than the current product or service (Bansal et al., 2005). Thus, townhomes

stimulate consumers to perceive numerous benefits, such as economic value, social benefit, hedonic value, privacy, and security, which are speculated to present the pull effects and cause consumers to switch to townhomes.

The conceptual framework for this study has been adapted from "Switching from hotels to peer-to-peer accommodation: an empirical study" (Ruihe et al., 2019), which endeavors to realize consumers' inspirations to engage in this factor. For example, a previous study (Guttentag & Smith, 2017) proved that P2P accommodation is somewhat inexpensive compared to hotels. Evidence has empirically shown about the social benefit that in comparison to hotels, P2P accommodation might grant more possibilities to make a worthwhile interaction with hosts through online channels (Heo, 2016; Karlsson & Dolnicar, 2016). Social benefit performs as the main driver to provoke consumers to go for P2P accommodation (Tussyadiah & Pesonen, 2016). For hedonic value, it is widely used in defining the behavior of consumers. The prior study pointed out that amusement is a crucial element from experiencing P2P accommodation, and hedonic value tends to impact consumers' intention for future usage (Tussyadiah, 2016). 1664 ITP 32,6. Lastly, the researcher adapted perceived privacy and security from "Sharing economy and the lodging websites Antecedents and mediators of accommodation purchase intentions" (Tahir et al., 2019) are principle evaluation measurements in services, these two components are certainly involving factors that contained protecting residents in terms of privacy and security. (Geyskens et al., 2006). mentioned that the more privacy and security perceived by consumers' minds, the fewer risks users acknowledge in making online transactions.

To sum up, the research offers economic value, hedonic value, perceived privacy and security, and social benefit as pull factors for the townhome context. These elements will show a significant association with switching intention. When the consumer recognizes more advantages from a townhome in comparison to condominiums, consumers tend to switch. The following hypotheses are formulated as:

H3: Economic Value has a significant impact on the Subjective Environmental Characteristics.

H4: Social Benefit has a significant impact on the Subjective Environmental Characteristics.

H5: Hedonic Value has a significant impact on the Subjective Environmental Characteristics.

H6: Perceived Privacy and Security has a significant impact on Subjective Environmental Characteristics.

2.1.5. Mooring Factor vs. Switching Intention

Mooring factors have been identified as social or personal elements which support or obstruct switching action (Bansal et al., 2005). Ruihe et al. (2019) represented Optimal Stimulation Level (OSL) as a mooring factor. However, for this study context, the researcher considered replacing OSL with subjective environmental characteristics, which is adapted from "Residential satisfaction among low-income single-mother households: the case of residential welfare facilities in South Korea" (Minjung, 2020) due to the elements that are more appropriate for different business contexts, Subjective environmental characteristics are emphasized to indicate consumers' preferred components as well as measuring the importance of various components that might have a big impact on forming consumers' switching behavior such as size, design, and type of components. Therefore, the researcher provided the following hypothesis:

H7: Subjective Environmental Characteristics have a significant impact on consumers' Switching Intention to the townhome.

2.2. Research Framework

For this research framework, the researcher has adapted from "Switching from hotels to peer-to-peer accommodation: an empirical study" (Ruihe et al., 2019). the theoretical frameworks, which is similar to this research. With one variable from "Residential satisfaction among low-income single-mother households: the case of residential welfare facilities in South Korea" (Minjung, 2020) and one variable from "Sharing economy and the lodging websites Antecedents and mediators of accommodation purchase intentions" (Tahir et al., 2019). According to the variables mentioned in the literature review, the researcher proposed a research model by integrating push, pull, and mooring factors to indicate the importance of consumers' switching intention. The conceptual model is illustrated in Figure 1.

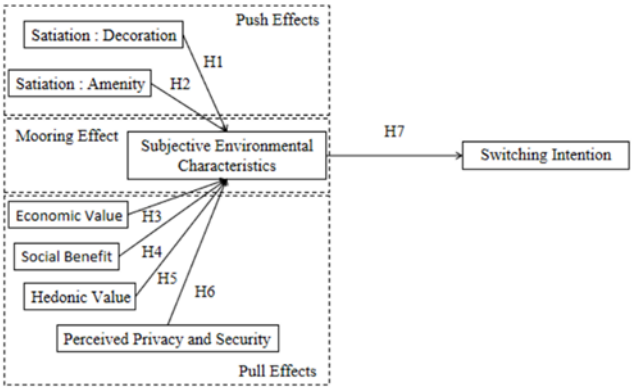

Figure 1: Conceptual Framework

3. Methodology

In this study, the researcher has used the quantitative method, with convenience sampling and snowball sampling methods. The developed questionnaire was based on previous theories and empirical researches. It was distributed online via LINE, Facebook, WeChat, and Telegram. Followed by offline channels as well. The target population of Thais living or working in Bangkok with a monthly family income of 150,000 Thai Baht and above who can afford the high-class townhome that costs between 7 - 15 Million Thai Baht, the monthly house payment rate is between 49,000 baht to 105,000 baht is required. The questionnaire consisted of six parts. The first part begins with the screening questions to identify the target respondents. The second part is demographic questions to profile the respondent's gender, age group, place of origin, education, and personal income. The third part is a five-point Likert scale question used to measure two variables from push factors, with differences ranging from strongly disagree (1) to strongly agree (5) to analyze all hypotheses. The fourth part is similar to the previous part but used to measure only one variable from the mooring factor, with asked about the importance of various elements of the project from the respondent's perspective with differences ranging from not at all important (1) to extremely important (5) for the analysis of all hypotheses. The fifth part also represented a five-point Likert scale question used to measure four variables from pull factors, with differences ranging from strongly disagree (1) to strongly agree (5) to analyze all hypotheses. The last part is similar to the previous part, which is used to measure switching intentions.

3.1. Population and Sample Size

The population used in this research comprises Thais living or working in Bangkok and perimeter areas, with a family income of 150,000 Thai Baht and above per month. A-priori Sample Size Calculator for Structural Equation Models (SEM) from danielsoper's website was calculated from 8 latent variables and 35 observed variables with a probability level of 0.05.

Based on the calculation, the appropriate minimum sample size must be 444 respondents. The actual survey was distributed to 512 respondents, whereas the actual responses were 478, adequate for further use in this study.

3.2. Sampling Technique

Non-probability sampling technique was used in this research with convenience and snowball sampling to gather data from 512 target respondents. The data were collected through online social networks via LINE, Facebook, WeChat, and Telegram randomly, and respondents also sent the URL link of the questionnaire to their friend contacts who also meet the criteria, including offline channels. The survey was conducted between August to November 2020.

3.3. Pilot Testing

After the research elements were wholly developed from prior theories and empirical research, Cronbach's Alpha coefficients analysis was used to inspect the reliability of questions on each variable in the questionnaire. The researcher performed the pilot testing by collecting 46 responded questionnaires and analyzed them to test the reliability using SPSS AMOS version 26. As shown in Table 1, all variables display the Cronbach's Alpha with a greater than or equal to 0.7. The Cronbach's Alpha Coefficient is in the range of 0.791 to 0.883. Consequently, this means the questions for each variable passed the acceptability range of the reliability test (Tavakol & Dennish, 2011).

Table 1: Reliability Test (Consistency of the scales test N=46)

Variables	Source of Questionnaire	Number of Items	Cronbach's Alpha
Satiation: Decoration (SD)	Ha & Jang (2013b)	4	0.843
Satiation: Amenity (SA)	Ruihe et al. (2018)	3	0.883
Subjective Environmental Characteristic (SEC)	Minjung (2020)	10	0.791
Economic Value (EV)	Tussyadiah (2016)	3	0.815
Social Benefit (SB)	Tussyadiah (2016)	3	0.871
Hedonic Value (HV)	Tussyadiah (2016)	3	0.838
Perceived Privacy and Security (PS)	Bart et al. (2005), Suh & Han (2003), Steenkamp & Geyskens (2006), Ponte et al. (2015)	5	0.796
Switching Intention (SI)	Chang et al. (2014)	4	0.882

4. Results and Discussions

4.1. Demographic Factors

The demographic profile of the target audience of 478 respondents living or working in Bangkok and perimeter areas, the Family income of 150,000 Thai Baht and above per month. The majority of the gender respondents were 53.7% of respondents representing female while 43.5% of respondents were male and 2.2% representing other the 0.5% the remaining prefer not to say. The majority age range of respondents in this study was 55.1% age between 25-34 years old, followed by age between 35-44 years old at 30.6%, 45-54 years old at 5.4%, 55-64 years old at 4.1%, Under 24 years old 2.8% and Over 65 years old 2% Majority of the place of origin was 90.5% from Bangkok and perimeter area followed by 3.3% from Southern region, 2% from Eastern region, 1.7% from Northern region, 1.4% from Central region and 1.1% from North-eastern region respectively. A majority of the respondent's education was Master's degree graduated at 55.8% followed by Bachelor's degree, High school or equivalent, and Doctorate graduated with a percentage of 42.2%, 1.4%, and 0.7% respectively. For employment status, most respondents were employed, representing 48.4%, followed by Self-employed at 45.6%, Student at 2.3%, Retired at 2%, and Unemployed at 1.7%. In terms of the personal monthly income range of the respondents, the majority were 50,001-150,000 THB with 36.7%, followed by 15,001-50,000 THB with 31.3%, More than 150,000 THB with 27.9% Less than 15,000 THB with 4.1% As shown in Table 2.

Table 2: Demographic Information

Demographic Factors	Characteristics (N=478)	Frequency	Percentage
Gender	Female	257	53.7%
	Male	208	43.5%
	Other	11	2.2%
	Prefer not to say	2	0.5%
Age	Under 24 years old	13	2.8%
	25-34 years old	263	55.1%
	35-44 years old	146	30.6%
	45-54 years old	26	5.4%
	55-64 years old	20	4.1%
	Over 65 years old	10	2%
Hometown	Bangkok and Perimeter area	433	90.5%
	Central Region of Thailand	7	1.4%
	Northern Region of Thailand	8	1.7%
	Eastern Region of Thailand	9	2%
	North-eastern region of Thailand	5	1.1%
	Southern Region of Thailand	16	3.3%
Education	High School or equivalent	6	1.4%
	Bachelor's Degree	202	42.2%
	Master's Degree	267	55.8%
	Doctorate Degree	3	0.7%
Employment Status	Employed	231	48.4%
	Self-employed	218	45.6%
	Unemployed	8	1.7%
	Student	11	2.3%
	Retired	10	2%
Personal Monthly Income	Less than 15,000 THB	20	4.1%
	15,001-50,000 THB	150	31.3%
	50,001-150,000 THB	175	36.7%
	More than 150,000 THB	133	27.9%

4.2. Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is a statistical technique that generates testing for data validation consistent with conceptual models applied before analyzing this study's measurement model. The result measured that

every item in each variable is significant and specified factor loading value to prove discriminant validity. The results of the factor loadings, the Composite Reliability (CR), and the Average Variance Extracted (AVE) could be inspected by CFA, and all values should be criterion with the theory. Factor loading is greater than 0.50 and p-value of lower than 0.05. Hair, Black, Babin, Anderson, and Tatham (2006) recommended defining the significance of factor loading for each item and defining the goodness of fit as acceptable. For CR, the result is considered acceptable when CR $\alpha > 0.6$ (Fornell & Larcker., 1981) since the reliability was estimated by the CR and standardized Cronbach's coefficient alpha (α). Next, the AVE was used to assess the convergent validity, and acceptable values of AVE > 0.4 (Lam, L. W., 2012) were defined for the factor's convergent validity, as shown in Table 3. The square root of AVE in Table 4 specified that all the correlations are higher than the corresponding correlation values for each variable. Apart from that, applying GFI, AGFI, CFI, NFI, and RMSEA indicates a good model fit in CFA testing. as mentioned in Table 5.

Table 3: Confirmatory Factor Analysis (CFA), Composite Reliability (CR), and Average Variance Extracted (AVE) Results

Variables	Factor Loading	CR	AVE
Satiation: Decoration (SD)	0.624 - 0.888	0.871	0.632
Satiation: Amenity (SA)	0.722 - 0.766	0.786	0.550
Subjective Environmental Characteristics (SEC)	0.587 - 0.714	0.887	0.441
Economic Value (EV)	0.666 - 0.742	0.750	0.501
Social Benefit (SB)	0.605 - 0.706	0.687	0.424
Hedonic Value (HV)	0.675 - 0.793	0.768	0.526
Perceived Privacy and Security (PS)	0.586 - 0.775	0.801	0.449
Switching Intention (SI)	0.829 - 0.869	0.912	0.722
CR = Composite Reliability, AVE = Average Variance Extracted *** = Significant at the 0.05 significant levels (p<0.05)			

Table 4: Discriminant Validity

	SD	SA	SEC	EV	SB	HV	PS	SI
SD	0.795							
SA	0.754	0.742						
SEC	0.794	0.736	0.664					
EV	0.731	0.695	0.606	0.708				
SB	0.681	0.740	0.646	0.680	0.651			
HV	0.728	0.730	0.615	0.689	0.627	0.725		
PS	0.660	0.696	0.603	0.616	0.632	0.687	0.670	
SI	0.599	0.594	0.605	0.578	0.429	0.574	0.617	0.850
The diagonally listed values are the AVE square roots of the variables								

Table 5: Goodness of Fit

Goodness-of-Fit Indices	Criterion	Results of this Study
Chi-Square (CMIN)	<3.00 (Hair, Black, Babin, Anderson, & Tatham, 2006)	2.521
Goodness-of-Fit Index (GFI)	> 0.80 (Forza & Filippini (1998), Greenspoon & Saklofske (1998)	0.856
Adjusted Goodness of Fit Index (AGFI)	> 0.80 (Forza & Filippini (1998), Greenspoon & Saklofske (1998)	0.826
Normed Fit Index (NFI)	> 0.80 (Forza & Filippini (1998), Greenspoon & Saklofske (1998)	0.874
Comparative Fit Index (CFI)	> 0.90 (Bentler, 1990)	0.919
Turker Lewis Index (TLI)	> 0.90 (Bentler & Bonett, 1980)	0.908
Root Mean Square Error of Approximation (RMSEA)	< 0.08 (MacCallum, Browne & , Sugawara, 1996)	0.056
Root Mean Square Residual (RMR)	< 0.05 (Hair et al., 2006)	0.036
CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalised fit index, TLI = Tucker-Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation, and RMR = rootmean square residual		

4.3 Structural Equation Model (SEM)

Researcher applied structural equation modeling (SEM) a statistical technique which combines instruments in tradition multivariate models Posterior of the procedure in SEMs and adjusting the model, the outcomes showed the whole model fit index as (CMIN/DF = 2.521, GFI = 0.856, AGFI = 0.826. NFI = 0.874, CFI = 0.919, TLI = 0.908, RMSEA = 0.056, RMR = 0.036) as shown in Table 5.

4.4 Research Hypothesis Testing

The results of hypotheses testing represented that hypotheses H1, H2, H5, H6, and H7 were supported with a significance at p = 0.05, While H3 and H4 were not supported.

Among push factors Satiation with Amenity has the highest significant impact on Subjective Environmental Characteristics (β = 0.472), followed by Satiation with Decoration (β = 0.116).

Among pull factors, Hedonic Value has the highest significant impact on Subjective Environmental Characteristics (β = 0.198) followed by Perceived Privacy and Security (β = 0.201).

In terms of mooring factors, Subjective Environmental Characteristics significantly impact Switching Intention (β = 0.612), as illustrated in Figure 2.

Table 6: Hypothesis Result of the Structural Model

	Paths	Standardized Path Coefficients (β)	SE.	T-Value	Tests Result
H1	SEC <= SD	0.116	0.068	2.137*	Supported
H2	SEC <= SA	0.472	0.122	3.881*	Supported
H3	SEC <= EV	-0.134	0.117	-1.005	Not Supported
H4	SEC <= SB	0.216	0.146	1.556	Not Supported
H5	SEC <= HV	0.198	0.076	2.880*	Supported
H6	SEC <= PS	0.201	0.066	2.729*	Supported
H7	SI <= SEC	0.612	0.060	11.529*	Supported

Remark: *p<0.05

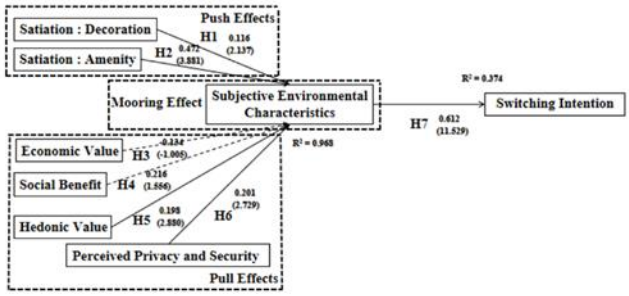

Figure 2: The Results of Structural Model
Remark: Dashed lines, not significant; solid lines, significant.
*p<0.05

5. Conclusion, Recommendation, and Limitation

5.1. Conclusion

In this study, the researcher intended to study and indicate the importance of factors affecting consumers' consideration of switching from condominium to townhome for the high-class market in Bangkok, Thailand. A total of 512 questionnaires were distributed in Bangkok to Thais living or working in Bangkok and perimeter area, Family income 150,000 Thai Baht and above per month. The conceptual framework was adapted from theory and statistics, including Satiation with Amenity, Satiation with Decoration, Economic Value, Social Benefit, Hedonic Value, Perceived Privacy and Security, Subjective Environmental Characteristics, and Switching Intention for investigating every hypothesis. The consequence of this study was justified to assure reliability by applying Confirmatory Factor Analysis (CFA) and the Structural Equation Model (SEM) to verify the influence of measuring variables and assemble a conclusion of this study.

The study explicated the following findings. Firstly, in terms of push factors, either Satiation with Amenity or Satiation with Decoration significantly impact Subjective Environmental Characteristics. Secondly, in terms of pull factors, Hedonic Value and Perceived Privacy and Security significantly impact Subjective Environmental Characteristics. Lastly, the mooring factor Subjective Environmental Characteristics has a significant impact on Switching Intention; this means most of the findings from this research are quite similar to the theoretical frameworks "Switching from hotels to peer-to-peer accommodation: an empirical study" (Ruihe et al., 2019).

5.2. Recommendation

The outcome of this research identifies factors that real estate developers should consider to emphasize to attract consumers. The most crucial factors are using the obtained information to help decide to adjust projects elements to fit customer needs such as bedroom size which most of respondents score more important than the size of living room, kitchen/dining room, and bathroom, including adding in more creatively and differently amenities to attract the target audience. Moreover, use marketing strategies that create emotional value and position products to represent the success and pride to attract the target audience.

5.3. Limitation and Further Study

The limitation of this study is that even though many consumers switch their intention from purchasing condominiums, there are many substitute products with a different price range and product type in the market that respondents might be interested in but not available in this research. Moreover, there are location factors such as workplace and distance from other family members' houses, including consumer's personal needs, that might impact consumer decisions, which should be investigated in further research. Moreover, there is a possibility of surveying on the same topic in the future after the COVID-19 pandemic. Therefore, the results might differ from the outcome of this research due to the fear that causes people to have social distancing gone.

This research objective is consumers' intention to switch from condominiums to townhomes during the COVID-19 pandemic. However, it is essential to mention that condominiums might have certain advantages like location and more amenities. Therefore, in the future, when the COVID-19 pandemic ends, the researcher suggested conducting further research to investigate consumers' behavior that might differ from now.

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