

Navigating homeownership in the shadow of COVID-19: Unraveling factors shaping house purchase intention among China's residents

Jiayue Yao

UCSI University, Malaysia
Email: acyaojiayue@163.com

Choi-Meng Leong

UCSI University, Malaysia
Email: leongcm@ucsiuniversity.edu.my

Bibiana Chiu-Yiong Lim *

Swinburne University of Technology, Sarawak Campus, Malaysia
Email: blim@swinburne.edu.my

Tze-Yin Lim

Swinburne University of Technology, Sarawak Campus, Malaysia
Email: tzlim@swinburne.edu.my

** Corresponding Author*

Abstract

Purpose: This research examines buyer behaviour in the real estate market in China by looking into the perceived values affecting house purchase intention (HPI) on customer perceived value theory (PVT): perceived economic value (PEV), perceived social value (PSV), perceived psychological value (PPV), perceived emotional value (PEmV) perceived functional value (PFV).

Design/methodology/approach: Using the purposive sampling method, 272 questionnaires were collected in China and analysed using SPSS.

Findings: The results show that PEV, PPV, PEmV and PFV have a positive and significant impact on house purchase intention, but PSV has no significant impact on HPI.

Research limitations/implications: It is essential to recognise that different geographic regions exhibit diverse purchasing behaviours, psychological characteristics, and varying real estate market environments.

Practical implications: Real estate companies can better cater to consumer demands by considering these perceived values during the early stages of real estate project development and tailoring marketing strategies.

Originality/value: This study addresses the scarcity of research on house purchasing behaviour and the absence of a coherent theory to guide the evaluation of perceived house value.

Keywords: Perceived value, Housing purchase intention, China residents, Regression analysis

Introduction

The global real estate industry plays a pivotal role in economic development, with far-reaching effects on various sectors (Azmi et al., 2022). In China, the real estate sector, closely

intertwined with over 40 other industries, has become a crucial driver of the national economy after three decades of growth (Liu, Yu and Mao, 2019). Urbanisation acceleration and increased housing demands have further propelled this industry's expansion (Zhang et al., 2018). House economics research encompasses multiple avenues, with house demand analysis as a cornerstone (Yu et al., 2023). This research can be approached through macro and micro perspectives, where macroeconomic factors influence the market, while micro-level analysis delves into individual housing demand drivers (Kaur & Mohindru, 2019).

China's government introduced real estate regulations in 2016, emphasising housing for living and creating housing affordability due to exacerbating the wealth gap and social inequalities (Yu et al., 2023). This shift towards consumer demand-driven markets underscores the need for developers to consider buyer preferences, including the rise of consciousness of environmental quality and safety (Bai, 2017). Boosted by increasing concerns over house affordability, the environment and the demand for better value for houses available in China has rapidly expanded in recent years (Yu et al., 2023). In particular, significant events like pandemics can reshape consumer behaviour and values, influencing housing preferences (Asmundson & Taylor, 2020).

The COVID-19 pandemic profoundly impacted consumers' psychology and behaviour, reshaping their perceptions and altering house-buying decisions (Jiang & Zhang, 2021). The epidemic situation has changed the economic environment and people's psychological cognition, which are the main components of perceived value (Patil & Patil, 2020). In other words, the perceived value under the epidemic has changed, ultimately affecting purchase behaviour. This influence was evident in China's real estate market as well. Despite an initial slowdown of the economy due to the pandemic, housing demand was resurgent by April 2020, with a subsequent surge in residential transactions (Zhang, 2021). This shows that house purchasing behaviour can vary among China consumers, underscoring the need to understand purchasing behaviour, intention and perception. Thus, understanding these dynamics is crucial as they highlight the importance of evaluating factors that sway residents' house purchase decisions, particularly under the influence of COVID-19. Hence, the motivation of this study is to seek an understanding of the perceived value that China customers associate with house purchasing and the factors that impact their willingness to purchase houses in light of the pandemic's impact. This exploration can shed light on the evolving relationship between consumer behaviour, market forces, and external shocks, offering valuable insights for both the real estate industry and broader economic considerations.

According to the theory of planned behaviour, behavioural intention directly impacts the occurrence of the behaviour (Lim et al., 2023). Hence, the intention to purchase a house significantly impacts the buying behaviour. Purchase intention as a pre-variable is unbiased in predicting behaviour (Bagozzi et al., 1989). Hence, this study investigates and analyses the elements that influence residents' house-buying decisions and provides a theoretical framework for real estate businesses to correctly locate consumers by determining if characteristics such as perceived economic value, perceived social value, perceived psychological value, perceived emotional value, and perceived functional value impact the intention to buy the house.

Literature Review

Theory of House Purchase Intention

Intention, within the context of consumer behaviour, represents a mental inclination towards the realisation of a specific behaviour (Peleaz et al., 2019). Specifically, purchasing intention pertains to the likelihood of consumers acquiring a particular product, reflecting a potential buyer's capacity to procure specific goods (Fishbein et al., 1977). This aligns with intention as

a consciously planned and prepared personal motivation, emphasising diligent commitment (Lim et al., 2023). In the realm of consumer behaviour, purchasing a house is regarded as a consumption behaviour, and the purchase intention related to housing constitutes a subset of this overarching consumer purchase intention. While scholars may exhibit varying interpretations of house purchase intention, they generally concur that it encapsulates a psychological activity (Njo & Sugeng, 2023).

Influencing Factors of House Purchase Intention

Commercial real estate, classified as a bulk commodity, holds a substantial position within household assets. The majority of consumers base their purchase decisions on rational deliberation (Escadas et al., 2019). Previous research endeavours in house purchase behaviour have spanned various disciplines, encompassing economics, psychology, sociology, and related domains (Letkiewicz & Heckman, 2018).

In the realm of economics, the examination of house purchase behaviour operates under the premise that consumers act as rational economic agents, aiming to maximise utility within predefined constraints. Conversely, non-economic investigations delve into psychological attributes, institutional factors, and other dimensions (Hassan, Ahmad & Hashim, 2021). Tan and Goh (2018) underscored the significance of non-economic variables, asserting their profound influence on consumers' house-buying choices. Pozdena (1988) expounded on the impact of factors such as sales price, household income, household size, and housing policies on housing demand. Further elucidating the relationship between household wealth and the aspiration to acquire a house, Jones (1995) and Boehm et al. (2004) established a favourable linkage.

Turning to family income and the propensity to purchase a house, Kabir et al. (2023) ascertained that higher household income and purchasing power correlate with an increased likelihood of acquiring a new home. Lapersonne et al. (1995) contended that personal consumer characteristics wield the most substantial influence on purchasing behaviour. Investigating the connection between customer age and house purchase behaviour, Le-Hoang et al. (2020) identified a positive correlation between age and the purchasing intention of houses. Past literature also revealed a propensity for higher education levels to be associated with increased house buying, demonstrating a positive correlation between elevated educational attainment and higher income (Liu & Li, 2018)

Lu (2012) expounded that the duration of residence in Hangzhou exhibits a positive correlation with house purchase behaviour when considering family characteristics. Hence, contemporary urban residence duration emerges as a prominent determinant profoundly influencing house purchase behaviour.

Customer Value Theory

Yuan et al. (2020) proposed that consumer perceived value is a decision-making process influenced by the assessment of benefits and losses associated with a product or service. The foundational model for perceived value establishes a positive correlation between consumer purchase intention and perceived value. This model suggests that perceived value is determined by the comparison between the actual price, the advertised price, and the customer's internal price guide.

Zeithaml (1988) contributed by defining perceived value as the evaluation of a product's utility based on the consideration of costs and benefits, emphasising the need for companies to align their offerings with customer-perceived value. Building upon this, Dodds et al. (1991) emphasised the substantial impact of perceived value on purchase intention. Sheth et al. (1991) expanded the dimensions of perceived value to include social, emotional, cognitive, functional,

and contextual aspects. Social value pertains to the utility derived from associating with a specific social group, while emotional value relates to the emotional significance of a product during consumption. Cognitive value is linked to the allure and eagerness to understand the value of knowledge during product consumption, and functional value pertains to specific attributes and functions of the product. Contextual value arises from the product's special significance within a particular context.

Da Silva et al. (2020) explored perceived value in relation to real estate projects, focusing on functional, symbolic, and experiential benefits. Further investigations into house purchasing behaviour, such as Liu et al. (2019) study, identified perceived value dimensions as quality, economic, social, and emotional value. Customer perceived value is characterised by its diversity, dynamism, and hierarchical structure, which is the foundational determinant of purchase intention and behaviour (Tan & Goh, 2018).

The burgeoning literature on customer perceived value in house purchasing behaviour has identified multiple dimensions. However, a prevailing consensus has emerged, delineating perceived value into five core dimensions: perceived economic value, perceived social value, perceived psychological value, perceived emotional value, and perceived functional value. This theoretical foundation underpins the present study's examination of house purchase intention.

Hypotheses Development

Perceived Economic Value (PEV)

Past literature indicates that consumer PEV plays a pivotal role in influencing perceived value, which in turn affects purchasing behaviour directly or indirectly (Chang & Wildt, 1994; Yu et al., 2023). It is essential to recognise that commercial real estate possesses dual attributes, serving both as a means for self-occupied consumption and as an investment vehicle. Real estate ownership facilitates value preservation and offers the potential for value-added income. For example, Stiglitz (1990) underscored that elevated house prices are intricately linked to buyers' expectations of future price movements rather than the current economic climate. Chen and Wang (2019) identified PEV as the paramount factor influencing purchasing intentions and posited a causal link between house buyers' expectations of capital gains and anticipated price increases. Moreover, Hui and Wang (2014) conducted a survey study revealing that the majority of respondents believed that fluctuations in house prices significantly impact house purchase behaviour.

Yu et al. (2023) emphasised that the global pandemic has heightened economic cycle volatility in various countries. Concurrently, a surplus of global currencies, escalating inflation rates, and rising commodity prices have increased house prices worldwide. Lu (2020) noted that the global pandemic's repercussions have further driven up house prices. Wang (2020) observed that the economic downturn during the pandemic prompted governments to implement loose monetary policies in a bid to stimulate short-term increases in house prices. Hence, the hypothesis is formed:

H1: There is a positive relationship between perceived economic value and house purchase intention.

Perceive Social Value (PSV)

Adams (1984) elucidated that the process of purchasing a house is intrinsically entwined with social values encompassing personal identity, social standing, and financial considerations. In the context of analysing house location models, Neilsen et al. (2006) employed the social value framework to delineate the significance of real estate. Li (2009) contended that a house serves

as a tangible manifestation of residents' wealth and contributes significantly to the differentiation of social classes. Specifically, real estate owners aspire for their properties to epitomise social ideals, including affluence and social status. Also, Hoe et al. (2018) stated that there was a significant relationship between PSV and the consumer purchasing intention for the residential property market.

Zhang et al. (2017) affirmed a substantial correlation between the number of family properties and one's class status, positing that a higher number of family-owned properties corresponds to elevated social class levels. This assertion was substantiated by Cai He et al. (2020) in their research. Dai and Wang (2006) proposed that the culture of house consumption serves as a reflection of residents' social status and class, with individuals expressing their social worth through property acquisition. Winstanley (2000) contended that purchasing households' significant importance in shaping women's self-identity, while Yu et al. (2023) underscored that real estate symbolises personal accomplishments and dignity, forming an integral component of adult self-identity. Therefore, the hypothesis is:

H2: There is a positive relationship between perceived social value and house purchase intention.

Perceived Psychological Value (PPV)

Hao (2009) posits that perceived psychological value entails the psychological contentment that customers derive during the process of purchasing a product, with this satisfaction primarily stemming from the aspects of brand and service. Tan and Goh (2018) addressed the impact of psychological factors in affecting green residential buildings among buyers. As per the findings of Bai et al. (2002), the brand element exerts a substantial influence on customer value, with brand impact channelled through the prism of service quality. In their exploration of methods for evaluating real estate customers' perceived value, Xu and Xia (2006) emphasised the paramount role of perceived psychological value as the foremost factor impacting customer purchase intentions. They further delineated psychological value into two dimensions: real estate brand and service quality. Zhang's study (2015) affirmed that both brand and service value wield significant sway over purchase intentions.

Keller (1998) underscores the close nexus between customer brand awareness and brand recognition, wherein brand associations fortify brand recall, ultimately influencing purchase decisions. As elucidated by Mohammad et al. (2011), service quality considerably impacts purchase intent. In the service industry, brand value assumes particular prominence within the spectrum of customer value. A robust brand image mitigates customers' apprehensions, instils confidence in their purchasing decisions, and augments the psychological value derived from the purchase experience, thus influencing their buying intentions. Furthermore, Li's study (2016) examining the impact of perceived psychological value on the intention to purchase a house concluded that psychological value significantly and positively affects the intention to buy a house, with the service attitude of sales staff serving as the most influential component. Hence, the hypothesis is:

H3: There is a positive relationship between perceived psychological value and house purchase intention.

Perceived Emotional Value (PEmV)

Andrew & Larceneux (2019) stated that emotion is one of the key factors influencing the decision to purchase houses. Hao (2009) posits that perceived emotional value in the context of house purchases pertains to the emotional or affective utility that consumers perceive during

the acquisition process. This emotional dimension encompasses feelings of belonging, happiness, and satisfaction that are evoked. Emotional utility refers to the emotional experience woven into the process of buying a house. Building on this premise, Huang and Deng (2017) identified a link between migrant workers' sense of belonging in the city and their propensity to purchase a house, contending that the emotion of belonging to urban society is a critical component of city dwelling. Huang (2012)'s research further corroborates this relationship, revealing that heightened feelings of belonging among migrant workers correspond to an increased likelihood of house purchases.

Clapham (2010) posits that the fundamental role of a house is to engender happiness, emphasising the need for housing policies to prioritise the enhancement of well-being. Qian and Li (2019) assert that home ownership contributes to the happiness of the floating population. As indicated by Kooshali et al. (2001), one of the motivations behind house purchases is to enhance one's sense of fulfilment and family belonging. Furthermore, Huang (2012) contends that the emotional experience entwined within the house purchasing process profoundly influences the perceived emotional value, thereby shaping the choices made in house purchases.

H4: There is a positive relationship between perceived emotional value and house purchase intention.

Perceived Functional Value (PFV)

Past studies define perceived functional value as the functional benefits that consumers accrue following the acquisition of a house, encompassing attributes such as residential functionality and convenience (Hao, 2009; Hoe, Dastane & Selvaraj, 2018). In line with the consumption value model, Sheth (1991) asserts that functional value constitutes an intrinsic attribute of the product itself. It is noteworthy that when customers contemplate the purchase of a tangible product, the foremost consideration typically pertains to its functional value. In the context of developing an assessment system for perceived value related to durable items, Seeney (1999) subdivided the functional value of products into fundamental functions, features, and product quality.

In examining customers' intentions to purchase houses within the Hefei, Anhui real estate market, Li (2016) discovered that perceived functional value exerts a significant influence on house purchase intentions. Customers tend to place considerable emphasis on factors such as the convenience of transportation in the vicinity and the presence of well-regarded school districts when making house purchase decisions. Lu (2012) posits that the distinctive functional value of a house lies in its association with school districts, as parents often opt to purchase houses with proximity to better educational institutions to secure a superior education for their children. Feng (2009) underscores that the perceived functional value of a house encompasses the surrounding environment and supporting facilities. A picturesque residential environment coupled with well-developed surrounding amenities enhances the inclination to purchase. Zhou and Zhang (2009) assert that internal functions, such as house design and architectural style, embedded within the functional value of residential properties significantly influence house purchase intentions.

H5: There is a positive relationship between perceived functional value and house purchase intention.

The figure below depicts the research framework of house purchasing intention explored in this study:

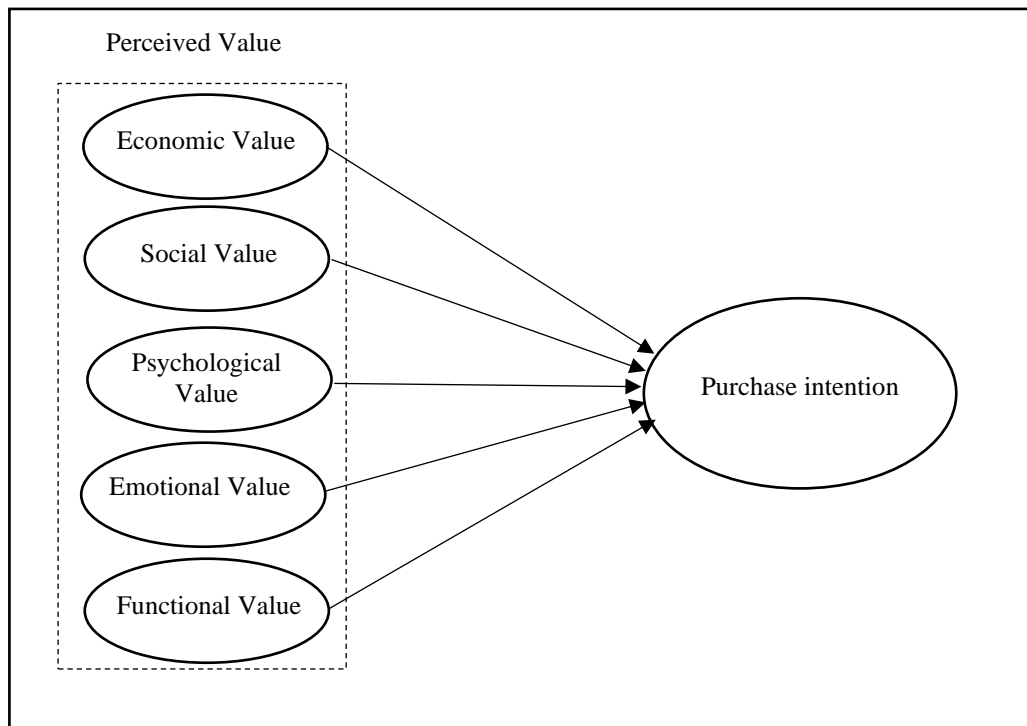


Figure 1: Research Framework

Methods

This study used a quantitative approach as the research design. Therefore, a survey was used to collect the data. Besides, this study employed a convenient non-probability sampling technique to reach the potential respondents, who were permanent residents of Shanghai, given its status as a major city in China. The sample was drawn from individuals either contemplating or recently engaged in the purchase of a new house. This study assessed demographic factors, such as age and gender, on house purchase intentions through descriptive statistical analysis. Furthermore, regression analysis was employed to scrutinise the influence of the five dimensions constituting perceived value as independent variables on house purchase intentions.

The questionnaire was designed by employing a 5-point Likert scale (ranging from 1=Strongly Disagree to 5=Strongly Agree). The measurement items were adapted from the study of: Ben-Shakar (2007); Lu (2012); Sweeney et al. (1999) and Li (2016) for perceived economic value; Adams (1984); Zhang and Yang (2017); Dupuis and Thorns (1998); and Winstanley (2000) for perceived social value; Keller (1998); Bai et al. (2002); Zhang (2015); Mohammad et al. (2011); and Li (2016) for perceived psychological value; Hao (2009); and Clapham (2010) for perceived emotional value; Lu (2012); Feng (2009); Li (2016); Zhou et al. (2009); and Hao (2009) for perceived functional value; and Lu (2012); and Lapierre et al. (1999) for house purchase intention. The questionnaire was hosted on a Chinese platform known as 'sojump.' The questionnaire link was shared on popular social media platforms such as Weibo and WeChat to maximise outreach. Respondents were guided by the principles of voluntary participation and the assurance of personal information confidentiality during the questionnaire completion process. The entire data collection process was executed within a one-month timeframe.

Findings and Discussion

This study collected a total of 272 completed questionnaires. The questionnaire is broken down into three sections. The first section, Section A, is a survey of the respondents' basic demographic information. The second section, Section B, comprised independent factors such as economic value, social value, psychological value, emotional value and functional value. The third section, Section C, is concerned with the dependent variable, which is house purchase intention. Table 1 shows the demographic information of the study.

Table 1: Summary of Demographic Data

Variable(s)		Frequency	Percentage (%)
Gender	Male	157	57.7
	Female	115	42.3
	Total	272	100.0
Age	≤20	7	2.6
	21-30	87	32.0
	31-40	122	44.9
	41-50	47	17.3
	≥51	9	3.3
	Total	272	100.0
Occupation	Self-employed	13	4.8
	Government / public institutions	27	9.9
	Teachers / doctors / lawyers and other professionals	46	16.9
	Company employees	126	46.3
	Enterprise managers	38	14.0
	Retire	5	1.8
	Others	17	6.3
	Total	272	100.0
Education level	Junior high and below	12	4.4
	High school / technical secondary school	26	9.6
	Undergraduate/Junior College	168	61.8
	Master's degree and above	66	24.3
	Total	272	100.0
Marital status	Single	96	35.3
	Marital	166	61.0
	Divorced	10	3.7
	Total	272	100.0
Time of living in Shanghai	Less than two years	20	7.4
	2-5 years	73	26.8
	6-10 years	92	33.8

	More than 10 years	87	32.0
	Total	272	100.0
Income level	≤RMB 5000 per month	13	4.8
	RMB 5001-7000 per month	21	7.7
	RMB 7001-10000 per month	58	21.3
	RMB10001-15000 per month	111	40.8
	≥RMB 15000 month	69	25.4
	Total	272	100.0
Have bought a house before	Yes	154	56.6
	No	118	43.4
	Total	272	100.0

Among the respondents, 157 were male, constituting 57.7% of the sample, while 122 individuals fell within the age range of 31-40, accounting for 44.9% of the participants. Approximately 46.3% of the respondents were employed in various companies, and the majority of participants, about 61.8%, possessed an education level of undergraduate or junior college. Additionally, 61.0% of the respondents were married. The largest cohort of the respondents resided in Shanghai for 6-10 years, comprising 33.8% of the respondents. Concerning income levels, the highest proportion of respondents, at 40.8%, reported a monthly income ranging from RMB10,001 to RMB15,000. Notably, 154 respondents had prior experience in purchasing a house.

Validity and Reliability Analysis

A validity test was used to verify the extent to which the instruments used to measure the specific concept in this study were decent (Sekaran & Bougie, 2013). On the other hand, a reliability test was conducted to examine the degree of consistency for instruments used in this study in measuring the variables (Sekaran & Bougie, 2013).

Table 2: Validity and Reliability Analysis of the Variables

Variables	Items	Factor Loading	KMO	Bartlett's Test	Eigenvalue	Cronbach Alpha
PECV	5	0.734 to 0.822	0.885	977.149 P=0.000	3.807	0.921
PSV	5	0.820 to 0.881	0.881	936.111 P=0.000	3.758	0.917
PPV	5	0.758 to 0.813	0.883	859.676 P=0.000	3.664	0.909
PEMV	5	0.728 to 0.809	0.804	924.300 P=0.000	3.507	0.892
PFV	7	0.751 to 0.794	0.884	1641.408 P=0.000	5.038	0.935
I	3	0.610 to 0.663	0.675	258.231 P=0.000	2.125	0.792

*P=Sig

Table 2 presented a summary of relevant results for reliability and validity analysis of 272 respondents. Table 2 showed that the Cronbach's Alpha values of the independent and dependent variables ranged from 0.792 to 0.935, in which all values were larger than 0.7,

suggesting that the questionnaire designed passed scale's reliability test and was reliable.

The KMO values of the independent variables varied from 0.804 to 0.885, all larger than 0.6, and the p-value in Bartlett's test was less than the significance level (0.05), indicating that the independent variables were valid (Cheah et al., 2020). The dependent variable's KMO value was 0.675, which was more than 0.6. For Bartlett's test, the p-value was less than the significance level (0.05) and therefore, the variable was valid.

Table 3: Coefficients of Multiple Regression Analysis

	Coefficients ^a								
	Unstd. C.		Std. C.	t-value	p-value	CI		C.S.	
	Beta	Std. Error	Beta			Lower	Upper	Tolerance	VIF
PECV	0.239	0.038	0.239	6.313	0.000	0.155	0.334	0.552	1.810
PSV	0.027	0.030	0.028	0.914	0.361	-0.035	0.093	0.836	1.196
PPV	0.072	0.035	0.075	2.070	0.039	0.009	0.132	0.613	1.630
PEMV	0.110	0.036	0.105	3.041	0.003	0.046	0.187	0.668	1.497
PFV	0.602	0.041	0.608	14.758	0.000	0.519	0.676	0.469	2.134

*Unstd. C. = Unstandardized Coefficients, Std. C. = Standardised Coefficients, CI = Confidence Interval, C.S. = Collinearity Statistics
a. Dependent Variable: I

Tolerance and VIF were used to judge whether there was multicollinearity between variables. When the VIF value is less than 10, and the Tolerance value is between 0.1 to 10, it is considered that there is no multicollinearity between variables. Table 3 showed that the Tolerance values ranged from 0.469 to 0.836, which were within the range of 0.1 to 10. Meanwhile, the VIF values varied from 1.196 to 2.134, all of which were less than 10. Both results indicated that there is no intervariable multicollinearity.

Table 4: Summary of Hypothesis Testing Result

No.	Hypotheses	Sig.	Beta	Supported
1	H1: There is a positive relationship between perceived economic value and house purchase intention.	P=0.000 <0.05	0.239 >0	Yes
2	H2: There is a positive relationship between perceived social value and house purchase intention.	P=0.361 >0.05	0.027 >0	No
3	H3: There is a positive relationship between perceived psychological value and house purchase intention.	P=0.039 <0.05	0.075 >0	Yes
4	H4: There is a positive relationship between perceived emotional value and house purchase intention.	P=0.003 <0.05	0.105 >0	Yes
5	H5: There is a positive relationship between perceived functional value and house purchase intention.	P=0.000 <0.05	0.608 >0	Yes

As shown in Table 4, perceived economic ($\beta = 0.239$, $p < 0.05$) was found to be positively related to house purchase intention, and the relationship was significant. As a result, H1 is supported. As the buyers perceived economic value of a house increases, their desire to purchase the house also increases. Therefore, when real estate enterprises are building houses or marketing personnel are promoting houses, they should improve and publicise the economic value of houses, so that people are more likely to buy houses. This is consistent with prior research noted in the literature review, namely, that houses have economic value and that the prospect of future house price increases will encourage people to buy houses (Sweeney et al.,

1999; Liu et al., 2019).

Perceived social value ($\beta = 0.027, p > 0.05$) was found not significantly related to house purchase intention (see Table 4). Consequently, H2 is not supported. The result contradicts the finding of Bai et al. (2002) and Li (2009), where, in their studies, a customer with a higher number of houses can represent an individual's higher social status. Hence, people will buy many houses to improve their social status. However, this study presents a different outcome where customers perceived social value has no significant influence on house purchase intention. It might be related to the assumption that the respondents could be salary-receiving employees with a relatively medium range of income level. They buy houses primarily for their own living and may not pay much attention to whether owning a house can improve their social status. Therefore, their perceived social value is relatively low, not significantly impacting house purchase intention.

The relationship between perceived psychological value ($\beta = 0.075, p < 0.05$) and house purchase intention was positive and significant (see Table 4). As a result, H3 was supported. The outcome is consistent with the findings of Zhang (2015). It may also be suggested that as a buyer's perceived psychological value of a house rises, so does their desire to purchase it. Therefore, the marketing personnel of real estate enterprises should publicise the psychological value to property buyers, which will improve the purchase desire. This also verifies the previous research results, such as Xu and Xia (2006), who pointed out that the perceived value evaluation system affecting the purchase intention should include perceived psychological value. Perceived psychological value is mainly reflected in two aspects: brand and service. Keller (1998) believes that brand knowledge is the key for a brand to affect the perceived psychological value of house buyers. Therefore, enterprises should first improve the brand awareness of house buyers by improving the popularity of famous brands. At the same time, enterprises should determine their own brand positioning, strengthen brand construction, and carry out brand marketing by issuing leaflets and doing activities. Then is the improvement of enterprise service quality. The cultivation of service awareness and service attitude of front desk service personnel and sales personnel is very important.

Perceived emotional value ($\beta = 0.105, p < 0.05$) had a positive impact on house purchase intention, and the relationship was significant. Therefore, H4 is supported. This suggested that the outcome is similar to the conclusion of Clapham (2010). In other words, with the increase in the emotional value of the house, people will be more likely to buy the house. Thus, it is essential to publicise the emotional value of houses in real estate marketing. Emotional value plays a crucial part in the process of house purchasing, according to Hao (2009), which is consistent with the findings of this study. Emotional value is a unique preference of consumers for products. A house can give buyers a pleasant emotional experience. The promotion of emotional value can be completed by product design. The product design should have advanced ideas and cultural connotations so that people can feel the warmth of the house after entering the house. At the same time, the design of the community should make buyers feel safe. Of course, for the sense of belonging and happiness in emotion, marketers need to focus on marketing.

Perceived functional value ($\beta = 0.608, p < 0.05$) was positively related to house purchase intention, and the relationship is significant. Thus, H5 is supported. It shows that the improvement of a house's functional value will significantly improve people's intention to buy a house. Consequently, real estate companies will benefit greatly from publicising the

functional value of houses. Hao (2009) pointed out that the functionality and surrounding convenience of the house are important factors affecting the purchase behaviour of house buyers. Li (2016) believes that the surrounding educational resources are an important function of the house, for example, location, which is also the primary factor in the purchase decision of most house buyers. These viewpoints are entirely congruent with the study's findings.

Implications and Conclusion

The study's primary objective is to gain insights into the purchasing behaviour of house buyers in China, which has yielded several noteworthy findings through the analysis. To begin, the research highlights that perceived economic value plays a crucial role in the decision-making process of purchasing a house in China. Potential buyers regard a house with economic value as a valuable asset with future resale potential (Liu et al., 2019). As a result, it becomes imperative for real-estate developers to prioritise the overall quality of housing development projects to ensure the maintenance of economic value. Secondly, customers attach great importance to psychological value when considering house purchases in China. Thus, it is advisable for marketers to focus on brand promotion and offer incentives to appeal to potential customers. The third significant finding revolves around emotional value. It was observed that most customers are more inclined to buy a house when they experience positive, satisfying, and comfortable emotions. To leverage this, it is recommended that housing marketers in China employ strategies to enhance services, packages, and customer benefits, such as through promotional activities or sharing success stories of previous home buyers, to foster positive emotions. Functional value emerges as the fourth key factor influencing house-buying intentions. Customers place value on the practicality, purpose, and functional amenities associated with a house purchase. Therefore, marketers and real estate developers should emphasise these aspects in their communications with customers. For instance, by providing detailed information about the available furniture and the advantages of the property, customers can better appreciate the functional value of the house. Finally, the study's findings reveal that customers do not perceive buying a house as a means to elevate their social status. While owning a house is considered an asset, customers tend to view house purchases as a basic necessity rather than a status symbol. However, it should be noted that owning multiple houses may alter one's social status (Bai et al., 2002). Other factors, such as customers' income levels and employment statuses, also suggest that social status is not a significant driver in house purchases.

Limitations and Suggestions for Future Research

This study depicts the significance of consumer behaviour research for enterprise development, particularly in the real estate sector, emphasising the need for an in-depth exploration of house buyer behaviour. Future researchers could consider the inclusion of control variables and mediators or moderators to study their influences on house purchase intention. Regional limitations are also recognised, as the sample focuses on permanent Shanghai residents. Future studies could further expand the study to include respondents from different cities in China and Asia.

References

- Adams, J. S. (1984). The meaning of housing in America. *Annals of the Association of American Geographers*, 74, 515-526.
- Andrew, M., & Larceneux, F. (2019). The role of emotion in a housing purchase: An empirical analysis of the anatomy of satisfaction from off-plan apartment purchases in France. *Environment and Planning A: Economy and Space*, 51(6), 1370-1388.
- Asmundson, G. J., & Taylor, S. (2020). How health anxiety influences responses to viral outbreaks like COVID-19: What all decision-makers, health authorities, and health care professionals need to know. *Journal of anxiety disorders*, 71, 102211.
- Azmi, A., Ibrahim, R., Abdul Ghafar, M., & Rashidi, A. (2022). Smarter real estate marketing using virtual reality to influence potential homebuyers' emotions and purchase intention. *Smart and Sustainable Built Environment*, 11(4), 870-890.
- Bagozzi, R. P., Baumgartner, J., & Yi, Y. (1989). An investigation into the role of intentions as mediators of the attitude-behaviour relationship. *Journal of Economic psychology*, 10(1), 35-62.
- Bai, C.H., Fan, X.C., & Gan, Y. (2002). Brand management of service enterprises based on customer perceived value. *Foreign economy and management*, 24(2), 7-13.
- Bai, S.M. (2017). Research on the influence of customer participation on customer purchase intention in real estate industry (*Master's Thesis*, Shandong University of Finance and Economics).
- Ben-Shahar, D. (2007). Tenure choice in the housing market: Psychological versus economic factors. *Environment and Behaviour*, 39(6), 841-858.
- Boehm, T. P., & Schlottmann, A. M. (2004). The dynamics of race, income, and homeownership. *Journal of Urban Economics*, 55(1), 113-130.
- Cai, H., Lu, Y., & Zhang, Y.J. (2020). House prices, real estate, and the subjective class status of urban residents -- An Empirical Study Based on the dynamic survey data of China's labor force. *Journal of Sun Yat sen University (Social Sciences Edition)*, 60(2), 144.
- Chang, T. Z., & Wildt, A. R. (1994). Price, product information, and purchase intention: An empirical study. *Journal of the Academy of Marketing science*, 22(1), 16-27.
- Cheah, J.-H., Thurasamy, R., Memon, M. A., Chuah, F., & Ting, H. (2020). Multigroup Analysis using SmartPLS: Step-by-Step Guidelines for Business Research. *Asian Journal of Business Research*, 10(3), 1-19. <https://doi.org/10.14707/ajbr.200087>
- Chen, J. & Wang, W. (2019) Economic incentives and settlement intentions of rural migrants: Evidence from China, *Journal of Urban Affairs*, 41, 372–389.
- Clapham, D. (2010). Happiness, well-being and housing policy. *Policy & Politics*, 38(2), 253-267.
- Dai, F., & Wang, X.F. (2006). Urban social stratification through urban residents' housing consumption culture. *Jiangxi Social Sciences*, (8), 153-155.
- Da Silva, M. B. C., Giacometti Valente, M., Petroli, A., Detoni, D., & Milan, G. S. (2020). Perceived quality of built environment, service, satisfaction and value in use, in the context of residential buildings. *Journal of Facilities Management*, 18(4), 451-468.
- Dodds, W. B., & Monroe, K. B. (1985). The effect of brand and price information on subjective product evaluations. *ACR North American Advances*.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of marketing research*, 28(3), 307-319.
- Dupuis, A., & Thorns, D. C. (1998). House, house ownership and the search for ontological security. *The sociological review*, 46(1), 24-47.

- Escadas, M., Jalali, M. S., & Farhangmehr, M. (2019). Why bad feelings predict good behaviours: The role of positive and negative anticipated emotions on consumer ethical decision making. *Business Ethics: A European Review*, 28(4), 529-545.
- Feng, Z.Y. (2009). Research on real estate value chain and value creation based on customer value (*Doctoral discourse*, Jilin University).
- Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behaviour: An introduction to theory and research. *Philosophy and Rhetoric*, 10(2).
- Fu, K. (2005). A model of real estate customer perceived value. *Economic management*, 13, 22-27.
- Hassan, M. M., Ahmad, N., & Hashim, A. H. (2021). Factors influencing housing purchase decision. *International journal of academic research in business and social sciences*, 11(7), 429-443.
- Hao, X.J. (2009). Research on real estate customer perceived Value evaluation (*Master's Thesis*, Xi'an University of Architecture and Technology).
- Huang, J., & Deng, X.G. (2014). Research on consumption behaviour and identity dilemma of migrant workers. *Jiangxi Social Sciences*, (11), 198-203.
- Huang, T.H. (2012). The impact of customer participation in real estate industry on Brand Loyalty: the intermediary role of customer experience (*Master's thesis*, Nanjing University of Finance and Economics).
- Hui, E. C. M. & Wang, Z. (2014) Price anomalies and effectiveness of macro control policies: Evidence from chinese housing markets, *Land Use Policy*, 39, 96–109.
- Hoe, J., Dastane, D. O., & Selvaraj, K. (2018). Predicting consumer perception and its impact on purchase intention for residential property market. *Journal of Technology Management and Business*, 5(2).
- Hopkins, D. (2008). *A teacher's guide to classroom research*. McGraw-Hill.
- Jiang, J., & Zhang, J. (2021, August). *Analysis of County Consumers' Housing Purchase Intention and Influencing Factors-Based on the Investigation of Anyue County*. In International Conference on Management Science and Engineering Management (pp. 820-834). Springer, Cham.
- Joshi, Y., Uniyal, D. P., & Sangroya, D. (2021). Investigating consumers' green purchase intention: Examining the role of economic value, emotional value and perceived marketplace influence. *Journal of Cleaner Production*, 328, 129638.
- Jones, T. O., & Sasser, W. E. (1995). Why satisfied customers defect. *Harvard business review*, 73(6), 88.
- Kabir, S., Jamal, Z.B. and Kairy, B.P. (2023), "How much to invest for house purchase? The consumer purchase intention perspective of real estate investment decision", *International Journal of Housing Markets and Analysis*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJHMA-10-2022-0151>
- Kaur, J., & Mohindru, P. (2019). Pre and Post Purchase Behaviour in Realty Sector: A Literature Review. *Amity Global Business Review*, 9.
- Keller, K. L. (1998). Branding perspectives on social marketing. *ACR North American Advances*.
- Kooshali, A. D., Parvizi, R., Azeri, A. R. K., & Hosseini, S. B. (2015). A comparative study on the effect of nature on satisfaction with residence at detached houses (single unit) and residential building complexes (apartment). *Procedia-Social and Behavioural Sciences*, 201, 243-254.
- Lapersonne, E., Laurent, G., & Le Goff, J. J. (1995). Consideration sets of size one: An empirical investigation of automobile purchases. *International Journal of research in Marketing*, 12(1), 55-66.

- Lapierre, J., Filiatrault, P., & Chebat, J. C. (1999). Value strategy rather than quality strategy: A case of business-to-business professional services. *Journal of Business Research*, 45(2), 235-246.
- Le-Hoang, P. V., Ho, V. T., Phan, N. T., & Le, T. T. T. (2020). Factors affecting the intention to purchase townhouse. *Independent Journal of Management & Production*, 11(6), 1899-1914.
- Letkiewicz, J. C., & Heckman, S. J. (2018). Homeownership among young Americans: A look at student loan debt and behavioural factors. *Journal of Consumer Affairs*, 52(1), 88-114.
- Li, J.J. (2016). An empirical study on the impact of consumer perceived value on purchase intention in housing market (*Master's Thesis*, Anhui University).
- Li, Q. (2009). Urban "housing status group" in the transition period. *Jiangsu Social Sciences*, (4), 42-53.
- Lim, W. M., & Weissmann, M. A. (2023). Toward a theory of behavioural control. *Journal of Strategic Marketing*, 31(1), 185-211.
- Lim, T. Y., Leong, C. M., Lim, L. T. K., Lim, B. C. Y., Lim, R. T. H., & Heng, K. S. (2023). Young adult tourists' intentions to visit rural community-based homestays. *Young Consumers*, 24(5), 540-557.
- Liu, Y., & Li, Z. (2018). Determinants of housing purchase decision: an empirical study of the high education cohort in urban China. *Journal of Asian Architecture and Building Engineering*, 17(2), 299-305.
- Liu, Y., Yu, H., & Mao, Y. (2019). The influence of purchase decision involvement on purchase intention of commodity housing: Chain mediating effect of customer participation and customer perceived value. *Journal of Zhejiang University (Science Edition)*, 46(5),
- Lu, Q.H. (2012). The influence factors of city non-household population purchase behaviour (*Master's thesis*, Zhejiang University of Technology).
- Mohammad, A. A. S., & Alhamadani, S. Y. M. (2011). Service quality perspectives and customer satisfaction in commercial banks working in Jordan. *Middle Eastern Finance and Economics*, 14(1), 60-72.
- Nielsen, I., Nyland, C., Smyth, R., Zhang, M. & Zhu, C. J. (2006) Effects of intergroup contact on attitudes of chinese urban residents to migrant workers, *Urban Studies*, 43, 475–490.
- Njo, A., & Sugeng, K. (2023). House purchase intention during pandemic COVID-19 in Surabaya, Indonesia. *Property Management*, 41(2), 191-211.
- Patil, B., & Patil, N. (2020). Impact of COVID-19 pandemic on consumer behaviour. *Mukt Shabd Journal*, 9(5), 3074-3085.
- Pelaez, A., Chen, C. W., & Chen, Y. X. (2019). Effects of perceived risk on intention to purchase: A meta-analysis. *Journal of computer information systems*, 59(1), 73-84.
- Pozdena, R. J. (1988). *The modern economics of housing: A guide to theory and policy for finance and real estate professionals*. Greenwood Publishing Group
- Qian, Y.F., & Li, R. (2019). Can buying a house improve the happiness of the floating population - Empirical evidence from China labor force dynamic survey (CLDs). *Journal of Shangrao Normal University*, 1.
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business : a skill-building approach* (6th ed.). John Wiley & Sons Ltd.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, 22(2), 159-170.
- Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of retailing*, 75(1), 77-105.

- Tan, W. L., & Goh, Y. N. (2018). The role of psychological factors in influencing consumer purchase intention towards green residential building. *International Journal of Housing Markets and Analysis*, 11(5), 788-807.
- Wang, Y.F. (2020). The retaliatory consumption of 20-80 million luxury houses lining up to buy the Shanghai property market. *China Economic Weekly*, (08), 31-32.
- Winstanley, A. S. (2000). Housing, house and women's identity, (*Doctorate Thesis*, University of Canterbury). <http://dx.doi.org/10.26021/3612>
- Xu, T.B., & Xia, J.L. (2006). Research on quantitative evaluation method of real estate customer perceived value *Science and Technology Plaza*, (06), 99-101.
- Yu, C., Zhuo, H., Hui, E. C.-M. & Zhang, W. (2023). Housing purchase intention of the floating population under the home purchase restriction policy in China, *Housing Studies*, <https://doi:10.1080/02673037.2023.2244914>
- Yuan, C., Wang, S., & Yu, X. (2020). The impact of food traceability system on consumer perceived value and purchase intention in China. *Industrial Management & Data Systems*, 120(4), 810-824.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, 52(3), 2-22.
- Zhang, M. (2015). Research on the impact of residential customer participation on purchase intention (*Doctoral discourse*, Jiangxi University of Finance and Economics).
- Zhang, H.D., & Yang, C.C. (2017). Housing and class identity of urban residents -- a study based on Beijing, Shanghai, and Guangzhou. *Sociological research*, (5), 39-63.
- Zhang, F.L. (2021). Hot house prices and rising trading volume in the real estate market in first tier cities, *Chinese brands*, 3, 48-49.
- Zhang, L., Chen, L., Wu, Z., Zhang, S., & Song, H. (2018). Investigating young consumers' purchasing intention of green housing in China. *Sustainability*, 10(4), 1044.
- Zhou, F., & Zhang, H.H. (2009). An Empirical Study on the impact of real estate promotion factors on consumers' purchase intention. *Chinese business*, 12, 177-178.