ARTICLE

What drives young talents' home-buying intentions? Evidence from China's first-tier cities

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Abstract

Young talents are vital drivers of urban social and economic development. However, unaffordable homeownership in China's first-tier cities increasingly marginalizes this vital demographic. Understanding young talents' home-buying intentions and their determinants is therefore imperative for policies aimed at attracting and retaining them. While several studies have examined housing purchase determinants, few have considered behavioural psychological factors. This paper employs the Theory of Planned Behaviour (TPB) to investigate specific beliefs and background factors influencing young talents' home-buying intentions. Analysing 1065 questionnaires from young talents across four Chinese first-tier cities using structural equation modelling (SEM), we found that multiple beliefs and background factors significantly impact buying intentions. Behavioural beliefs prove pivotal: young talents perceive homeownership as investment opportunity, source of belonging, and means to secure children's education. Normative beliefs are influential, with individuals valuing opinions from current homeowners, family members, and partners. Control beliefs—encompassing financial constraints regarding down payments and mortgages, family support access, and settlement decisions—also significantly influence home-buying intentions. Additionally, background factors including gender, occupation, and current tenure shape various beliefs and attitudes, subsequently affecting purchase intentions. This study advances tenure choice literature by employing TPB to examine specific beliefs and socio-demographic influences. In the context of China's sluggish real estate market, these findings offer policymakers practical guidance for stimulating housing demand by targeting the specific psychological drivers of young talents, complementing conventional economic instruments.

Keywords Home-buying intention · Young talents · Theory of planned behaviour · Housing beliefs · First-tier cities · Structural equation modelling

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1 Introduction

Homeownership represents a fundamental aspiration across diverse cultures and economic systems, serving functions that extend far beyond mere shelter. As both an economic asset and a source of housing security, it enables individuals to build wealth while providing stability that rental housing often cannot guarantee (Doling & Ronald, 2010; Li, 2023; Li et al., 2023). However, escalating housing prices in major metropolitan areas worldwide have created significant barriers to entry, particularly affecting young professionals and recent graduates who lack accumulated capital (Boelhouwer, 2020; Lennartz et al., 2016).

This challenge is particularly pronounced in China's first-tier cities—Beijing, Shanghai, Guangzhou, and Shenzhen—where housing affordability has reached critical levels for young talents (Jin et al., 2025; Lian, 2022). The implications extend beyond individual housing outcomes: research indicates that young talents who cannot afford homeownership in these cities may choose not to migrate there or may leave for more affordable locations (Jin et al., 2022; J. Wen et al., 2024).

While the relationship between housing affordability and talent retention is complex and may involve multiple factors beyond housing costs alone, the potential outflow of human capital due to housing barriers represents a significant policy concern for urban development. As young talents drive social and economic innovation (Corcoran et al., 2010; R. L. Florida, 2005), understanding their housing decisions becomes crucial for creating sustainable urban environments that balance economic vitality with housing accessibility. This understanding will enable policymakers to identify the housing needs of young talent and develop policies that will attract and retain them, while also addressing broader housing affordability challenges.

Numerous scholarly works have delved into the decision-making process of housing tenure—between buying and renting—through various theoretical frameworks. These investigations have employed diverse analytical lenses, including neo-classical economic theory (Koopman, 2011), family lifecycle approach (Chen et al., 2022), and means-end theory (Coolen et al., 2002). Neo-classical economic theory represents one of the most extensively applied frameworks for studying housing tenure decisions. Seminal contributions in this tradition include studies by Henderson and Ioannides (1983), Campbell and Cocco (2007), and Yi and Lee (2014). This theoretical approach employs market supply and demand analysis, along with utility maximization principles, to explain individuals' housing tenure choices. The neo-classical paradigm assumes rational behaviour, complete information access, and autonomous decision-making by both households and market producers (Koopman, 2011). Researchers applying neo-classical economic theory have identified numerous market and economic determinants of housing choices, including interest rates, borrowing constraints, income levels, taxation policies, housing prices, and rental costs (Arimah, 1997; Bourassa, 1995; Bourassa & Yin, 2006; Carliner, 1974; Haurin et al., 1996; Stemn et al., 2024). A second major research tradition emphasizes socio-demographic approaches to housing tenure choice analysis (Clark & Dieleman, 1996; de Groot et al., 2013; Mulder & Wagner, 2001). This approach contends that individual housing decisions are fundamentally shaped by life course events (such as marriage and childbirth), family composition, and various socio-demographic characteristics including age, gender, educational attainment, ethnicity, and parental socioeconomic status (Chen et al., 2022; Haan et al., 2024; Mulder, 2006a, 2006b; van Gent & Zorlu, 2024).

While these traditions have generated valuable insights for housing tenure research, a growing body of scholarship questionsthe rationality assumptions underlying neo-classical theory—specifically, the notion that decision-making under uncertainty involves maximizing subjective expected utility with perfect market knowledge (Jin et al., 2025; Marsh & Gibb, 2011). Boelhouwer (2011) argues that housing markets are inherently imperfect due to information asymmetries, complex product characteristics, extended development timeframes, and substantial investment requirements. Consequently, individuals' housing market knowledge and information are often incomplete or biassed. Rather than adhering to the rational assumptions of neo-classical economic theory, people frequently base their housing decisions on imperfect information, including personal beliefs and attitudes (Lindblad et al., 2017; Odermatt & Stutzer, 2022). For instance, Odermatt and Stutzer (2022) demonstrated that homebuyers may ground their purchasing decisions in biassed beliefs about the long-term benefits of homeownership. Drew (2014) goes further, asserting that individuals' beliefs about homeownership—encompassing perceived financial benefits, enhanced childrearing opportunities, and increased security—exert greater influence on their willingness to purchase homes than many traditional economic and socio-demographic factors associated with tenure preferences. Conversely, research examining housing decisions through sociodemographic lenses often struggles to explain divergent tenure intentions among individuals from similar backgrounds. Even people sharing comparable socio-demographic characteristics may exhibit markedly different behavioural patterns and housing preferences (Jansen, 2012). An expanding literature demonstrates that psychological factors—including personal values, beliefs, attitudes, and subjective norms—can better illuminate the mechanisms driving housing tenure choices (Aguda, 2018; Ben-Shahar, 2007; Coolen et al., 2002). However, these investigations have typically focussed on limited sets of psychological factors, failing to develop comprehensive theoretical frameworks capable of integrating both socio-demographic variables and diverse psychological elements.

To bridge these gaps and deepen insights into young talents' decision-making, this study employs the theory of planned behaviour (TPB). By applying this framework, we seek to illuminate the complex interplay between socio-demographic background factors and psychological determinants, providing a nuanced understanding of how these elements collectively shape home-buying intentions.

This paper offers both theoretical and practical contributions. Theoretically, it moves beyond the rationality assumptions inherent in traditional economic approaches by examining both socio-demographic and psychological factors that influence housing tenure decisions. This framework enables comprehensive understanding of how socio-demographic characteristics shape decision-making processes. Practically, the study provides dual significance. First, detailed findings regarding how different background factors generate distinct beliefs that influence purchasing intentions can enhance governmental agencies' and developers' understanding of this demographic's housing needs, thereby supporting more targeted housing provision. Second, given the current sluggish real estate market in China and its implications for local economic and social stability, comprehensive understanding of factors influencing home-buying intentions can inform policy strategies aimed at addressing housing market challenges while supporting broader housing affordability goals.

The paper proceeds as follows. The next section provides detailed introduction to TPB and outlines specific research questions. We then present an overview of the case cities and describe our data collection procedures. Subsequently, we detail the statistical methods and

analytical approaches employed. The results are then presented and discussed, including exploration of study limitations. Finally, we conclude by highlighting policy implications and suggesting directions for future research.

2 Theoretical framework

While researchers have recognized the significance of psychological factors in housing tenure choices, comprehensive theoretical frameworks integrating both socio-demographic and psychological determinants remain limited. This study employs the TPB to address this gap. TPB explains how psychological factors—beliefs, attitudes, subjective norms, and perceived behavioural control—influence behavioural intentions without assuming rational decision-making (I. Ajzen, 1991). Additionally, it incorporates socio-demographic characteristics to explain why individuals with different backgrounds exhibit varying behavioural intentions. TPB posits that behavioural intentions are influenced by three constructs: attitudes towards the behaviour, subjective norms, and perceived behavioural control (PBC) (I. Ajzen, 1991). These constructs are shaped by underlying beliefs: behavioural beliefs influence attitudes, normative beliefs shape subjective norms, and control beliefs determine PBC. These beliefs provide detailed information about behavioural determinants (I. Ajzen, 2011) (Fig. 1).

TPB has demonstrated effectiveness in housing tenure research (Cui et al., 2016; Tang et al., 2025). Cohen et al. (2009) pioneered its application in tenure choice, finding that attitudes, subjective norms, and perceived control significantly influenced home-buying intentions among US tenants. Subsequent studies have validated TPB's applicability across various housing contexts (Judge et al., 2019; Kumar et al., 2024; Z. Liu et al., 2025; Zhang et al., 2018).

However, most studies focus only on TPB constructs rather than examining specific underlying beliefs. Understanding these beliefs can reveal decision-making mechanisms for home-buying behaviour. As Drew (2014) suggested, beliefs can significantly influence
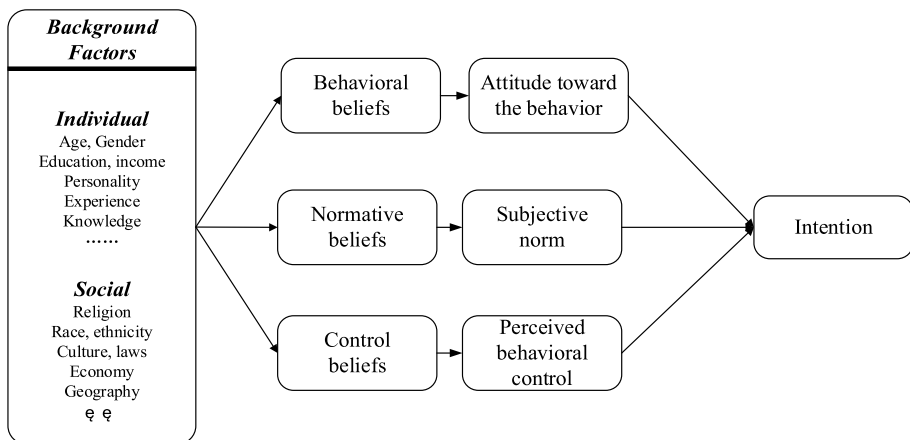
Fig. 1 Theoretical framework of TPB.
Source Ajzen (2005, p135)

housing preferences and provide specific information about housing choices. Understanding the role of specific beliefs that shape attitudes/subjective norms/PBC and ultimately determine the intention to purchase a home can uncover the decision-making mechanisms for home-buying behaviour (D. K. C. Chan et al., 2015; McEachan et al., 2011). Therefore, our research questions are formulated as follows:

RQ1a: What beliefs about homeownership do young talents hold that influence their attitudes, subjective norms, and perceived behavioural control?

RQ1b: How do these beliefs influence young talents' intention to buy a home in a first-tier city?

TPB also incorporates background factors that may indirectly influence intentions through their impact on beliefs and constructs (Ajzen, 2005). This leads to our second set of questions:

RQ2a: Which personal background factors influence the beliefs, attitudes, subjective norms, and perceived behavioural control regarding home purchase among young talents?

RQ2b: How do these background factors ultimately affect young talents' intention to buy a home in a first-tier city through the TPB constructs?

3 Data sources

3.1 Study scope and research area

This study examines homeownership intention in first-tier cities of China. Specifically, it focuses on understanding the factors that influence young talents' intention to purchase homes in these cities. The definition of talents can be approached from two perspectives, as outlined by Qian (2010). The first approach, rooted in human capital theory, identifies talents based on educational attainment, specifically those who have completed at least a college degree. The second perspective draws on R. Florida's (2002) concept of the creative class, which encompasses scientists, artists, entertainers, and professionals across various sectors. However, applying Florida's classification in the Chinese context presents challenges due to limitations in occupational data collection. To address this, Qian (2010) proposed using China's professional and technical personnel category ("Zhuanye Jishu Renyuan") as a proxy for the creative class. For the purposes of this study, young talents are defined through a combination of age, education, and professional criteria. Specifically, this includes individuals aged 20–40 who either (1) hold a bachelor's degree or higher, (2) possess a national vocational qualification certificate as professional and technical personnel, or (3) work in professional or managerial positions in companies.

The current study focuses on all four first-tier cities in China, namely Beijing, Shanghai, Guangzhou, and Shenzhen. These cities are renowned for their leading economic, social, and cultural development in the country. Beijing, the capital of China, is situated in Northern China and spans an administrative area of 16,410.5 km^2 with a population of 21.88 million residents as of 2020, according to National Bureau of Statistics of China (2021).

Shanghai, located on the southern estuary of the Yangtze River, boasts the highest population among Chinese urban areas, with 24.87 million inhabitants as of 2020. Guangzhou and Shenzhen, both located in southern China within Guangdong province, are significant urban centres. Guangzhou, the capital city of Guangdong province, has a population of 18.68 million, while Shenzhen, despite being the smallest city in terms of administrative area among the four first-tier cities, still has a population of 17.56 million. Collectively, these four first-tier cities are home to approximately 83 million residents and represent the epitome of development in China.

The selection of first-tier cities as the study area was motivated by two primary considerations. Firstly, these cities grapple with some of the most severe housing unaffordability issues in China. Over the past two decades, housing prices in Beijing, Shanghai, Shenzhen, and Guangzhou have witnessed exponential growth, far surpassing the national average (Kohl et al., 2025). For instance, the average price of commercial housing in Beijing skyrocketed over nine times from 4557 yuan/m^2 in 2000 to 42,684 yuan/m^2 in 2020, whereas the national average increased by approximately five times during the same period (National Bureau of Statistics of China, 2023). Moreover, the average housing prices in Shanghai, Shenzhen, and Beijing rank among the fourth, fifth, and sixth most expensive in the world, respectively (CBRE, 2020). Secondly, these first-tier cities have long been magnets for young talents due to higher salaries and superior urban amenities (He et al., 2016; Liu & Shen, 2014). The concentration of young talents in these cities provides an ideal setting to investigate their home-buying intentions. Additionally, the intricate balance between the allure of first-tier cities and the affordability challenges they pose renders the study of young talents' home-buying intentions in these cities particularly intriguing and valuable.

3.2 Data collection

Following the guidelines provided by Icek Ajzen (2002), a two-stage investigation was carried out to collect the research data. The first stage is an elicitation study to find the most common shared thoughts/beliefs of the target population about buying a home in first-tier cities. Next, the results of the elicitation study were used to formulate the main TPB questions for the questionnaire survey in the second stage. The data collection was performed after the approval of the Human Research Ethics Committee (HREC) of Delft University of Technology.

3.2.1 Elicitation study

During the time of our elicitation study in August 2022, China implemented strict lockdown measures due to the COVID-19 pandemic, limiting our ability to conduct on-site interviews. Consequently, we opted for online interviews as a practical alternative. Online interviews and open-ended surveys were conducted with a sample of 39 young talents[1] to elicit salient behavioural beliefs, normative referents, and control beliefs that influence the housing purchasing intention. The elicitation study was conducted with 11 young talents from Beijing, 11 from Shanghai, 8 from Guangzhou and 9 from Shenzhen. Moreover, a good mix of these respondents was achieved in terms of basic demographic factors such as gender, educa-

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[1]. As a rule of thumb, the pilot study should include a sample of 25 to 30 participants representative of the general research population (Ajzen, 2020).

tion, marital status and tenure type. During the interview, we assured participants of the confidentiality and anonymity of their responses and made efforts to establish rapport with the respondents to foster trust and open communication, enabling participants to express themselves more freely and authentically.

The survey contained 11 questions, including, for example, "Do you plan to buy a home in a first-tier city in the next five years? And why(not)?", "What are the pros/cons of buying a home in a first-tier city in the next five years?", "Who would (dis)agree with you to buy a home in a first-tier city?", and "What factors or circumstances would facilitate/prevent you from buying a home in a first-tier city?".

The salient beliefs were obtained by a content analysis that focussed on extracting and summarizing the most frequently mentioned responses to the 11 questions. We also scrutinized the elicited beliefs using a literature review, referencing Aguda (2018), Ben-Shahar (2007), and Drew (2014), among others. Finally, 9 behavioural beliefs, 6 normative beliefs, and 6 control beliefs were identified. See Appendix 1 for detailed information on the beliefs.

3.2.2 Questionnaire survey

3.2.2.1 Development of the questionnaire The questionnaire survey for the current research is part of a comprehensive survey into young talents' housing and migration intention. The specific questionnaire for the current study consisted of 2 main parts. The first part asked questions about the background factors. These are explained in Sect. 2 and summarized in Table 1. The second part asked young talents about personal opinions with regard to buying a home in a first-tier city in the next 5 years[2] under the guidance of the TPB framework.

Measuring intention, attitudes, subjective norms, and PBC

To assess young talents' intention to buy a home in a first-tier city in the next 5 years, we used 3 different semantic items (e.g. "I expect/want/intend to buy a home in a first-tier city in the next 5 years"). Answers were collected on a 7-point scale ranging from "strongly disagree = 1" to "strongly agree = 7". Likewise, three different semantic items with 7-point scales were used to measure attitude, subjective norm, and perceived behaviour control. Such items are referred to as reflective indicators by Icek Ajzen (2020, p. 318) because they are a reflection of what is intended to be measured. They can be found in more detail in Appendix 2.

Measuring behavioural/normative/control beliefs

Behavioural beliefs, normative beliefs, and control beliefs are called formative indicators as they influence the formation of attitude, subjective norm, and perceived behavioural control, respectively (Icek Ajzen, 2020, p. 318). Multiplicative terms (the product of the strength of a belief combined with the importance/value/power of that belief) were recommended by Ajzen to examine the impact of beliefs on their corresponding constructs (I. Ajzen, 1991). For example, attitude is influenced by the multiplication of behavioural belief strength and outcome evaluation. However, the multiplicative model has been challenged

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[2]. The reason for asking about the intention to buy a home in the next five years is that five years seems a good compromise. Buying a home is not as easy as buying groceries. Short-term intentions to buy a home, such as 2 years, may be affected by insufficient time to prepare adequately. A long-term desire to buy a home, such as 10 years, maybe too far in the future to make a concrete plan.

Table 1 Characteristics of the respondents

N=1065	Number of respondents	Mean (SD)/ percent- age of our sample	Definition (coding)
Age	1065	28.85(3.60)	Continuous variable
Gender			Binary variable (0=Male)
Male	481	45.2%	
Female	584	54.8%	
Only child			Binary variable (0=Non-only child)
No	460	43.2%	
Yes	605	56.8%	
Educational level			Binary variable (0=Bachelor's degree and below)
Bachelor's degree and below	291	27.3%	
Master's degree and above	774	72.7%	
Educational level (parents' highest)			Categorical variable
Junior high and below	281	26.4%	
High school	234	22.0%	
College degree	201	18.9%	
Bachelor and above	349	32.8%	
Hukou status[a]			Categorical variable
Hukou of first-tier cities	696	65.4%	
Other urban hukou	210	19.7%	
Other rural hukou	159	14.9%	
Marital status			Categorical variable
Single/divorced/widowed	440	41.3%	
Cohabiting/in a relationship	277	26.0%	
Married	348	32.7%	
Living with partner			Binary variable (0=No)
No	608	57.1%	
Yes	457	42.9%	
Living with children			Binary variable (0=No)
No	909	85.4%	
Yes	156	14.6%	
Current living/working city			Categorical variable
Beijing	266	25.0%	
Shanghai	262	24.6%	
Guangzhou	272	25.5%	
Shenzhen	265	24.9%	
Current occupation			Binary variable (0=working privately)
Working privately (including self-employed)	520	48.8%	
Working in government/public/state-owned/collected companies	545	51.2%	

Table 1 (continued)

N=1065	Number of respondents	Mean (SD)/ percentage of our sample	Definition (coding)
Family income(monthly after-tax household income)			Categorical variable
Less than 10,000 yuan	188	17.7%	
10,000–20,000 yuan	324	30.4%	
20,000–40,000 yuan	376	35.3%	
Over 40,000 yuan	177	16.6%	
Current housing tenure (in a first-tier city)			Binary variable (0=owner)
Owner	349	32.8%	
Non-owner	716	67.2%	
Indigenous people (born in first-tier cities)			Binary variable (0=no)
No	928	87.1%	
Yes	137	12.9%	
Length of residence in the current first-tier city (in years)[b]		7.40 (7.53)	Continuous variable
Length of working in the current first-tier city(in years)[c]		3.58 (3.23)	Continuous variable

[a]The hukou (household registration) system in China has segregated the rural and urban populations. Each person has a hukou (registration status), classified as "rural" or "urban" in a specific administrative district (Chan, 2010). In some cities where the local government wants to inhibit speculative home-buying, people without a local hukou have to pay social insurance or taxes for some years (e.g. 5 years in Beijing) to be allowed to buy housing in this city

[b]The length of residence is longer than the length of work in the current first-tier city can be attributed to two reasons. First, our respondents also include local young talents born and raised in first-tier cities. Secondly, many respondents pursued their education in the current first-tier city, such as completing bachelor's or master's studies. As academic study is not counted as employment, individuals may have resided in the city for educational purposes before entering the workforce

[c]In SEM, observed variables refer to the data that you have collected, for which scores have been entered into a data file. Latent variables typically represent hypothetical constructs or explanatory entities that are presumed to reflect a continuum that cannot be directly observed (Kline, 2015).

by scholars due to the difficulty of interpreting the meaning of the multiplicative terms and the other statistical technical issues, see Evans (1991), French and Hankins (2003), Gagné and Godin (2000), and Newton et al. (2012) for details. In the current research, we only measured the influence of beliefs on the corresponding constructs—and ultimately on the intentions—by inquiring about the strength of the beliefs. This was done to reduce the number of questions in the questionnaire and thus obtain a higher response rate, and to avoid the instability of the effect of the multiplicative model.

The measurement of beliefs was based on the TPB questionnaire design guidelines (Icek Ajzen, 2002). A total of 21 items were used to measure behavioural beliefs (9 items), normative beliefs (6 items), and control beliefs (6 items). Each belief was measured using a 7-point scale. For behavioural beliefs, the scale ranged from 'strongly disagree=1' to 'strongly agree=7'. Normative beliefs were measured from 'not at all important=1' to 'very important=7'. Control beliefs were assessed using a scale from 'extremely unlikely=1' to 'extremely likely=7'. All measurement items are presented in Appendix 1.

3.2.3 Field work

An online survey was employed to gather research data from September 14th to October 15th, 2022. Before the formal launch of the questionnaire, a small pilot study involving 6 young talents was conducted in early September 2022. Any poorly articulated questions, difficult-to-understand terminologies, and spelling errors identified during the pilot survey were promptly rectified.

The distribution of the formal questionnaire was facilitated through virtual snowball sampling. This method was chosen to overcome logistical barriers associated with on-site visits, facilitate geographic expansion, and afford a degree of control over the quantity and nature of responses by regulating referrals during the survey (Baltar & Brunet, 2012).

We conducted snowball sampling primarily through social media platforms such as WeChat and QQ. Initially, we initiated the referral chain by identifying eligible respondents, drawing from both the authors' social networks and participants in the elicitation study. Subsequently, we engaged these initial respondents to refer additional participants. Referrals were selected based on their residency or employment in first-tier cities, their affiliation with social networks comprising our target population, and their level of activity on social media platforms. A total of 46 participants from diverse industries were selected to help disseminate the questionnaire as referrals. Among them, 13 were tasked with distributing the questionnaire in Beijing, while 10, 11, and 12 individuals were responsible for distributing the questionnaire link in Shanghai, Guangzhou, and Shenzhen, respectively. Referrers primarily disseminated the questionnaire by sharing links to electronic surveys within their social networks in first-tier cities. During the distribution of questionnaires, we took measures to ensure demographic diversity by targeting individuals from different age groups, educational levels, occupations, housing tenures, etc. We monitored the distribution process closely to avoid oversampling certain demographic groups and to achieve a balanced representation across various characteristics.

As a rule of thumb, structural equation modelling (SEM) analysis typically requires a minimum sample size of 200 (Kline, 2015). Given that our study encompassed four cities, it was deemed appropriate to aim for a minimum sample size of 200 respondents per city. Consequently, we initially targeted a sample size of 1000 respondents, considering the likelihood of obtaining some invalid responses. Ultimately, we received a total of 1,152 responses. Following data cleaning procedures, 1,065 valid responses were retained. During the data cleaning process, we excluded responses that did not align with our target group criteria, such as individuals under 20 or over 40 years of age, school students not yet employed, responses with durations of less than 3 min, and responses containing obvious errors.

Table 1 presents the characteristics of the respondents. The young talents were almost equally distributed over the four first-tier cities (25% each). Due to the scarcity of reference city-level data on young talents for comparative analysis, along with the limited sample size within each city, it remains inconclusive whether our dataset accurately reflects the broader demographic of young talents across first-tier cities. However, considering our study's primary objective of uncovering the determinants behind young talents' intention to purchase homes, the issue of generalization will probably not impede our findings because the correlational relationships between factors are determined by analysing the variability within the sample rather than its similarity to the population.

3.3 Analytical methods

3.3.1 Statistical methods

Structural equation modelling (SEM) was chosen as the main statistical method for models in the current paper. Chin (1998) identified several advantages of SEM. Chin claimed that SEM provides researchers with the flexibility to (a) assess model relationships between multiple predictive variables and dependent variables at the same time, (b) enable the exploration of mediating and total effects in one analysis, and (c) construct the latent(unobservable) variables. In the current research, the intention, attitude, subjective norm, and perceived behavioural control are conceptual in nature and cannot be observed directly. For this reason, they are regarded as being latent variables.

Maximum likelihood (ML) was employed in the current analysis as it gives the most precise and robust statistical results (Hair, 2009). Nevertheless, it is unable to report the significance of indirect and total effects, as indirect effects tend to be non-normally distributed (Bollen & Stine, 1990). Therefore, the bootstrapping technique was also adopted to test the significance of the indirect and total effects. The analysis was conducted using AMOS 24 in SPSS.

3.4 Analytical process and model development

The analytical framework consisted of three sequential stages of investigation. The first stage involved a measurement model evaluation using Confirmatory Factor Analysis (CFA) to ensure the reliability and validity of our constructs (Collier, 2020, p. 62). This preliminary analysis guided the refinement of measurement items to achieve satisfactory model fit. Based on this analysis, one item of PBC ("Whether or not I buy a home in a first-tier city in the next 5 years is completely up to me") was removed to yield a good CFA result.

Following the measurement validation, the second stage employed bivariate analyses to systematically examine relationships between background factors and both the mean intention and significant beliefs. This preliminary screening utilized different statistical methods based on variable types: Pearson correlation for numerical variables, independent T-Test for binary variables, and one-way ANOVA for multi-categorical variables.

The final stage focussed on structural model development and proceeded in two steps. Initially, a basic TPB framework incorporating salient beliefs was constructed to examine how underlying beliefs influence attitude, subjective norm, perceived behavioural control, and intention to buy (Fig. 2). To maintain model parsimony, only beliefs demonstrating significant influence on intention were retained in the final specification.

Building upon these findings, the analysis then expanded to include relevant background factors. The final specification incorporated only those background factors showing significant binary relationships with mean intention. Furthermore, influence paths between background factors and significant beliefs were only included when their binary relationships proved statistically significant. This comprehensive model is presented in Fig. 3.
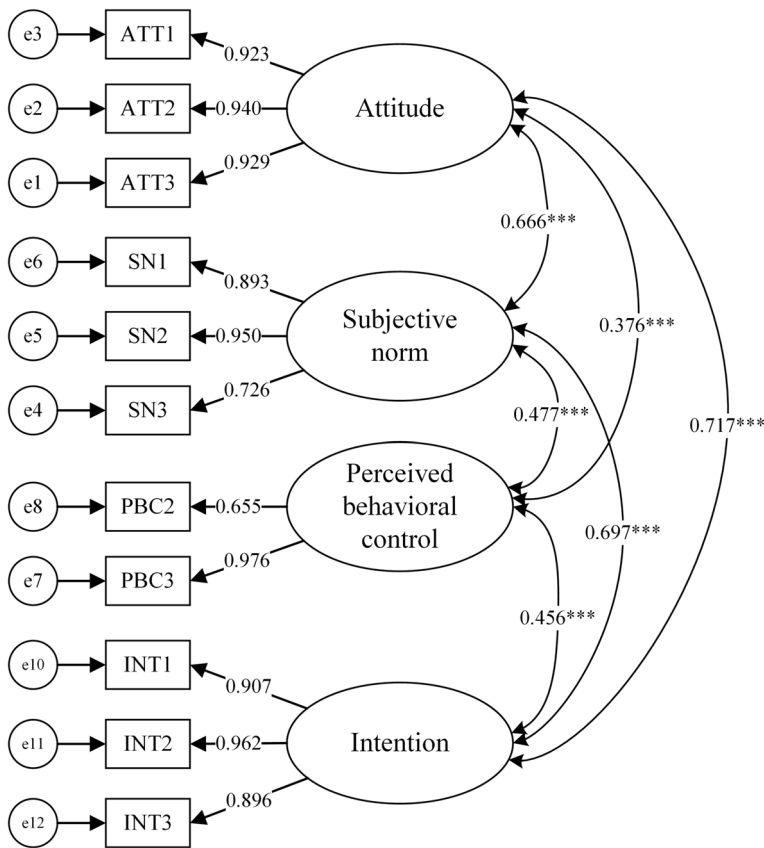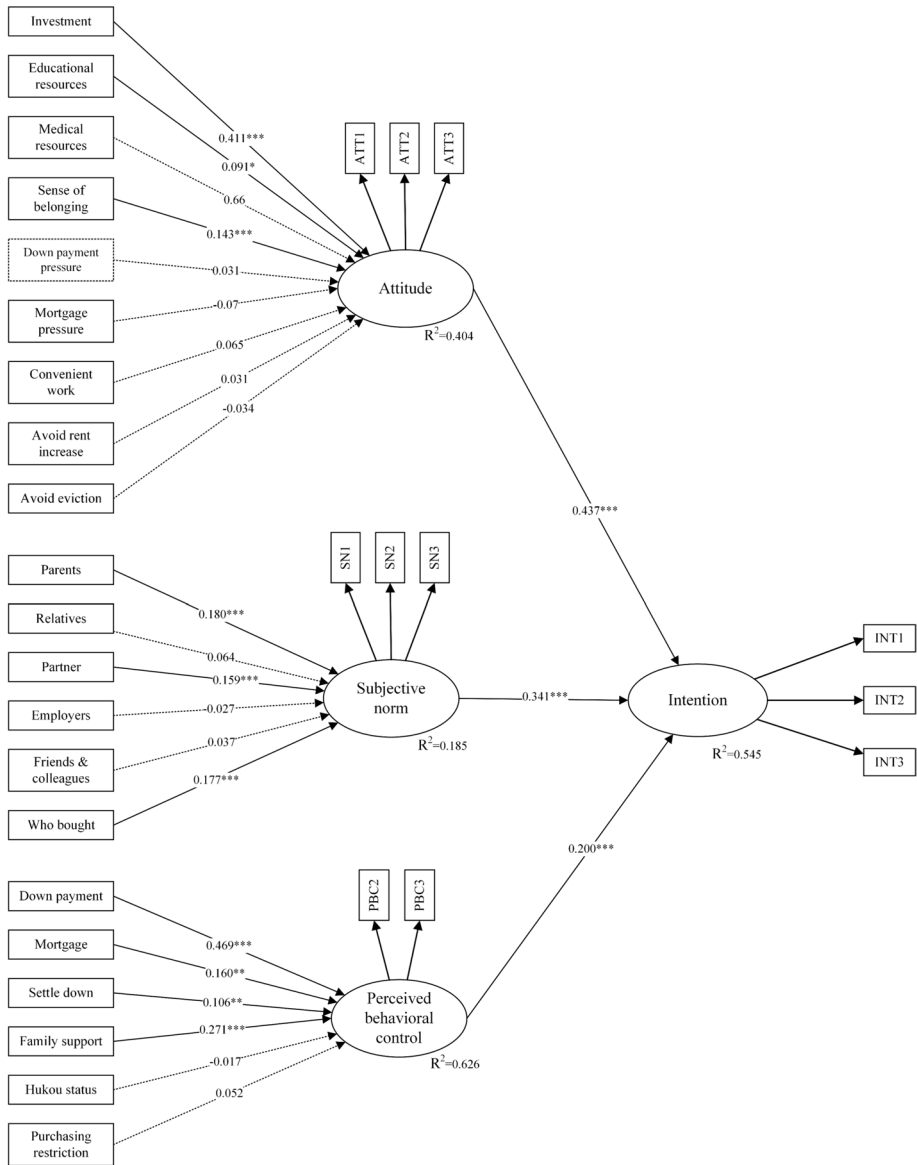
Fig. 2 Confirmatory factor analysis results with standardized estimates. Significance levels: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$; Model fit indices: CFI = 0.978, TLI = 0.969, RMSEA = 0.076; SRMR = 0.036

4 Results

4.1 Measurement model evaluation

Prior to testing the structural model, a Confirmatory Factor Analysis (CFA) was conducted to assess the reliability and validity of the measurement model. Factor loadings for all items were statistically significant ($p < 0.001$) and substantively meaningful, ranging from 0.655 to 0.976 (see Fig. 2). Attitude (ATT) showed particularly strong item loadings (0.923–0.940), followed by intention (INT) with loadings ranging from 0.896 to 0.962. Subjective norm (SN) demonstrated robust loadings between 0.726 and 0.950, while perceived behavioural control (PBC) showed acceptable to strong loadings (0.655–0.976).

The CFA results demonstrated excellent model fit with Comparative Fit Index (CFI) = 0.978, Tucker–Lewis Index (TLI) = 0.969, Root Mean Square Error of Approximation (RMSEA) = 0.076, and Standardized Root Mean Square Residual (SRMR) = 0.036. These values met the recommended thresholds: CFI and TLI should be greater than 0.90, RMSEA and SRMR should be less than 0.08 (Kline, 2015).

Fig. 3 The basic model with salient beliefs (standardized estimates). Significance levels: *p<0.05, **p<0.01, ***p<0.001; model fit indices: CFI=0.942, GFI=0.921, RMSEA=0.071; "……" dashed lines=non-significant; Refer to Appendix 1 for the description of each belief; to avoid overloading the figure, error items of beliefs and arrows between them are not shown

The measurement model showed strong reliability and validity (see Table 2). In terms of reliability, all constructs demonstrated good internal consistency, with composite reliability (CR) values ranging from 0.815 to 0.951, well above the recommended threshold of 0.6. For convergent validity, the average variance extracted (AVE) values for all constructs ranged from 0.696 to 0.866, exceeding the minimum criterion of 0.5. Discriminant validity was

Table 2 Measurement model results: factor loadings, composite reliability (CR), convergent validity, and discriminant validity

Latent variables	Measurable variables	Factor loading	CR	AVE	Square root of AVE	Correlation		
						ATT	SN	PBC
ATT	ATT1	.923***	0.951	0.866	0.931			
	ATT2	.940***						
	ATT3	.929***						
SN	SN1	.893***	0.895	0.741	0.861	0.666***		
	SN2	.950***						
	SN3	.726***						
PBC	PBC2	.655***	0.815	0.696	0.834	0.376***	0.477***	
	PBC3	.976***						
INT	INT1	.907***	0.944	0.849	0.921	0.717***	0.697***	0.456***
	INT2	.962***						
	INT3	.896***						

Significance levels: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

confirmed as the square root of AVE for each construct was greater than its highest correlation with any other construct.

The correlation analysis revealed moderate to strong relationships between constructs. The strongest correlation was observed between attitude and intention (0.717), followed by the relationship between subjective norm and intention (0.697). Perceived behavioural control showed moderate correlations with other constructs, ranging from 0.376 with attitude to 0.477 with subjective norm. These results indicate that our measurement model demonstrates satisfactory reliability and validity, providing a solid foundation for subsequent structural model analysis.

4.2 Preliminary analysis of background factors

Prior to incorporating background factors into the structural model, a series of bivariate analyses were conducted to examine the relationships between background factors and both the mean intention and significant beliefs. The results are shown in Appendix 3. These analyses employed different statistical methods based on variable types: pearson correlation for continuous variables, independent T-Test for binary variables, and one-way ANOVA for multi-categorical variables.

The preliminary analyses identified twelve background factors that demonstrated significant relationships with mean intention: age, years of working, years of living in first-tier cities, gender, education, current occupation, living with children, living with partner, current tenure, hukou status, marital status, and family income. These factors also showed significant associations with various beliefs, suggesting potential indirect effects through belief pathways.

For multi-categorical variables (hukou status, marital status, and family income), they were transformed into dummy variables with one category serving as the reference group before inclusion in the final structural model. This systematic screening approach ensured model parsimony, while retaining theoretically and statistically significant relationships for further analysis.

4.3 Structural model analysis

4.3.1 Basic TPB model

The basic model incorporating salient beliefs (Fig. 3) demonstrated good model fit with CFI = 0.942, GFI = 0.921, and RMSEA = 0.071. These values met the recommended thresholds (Kline, 2015), indicating the model adequately represents the underlying data structure.

As shown in Fig. 3, all three TPB constructs—attitude, subjective norm, and perceived behavioural control (PBC)—exhibited significant effects on intention to purchase a home. Further examination of belief structures in the model revealed varying levels of influence. Among the six behavioural beliefs examined, including notions such as 'owned house would be convenient for work', 'avoiding a sudden increase in the rent', and 'not being evicted by the landlord', none demonstrated significant impacts on attitude (represented by dashed lines in Fig. 3). Similarly, three normative beliefs failed to significantly influence subjective norm. Additionally, two out of the six control beliefs showed no significant effect on PBC.

Given these findings, all the aforementioned non-significant factors were omitted from the final model to ensure parsimony. The significant beliefs identified in Fig. 3 formed the foundation for the extended model incorporating background factors.
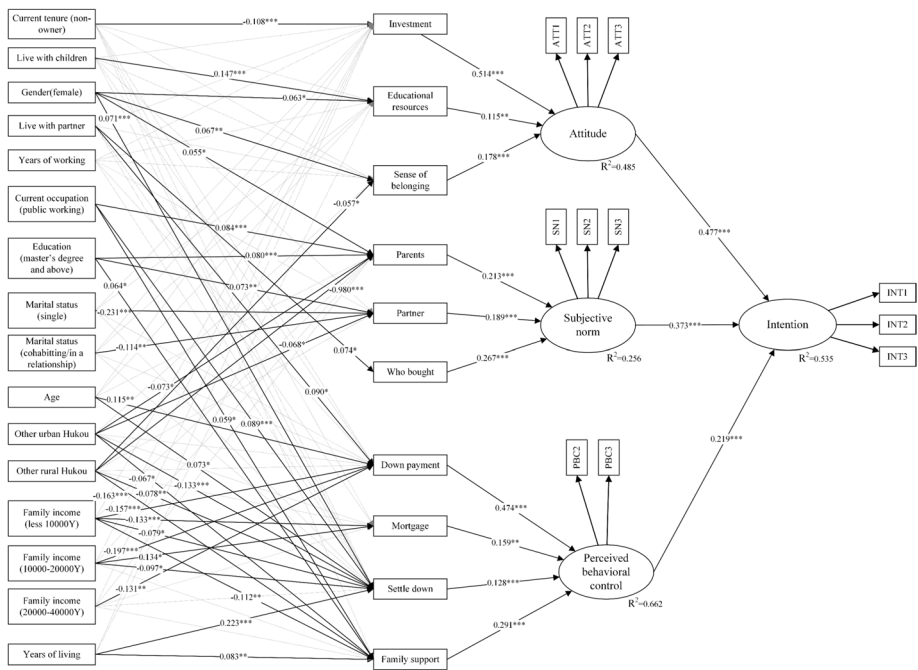
4.3.2 Extended model with background factors

The extended model incorporating background factors (Fig. 4) also demonstrated satisfactory fit indices (CFI = 0.937, TLI = 0.934, RMSEA = 0.057). The model explained 53.5% of the variance in intention to purchase a home, suggesting strong explanatory power.

The impact of salient beliefs on the theory of planned behaviour (TPB) constructs and intention is illustrated in Fig. 4 and detailed in Table 3. Among the behavioural beliefs examined, three displayed significant positive effects on attitude and intention. Notably, the perception of home ownership as a good financial investment exerted the strongest influence on attitude and intention. This implies that young talents who view buying a home as a sound investment tend to hold more positive attitudes towards home purchase and exhibit stronger intentions to buy. The anticipated sense of belonging and access to better educational resources for children followed, albeit with slightly lesser effects on attitude and intention.

Regarding normative beliefs, three out of six demonstrated significant impacts on subjective norm and intention to purchase a home in a first-tier city within 5 years. Particularly noteworthy was the considerable positive influence of successful homeowners in one's social circle on subjective norm and intention. A compelling illustration from one of our interviews underscores this point:

Those around me who bought a home often discuss home-buying related issues, which might have influenced me. I remember once we had dinner with my husband's colleagues. During the whole dinner, they discussed and planned to buy another house (they already bought one around 2018). They also strongly suggested that we should rush to buy a home in Shanghai ...... We bought our own house last year. (female, 30 years old, living in Shanghai, interviewed on 2 August 2022).

Fig. 4 Extended model with background factors (standardized estimates). Significance levels: *$p<0.05$, **$p<0.01$, ***$p<0.001$; model fit indices: CFI=0.937, TLI=0.934, RMSEA=0.057; Light grey lines=non-significant; to avoid overloading the figure, error items are not shown

Additionally, the opinions of parents and a partner significantly influenced subjective norm and strengthened the intention to buy. This suggests that the perceived importance of parental and partner opinions among young talents correlates with higher social pressure or support, thereby enhancing their willingness to purchase a home in a first-tier city. Conversely, the opinions of relatives, friends, colleagues, employers, and supervisors did not significantly influence subjective norm and intention.

Regarding control beliefs, four were identified to significantly influence perceived behavioural control and intention. Notably, the expectation of accumulating sufficient down payment within 5 years exhibited the highest impact on perceived behavioural control and intention. This suggests that young talents who harbour greater confidence in their ability to save enough money for a down payment within the next 5 years tend to wield greater control over their perceived behaviour, thereby displaying a stronger intention to purchase a home. Following closely, the anticipated availability of family financial support demonstrated the second-highest impact, succeeded by expectations of salary growth to manage mortgage payments more comfortably, and finally, the intention to settle down long-term in a first-tier city.

Regarding background factors, seven were identified to possess a significant relationship with intention. These factors include 'gender', 'current occupation', 'education', 'living with children', 'current tenure', 'hukou status', and 'family income'. Conversely, background factors such as 'age', 'years of working', 'years of living', 'living with a partner',

Table 3 Standardized total effects of the final model

	Attitude	Subjective norm	PBC	Intention
TPB constructs and beliefs				
Attitude	–	–	–	0.477***
My own house would be a good financial investment (investment)	0.514***	–	–	0.245***
My own house would ascertain better educational resources for my (future) children (if any) (educational resources)	0.115**	–	–	0.055**
My own house would give me a sense of belonging (sense of belonging)	0.178***	–	–	0.085***
Subjective norm	–	–	–	0.373***
Parents' opinions (parents)	–	0.213***	–	0.080***
Partner's opinions (partner)	–	0.189***	–	0.071***
Opinions of people around me who bought a home (Who bought)	–	0.267***	–	0.099***
Perceived behavioural control	–	–	–	0.219***
I expect that I can accumulate enough money to afford the down payment in the next 5 years (Down payment)	–	–	0.474***	0.104***
I expect my salary will rise in the next 5 years to allow me to pay the monthly mortgage (more easily) (Mortgage)	–	–	0.159**	0.035***
I expect to decide to settle down for more than 10 years in a first-tier city (Settle down)	–	–	0.128***	0.028***
I expect that I can get family financial support to buy a home in the next 5 years (Family support)	–	–	0.291***	0.064***
Background factors				
Age	/	/	0.064***	/
Years of working	/	/	/	/
Years of living	/	/	0.053****	/
Gender (male as reference)	0.019**	0.012**	0.009***	0.016***
Current occupation (working privately as reference)	–	0.018**	0.028**	0.013***
Education (bachelor's degree and below as reference)	–	0.031***	0.019*	0.016***
Live with children (do not live with children as reference)	0.061**	/	/	0.034**
Live with a partner (do not live with a partner as reference)	/	/	0.053*	/
Current tenure (owner as reference)	−0.069**	–	/	−0.030*
Hukou status (hukou of first-tier cities as reference)				
Other urban hukou	/	−0.028**	−0.068**	−0.030***
Other rural hukou	−0.010*	−0.030**	−0.054*	−0.028***
Marital status (married as reference)				
Single	/	−0.044***	/	/
Cohabiting/in a relationship	/	−0.021**	/	/
Family income (over 40,000 yuan as reference)				
Less than 10,000 yuan	/	/	−0.138***	−0.042*

Table 3 (continued)

	Attitude	Subjective norm	PBC	Intention
10,000–20,000 yuan	/	/	−0.149***	−0.046*
20,000–40,000 yuan	/	/	−0.077*	/

Significance levels: *$p<0.05$, **$p<0.01$, ***$p<0.001$; Dash line (–)=no pre-assumed relationship; Slash line (/)=non-significant relationship. As shown in Fig. 3, TPB constructs have direct effects on intention, while beliefs and background factors have indirect effects on intention through TPB constructs

and 'marital status' displayed a non-significant relationship with intention and were consequently omitted.

Based on the outcomes of binary analyses conducted between background factors and the mean intention to purchase, twelve background factors exhibiting significant binary relationships were integrated into the final model (refer to Appendix 3 and Fig. 4). Continuous and binary variables were directly introduced into the model, while multi-categorical variables were transformed into multiple dummy variables, with N−1 (where N represents the number of variable categories) dummy variables being included in the model. The excluded dummy variable was utilized as the reference.

Seven background factors were identified to possess a significant relationship with intention. These factors include 'gender', 'current occupation', 'education', 'living with children', 'current tenure', 'hukou status', and 'family income'. Conversely, background factors such as 'age', 'years of working', 'years of living', 'living with a partner', and 'marital status' displayed a non-significant relationship with intention and were consequently omitted. Section 6 will offer plausible explanations for the insignificance of these background factors. Next, the seven significant background factors are elaborated upon.

Remarkably, in comparison to male young talents, female young talents exhibited a greater inclination to purchase a home in a first-tier city within the next 5 years. As depicted in Table 3, female young talents showcased a more favourable attitude, perceived greater social support or pressure, and were deemed to possess higher behavioural control than their male counterparts. Further insights into the underlying driving forces are provided in Fig. 4. Firstly, female young talents more frequently concurred that buying a house would secure better educational resources for their (future) children (if any) and that an owner-occupied house would engender a sense of belonging, thereby shaping their positive attitude towards the home purchase. Secondly, the heightened social support/pressure perceived by young female talents stemmed from the greater importance accorded to parental opinions among them. Lastly, the enhanced perceived behavioural control among female young talents was primarily attributed to their increased likelihood, relative to male counterparts, of opting to settle in a first-tier city for more than 10 years.

Regarding current occupation, it was observed that young talents employed in sectors such as state-owned, government or collective companies perceived higher levels of social pressure/support and behavioural control, consequently exhibiting a greater intention to purchase a home compared to their counterparts in the private sector. As depicted in Fig. 4, individuals working in public companies placed greater value on parental opinions and were more inclined to settle in a first-tier city for over a decade, as well as anticipate family financial support, contributing to their heightened perceptions of social pressure/support and behavioural control, respectively.

Educational attainment displayed a significantly positive association with intention, indicating that young talents with higher educational levels (master's and PhDs) were more inclined to purchase a home. Figure 4 illustrates that individuals with advanced educational qualifications were perceived to have a greater likelihood of receiving financial support from their families for home purchase within the next 5 years. This increased likelihood of family financial support bolstered their perceived behavioural control, consequently elevating their willingness to purchase a home. Additionally, the greater significance attributed by highly educated young talents to the opinions of their parents and partners heightened their perception of support or pressure towards home purchase.

Furthermore, compared to young talents without children or those not residing with their children in a first-tier city, those living with children exhibited a more positive attitude and a higher intention to purchase a home within the next 5 years. As evidenced in Fig. 4, young talents cohabiting with children were more likely to believe that homeownership would afford better educational opportunities for their offspring. This behavioural belief regarding educational resources for children shaped their positive attitude towards home purchase and heightened their intention to buy.

Current tenure exhibited a significantly negative relationship with attitude and intention. Specifically, the findings revealed that young talents who were homeowners in a first-tier city displayed a more positive attitude and a higher intention to purchase additional homes in a first-tier city within the next 5 years compared to their non-homeowner counterparts. Figure 4 further illustrates that homeowners were more convinced of the soundness of investing in a home in a first-tier city compared to non-homeowners. In essence, the heightened buying intention among homeowners stemmed from their stronger belief in the investment potential of purchasing a home in a first-tier city.

Hukou status demonstrated a significant relationship with intention. Young talents holding rural or urban hukou in other cities displayed a lower intention to purchase a home compared to those with a first-tier city hukou. For both young talents with urban and rural hukou in other cities, Fig. 4 indicates that they accorded less importance to parental opinions, were less likely to settle in a first-tier city for over a decade, and had a lower likelihood of receiving family financial support compared to those with a first-tier city hukou. Notably, subtle distinctions existed between young talents with other urban hukou and those with other rural hukou. For instance, young talents with other urban hukou valued their partner's opinion less than those with a first-tier city hukou, while young talents with other rural hukou believed less in the ability of a house to provide a sense of belonging compared to their counterparts in a first-tier city hukou. These divergent beliefs held by young talents with different hukou statuses contributed to variations in their attitudes, perceived social pressure, and behavioural control towards home purchase in a first-tier city, subsequently resulting in differences in intention.

Family income was statistically significantly related only to perceived behavioural control and not to attitude or subjective norm. In comparison to young talents with a monthly family income exceeding 40,000 yuan, those with a monthly family income of less than 10,000 yuan and between 10,000 yuan and 20,000 yuan exhibited significantly lower intentions to purchase a home. Conversely, no significant difference in intention was observed between young talents with a monthly family income exceeding 40,000 yuan and those earning between 20,000 yuan and 40,000 yuan. Figure 4 highlights that young talents with a monthly family income below 20,000 yuan faced challenges in affording the down payment

and monthly mortgage, as well as in settling in a first-tier city for over a decade. Furthermore, those with a monthly family income below 10,000 yuan also had reduced chances of receiving family financial support. Consequently, young talents with a monthly family income below 20,000 yuan perceived lower behavioural control over purchasing a home within the next 5 years.

The findings from the final model incorporating background factors are depicted in Fig. 4. Table 3 presents the standard total effects of TPB constructs, salient beliefs, and background factors on intention. The R-squared value for intention was calculated as 0.535, indicating that the independent variables in the model accounted for 53.5% of the variance in intention. The analysis revealed that attitude exerted the most substantial influence on young talents' intention to purchase a home in a first-tier city, followed by subjective norms and perceived behavioural control. This suggests that young talents with more positive attitudes, stronger subjective norms, and a heightened sense of control are more inclined to express their intention to buy a home within the next 5 years in a first-tier city.

5 Discussion

Amidst the backdrop of a sluggish housing market in China's first-tier cities, there arises a critical need to examine the decision-making process surrounding home ownership, particularly among young professionals who are in the nascent stages of their careers and face financial constraints. This study endeavours to delve into the intention of these young talents to purchase a home within the next 5 years in China's first-tier cities. Employing the TPB in conjunction with various background factors, we seek to address two pivotal research inquiries: (1) How do the beliefs of young talents regarding homeownership influence their intention to buy a home? and (2) What impact do background factors exert on the home-buying intentions of young talents? In this section, we present our findings, drawing comparisons with existing literature. Furthermore, we scrutinize the limitations inherent in our research and propose avenues for future investigation.

5.1 The impact of beliefs

The initial research inquiry delved into the specific beliefs surrounding homeownership that influence the intentions of young talents to purchase a home in first-tier cities. Notably, the behavioural belief regarding housing as a good financial investment emerged as the most influential factor positively impacting both attitude and intention towards home-buying. This outcome resonates with the observed trend in China's major urban centres, where many buyers have experienced substantial property value appreciation and lucrative returns on investments over recent decades (Li et al., 2024; Zheng et al., 2023). Moreover, this finding is corroborated by research conducted in various countries, highlighting the pivotal role of financial beliefs in motivating individuals to pursue homeownership (Belsky, 2013; Case & Shiller, 2003; Drew, 2014; Liu & Li, 2018; Reid, 2013). For instance, Drew's (2014) study on housing tenure choice in the US revealed that individuals who perceived homeownership as a profitable long-term investment were significantly more inclined (280%) towards becoming homeowners compared to those who did not share this belief.

Additionally, our investigation unveiled that homeownership fosters a sense of belonging and offers perceived benefits such as access to superior educational resources for children. Qualitative research by Reid (2013) illustrated how homeownership represents a sense of belonging, particularly for migrants, as it symbolizes citizenship and the right to establish roots in a country. Similarly, Liu and Li (2018) emphasized the connection between homeownership and a sense of belonging to a city, as homeowners perceive themselves as integral members of their community.

The belief that homeownership translates into enhanced educational opportunities for children is intricately linked to China's education system, particularly the concept of the "school district". The longstanding "nearby schooling" policy and the "school district system" in China's compulsory education landscape (H. Wen et al., 2017) dictate that children of homeowners have access to higher-quality public schools within their designated district compared to children of renters (Li et al., 2022). Although policies in some cities, such as Shenzhen, are gradually diluting the significance of the "school district", this belief continues to shape individuals' intentions to purchase a home.

An interesting revelation concerning normative beliefs is the substantial influence wielded by the opinions of individuals within the respondent's social circle who have already embarked on the journey of homeownership. Surprisingly, these peer opinions exert a more pronounced impact on shaping positive subjective norms and, consequently, on the intention to buy a home, surpassing the influence of parents and partners. This stands in contrast to the findings of Li et al. (2022), who identified valuing the perspectives of family members as the most influential factor guiding individuals towards choosing the private rental market. Such divergent results highlight the nuanced nature of normative beliefs, which may exert varying influences on different behavioural intentions (Ajzen, 1991).

Despite both buying and renting representing housing tenure choices, they diverge significantly in their economic attributes and social symbolism. Notably, homeownership is often associated with elevated social status, as posited by McCabe (2018). Consequently, the desire to uphold or attain a similar social standing to one's peers may elucidate the significance of peer opinions among individuals who have intentions to purchase a home. This phenomenon aligns with numerous studies investigating the impact of market sentiment on home-buying intentions, indicating that heightened enthusiasm within the housing market, evidenced by peers engaging in home purchases, correlates with increased inclination towards homeownership (Dong et al., 2022; Jin et al., 2023).

The present study uncovered a significant association between the perception of a higher likelihood of affording a down payment and mortgage and increased behavioural control and intention to purchase a home. This finding is intuitive, considering the enduring financial commitment that buying a home entails. Moreover, perceiving a high likelihood of receiving familial support was also found to enhance control over homeownership decisions and the propensity to buy a home. This result aligns with prior research by Lux et al. (2018), Druta and Ronald (2017), and Deng et al. (2019), underscoring the pivotal role of family support in facilitating young individuals' access to homeownership. In the face of today's increasingly unattainable housing market, relying on familial assistance emerges as a crucial avenue for contemporary young adults grappling with the homeownership dilemma.

Furthermore, young talents who envision settling in first-tier cities exhibit a heightened intention to purchase a home, perceiving it as a key indicator of permanent residency. This finding offers valuable insight into the nexus between migration patterns and housing

behaviour, supplementing existing literature that predominantly explores how homeownership influences individuals' intentions to remain in their current locale (Aner, 2016; Cui et al., 2015; Teixeira & Drolet, 2018).

5.2 The impact of background factors

The second research question delves into the influence of personal background factors on the intention to purchase a home in a first-tier city. While prior research has often established a direct correlation between background factors and home-buying intentions (Bazyl, 2009; Njo & Sugeng, 2023; Wang & Li, 2006), it has frequently overlooked the mechanisms through which these factors exert their influence, either theoretically or empirically. In contrast, this study contributes to the literature by demonstrating that certain background factors impact young talents' intentions to purchase a home through the mediating effects of the TPB components.

Specifically, our findings illuminate how disparities in beliefs, attitudes, subjective norms, and perceived behavioural controls among young talents from diverse backgrounds contribute to variations in their intentions to buy a home. In Sect. 5, we elaborate on seven significant background factors that shape home-buying intentions, providing a nuanced understanding of their influence. Next, we will discuss five background factors that were potentially relevant in previous studies but were not significant in this study.

Drew (2014) discovered that age strongly influences future house purchase expectations. However, in our study, the effect of age on the intention to buy a home was not significant, possibly due to our sample comprising young talents aged 20–35, exhibiting limited age variation. Furthermore, Liadi and Tapamose (2021) found that a longer stay in the city correlated with a more positive attitude/intention to buy. Yet, in our study, neither the length of residence nor the length of work in the city significantly related to the intention to buy a home. This disparity in findings may stem from differences in methodology; while their study solely examined the bivariate correlation between length of residence and attitude/intention, our analysis went further and incorporated other independent variables. Despite this, the relationship between length of residence/work and intention remained insignificant, suggesting that home-buying intention is not contingent upon the duration of residence/work.

Furthermore, our study revealed that living with a partner was unrelated to the intention to buy a home, contrasting with the significant influence of living with children. This observation aligns with Jin et al.'s (2023) findings, suggesting that young talents may tolerate substandard rental housing conditions but aspire to provide better accommodations for their children in the future. In contrast, while life course models typically emphasize the importance of marital status in promoting housing purchases (Raya & Garcia, 2012), our study did not find a significant relationship between marital status and the intention to buy a home. This divergence could be attributed to the prohibitively high threshold for homeownership in first-tier cities, rendering it unattainable for many young talents regardless of their marital status.

5.3 Limitation and future research direction

This study is subject to several limitations that warrant consideration. Firstly, it is important to note that our data were collected in 2022, when China's real estate market had just begun to cool down. Since then, the property market has experienced a significant downturn, characterized by declining housing prices and weakened market confidence (Li et al., 2025). This temporal limitation suggests that young talents' current housing purchase intentions and their influencing factors might have evolved substantially from our findings. While our results effectively capture the dynamics of the initial cooling period, they may not fully reflect the more pronounced market challenges and altered perceptions of young talents in the current market environment. Future studies could investigate how young talents' housing purchase intentions have shifted in response to the sustained market downturn, and whether the relative importance of different influencing factors has changed under these new market conditions.

Secondly, our theoretical framework focuses exclusively on purchase intentions without examining the intention-behaviour gap. Given that housing purchase is a complex decision often involving multiple stakeholders (e.g. family members, banks, real estate agents) and various external constraints (e.g. mortgage availability, housing supply), strong purchase intentions may not necessarily translate into actual buying behaviour. Future research endeavours could address this limitation by investigating both intentions and actual purchase behaviours, potentially incorporating the perspectives of different stakeholders in the housing purchase process.

Thirdly, while we examined young talents' housing purchase intentions across first-tier cities, our analysis did not fully account for the heterogeneous housing market conditions among these cities, such as differences in housing prices, supply levels, and local housing policies. Although our findings suggest no significant divergence in purchase intentions across cities (see Appendix 3), the underlying mechanisms and context-specific factors influencing these intentions might vary substantially. Future research could conduct more nuanced comparative analyses of how city-specific market conditions and policy environments shape young talents' housing purchase intentions.

6 Conclusion

Since the COVID-19 pandemic, China's first-tier cities have grappled with persistent real estate downturn, presenting challenges for local economic and social stability (Li et al., 2025). While housing affordability remains a primary constraint, policymakers face a knowledge gap regarding the underlying psychological determinants of home-buying intentions, particularly among young talents—a pivotal demographic for urban vitality.

Moving beyond traditional studies that emphasize socio-demographic variables, this research utilized the Theory of Planned Behavior to deconstruct the belief systems driving young talents' housing decisions. Our findings reveal that intentions are not merely a function of income or age, but are significantly shaped by behavioural beliefs (viewing homeownership as financial investment, a locus of belonging, and a gateway to educational resources), normative beliefs (social pressure from parents, partners, and successful peers), and control beliefs (confidence in down payment affordability, family support, and settle-

ment plans). Furthermore, we demonstrate how background factors—including gender, occupation, education, family composition, tenure status, hukou registration, and income— indirectly orchestrate these intentions by influencing specific belief structures.

These insights have profound implications. They suggest that effective policy interventions must go beyond conventional economic levers like interest rate adjustments or price controls. Instead, policymakers should consider the psychological dimensions of housing consumption. As De Jong and Fawcett (1981) questioned, "What else can be done in a shorter time and at a lower, more feasible cost?" In this light, targeted communication strategies that address specific beliefs—such as clarifying long-term settlement benefits or addressing anxieties regarding educational resources—could prove effective. By aligning housing policies with the specific psychological and behavioral drivers of young talents, cities can better foster environments that attract and retain this essential human capital.

7 Appendix 1: Descriptive statistics of behavioural/normative/control beliefs

Behavioural beliefs (formative indicators)			
Variable	Item wording When I would buy a home in a first-tier city in the next 5 years	Item value: scale	Mean (SD)
Investment	My own house would be a good financial investment	Strongly disagree → strongly agree: 1 → 7	4.6 (1.42)
Educational resources	My own house would ascertain better educational resources for my (future) children (if any)		5.09 (1.39)
Medical resources	Because of my own house, I would enjoy excellent medical services easier		4.54 (1.49)
Sense of belonging	My own house would give me a sense of belonging		5.4 (1.43)
Down payment pressure	I would have high pressure to pay the down payment		5.59 (1.35)
Mortgage pressure	I would have high pressure to pay the monthly mortgage		5.59 (1.32)
Convenient work	I can live in my own house which is more convenient for me to work in the current city		5.08 (1.49)
Avoid rent increase	I can live in my own house so that I would not have to cope with a sudden increase in the rent		5.05 (1.50)
Avoid eviction	I can live in my own house so that I would have the certainty of not being evicted by the landlord		5.12 (1.58)

Normative beliefs (formative indicators)

Variable	Item wording How much do you value their opinion when it comes to buying a home in a first-tier city in the next 5 years?	Item value: scale	Mean (SD)
Parents	Parents' opinions	Not important at all → very important: 1 → 7	5.11 (1.44)
Relatives	Relatives' opinions		3.19 (1.59)
Partner	Partner's opinions		5.49 (1.45)
Employers	Employer/supervisor's opinions		3.09 (1.61)
Friends and colleagues	Friends' and colleagues' opinions		3.52 (1.59)
Who bought	Opinions of people around me who bought a home		3.77 (1.62)

Control beliefs (formative indicators)

Variable	Item wording How much do you value their opinion when it comes to buying a home in a first-tier city in the next 5 years?	Item value: scale	Mean (SD)
Down payment	I expect that I can accumulate enough money to afford the down payment in the next 5 years	Extremely unlikely → Extremely likely: 1 → 7	3.99 (1.83)
Mortgage	I expect my salary will rise in the next 5 years to allow me to pay the monthly mortgage (more easily)		4.46 (1.57)
Settle down	I expect to decide to settle down for more than 10 years in a first-tier city		4.84 (1.72)
Family support	I expect that I can get family financial support to buy a home in the next 5 years		4.37 (1.8)
Hukou status	I expect that I can get a hukou in a first-tier city in the next 5 years (If already got one, indicate Extremely likely)		5.65 (1.81)
Purchasing restriction	I expect the purchasing restrictions in first-tier cities to be more relaxed in the next 5 years		4.84 (1.51)

8 Appendix 2: Measurement of intention, attitude, subjective norm, and PBC

Intention measurement			
Item Wording	Item name	Item value: scale	Mean (SD)
I expect to buy a home in a first-tier city in the next 5 years	INT1	Strongly dis-agree → Strongly agree: 1 → 7	4.8 (1.86)
I want to buy a home in a first-tier city in the next 5 years	INT2		4.65 (1.86)
I intend to buy a home in a first-tier city in the next 5 years	INT3		4.35 (1.94)

Attitude measurement (reflective indicators)			
Item Wording	Item name	Item value: scale	Mean (SD)
I think buying a home in a first-tier city in the next 5 years is	ATT1	Bad → Good: 1 → 7	4.8 (1.58)
	ATT2	Worthless → Useful: 1 → 7	4.71 (1.61)
	ATT3	The wrong thing to do → The right thing to do: 1 → 7	4.67 (1.62)

Subjective norm measurement (reflective indicators)			
Item wording	Item name	Item value: scale	Mean (SD)
Most people who are important to me think that I should buy a home in a first-tier city in the next 5 years	SN1	Strongly dis-agree → Strongly agree: 1 → 7	4.7 (1.55)
Most people whose opinions I value would approve of me buying a home in a first-tier city in the next 5 years	SN2		4.73 (1.54)
Most of the young people around me will buy a home in a first-tier city in the next 5 years	SN3		4.53 (1.55)

Perceived behavioural control (PBC) measurement (reflective indicators)			
Item Wording	Item name	Item value: scale	Mean (SD)
Whether or not I buy a home in a first-tier city in the next 5 years is completely up to me	PBC1	Strongly dis-agree → Strongly agree: 1 → 7	5.02 (1.53)
For me, buying a home in a first-tier city in the next 5 years is easy	PBC2		3.29 (1.68)
I am confident that if I want to, I could buy a home in a first-tier city in the next 5 years	PBC3		4.24 (1.71)

9 Appendix 3: Analysis of relationships between background factors, intention, and significant beliefs

9.1 Results of the Pearson correlation (for continuous background variables)

Pearson correlation	Age	Years of working	Years of living
Mean intention			
R(1063)	**0.062***	**0.108*****	**0.084****
Sig	0.042	0.000	0.006
Investment			
R(1063)	**0.077***	**0.153*****	**0.083****
Sig	0.012	0.000	0.006
Educational resources			
R(1063)	**0.065***	**0.132*****	**0.071***
Sig	0.034	0.000	0.020
Sense of belonging			
R(1063)	−0.004	**0.063***	0.023
Sig	0.886	0.040	0.459
Parents' opinion			
R(1063)	−0.058	−0.014	0.025
Sig	0.058	0.650	0.418
Partner's opinion			
R(1063)	**0.077***	**0.098*****	0.031
Sig	0.012	0.001	0.320
Opinion of who bought			
R(1063)	−0.015	0.054	−0.025
Sig	0.630	0.078	0.424
Down payment			
R(1063)	**0.152*****	**0.145*****	0.015
Sig	0.000	0.000	0.635
Mortgage			
R(1063)	−0.004	0.025	0.009
Sig	0.906	0.409	0.771
Settle down			
R(1063)	**0.207*****	**0.247*****	**0.332*****
Sig	0.000	0.000	0.000
Family support			
R(1063)	0.027	0.035	**0.119*****
Sig	0.385	0.248	0.000
Whether this background factor is included in the final model?	Yes	Yes	Yes

Significance levels: ***$p<0.001$. **$p<0.01$. *$p<0.05$; The bolded coefficients indicate that the results of the binary analysis are significant and this relationship will be included in the final model

9.2 Results of the independent T-test (for binary background variables)

Independent samples test		Gender	Only child	Education	Indigenous	Live with partner	Live with children	Current occupation	Current tenure
Mean intention	Sig	**0.006****	0.416	**0.023***	0.983	**0.000****	**0.001****	**0.004****	**0.000****
Investment	Sig	0.067	0.857	0.125	0.321	**0.017***	**0.000****	0.713	**0.000****
Educational resources	Sig	**0.004****	**0.037***	0.078	0.740	0.094	**0.000****	0.302	**0.000****
Sense of belonging	Sig	**0.003****	0.569	0.702	0.437	0.751	**0.010****	0.255	**0.014***
Parents	Sig	**0.008****	**0.000****	**0.001****	0.718	**0.028***	0.099	**0.000****	0.319
Partner	Sig	0.959	0.802	**0.009****	0.074	**0.000****	**0.000****	0.304	0.183
Who bought	Sig	0.751	**0.031***	0.952	0.054	**0.050***	0.077	0.216	0.430
Down payment	Sig	0.084	**0.000****	0.517	0.782	0.000	**0.000****	0.241	**0.002****
Mortgage	Sig	0.443	0.101	0.977	0.408	0.042	0.160	0.088	**0.004****
Settle down	Sig	**0.004****	0.832	0.650	**0.000****	0.000	**0.000****	**0.000****	**0.000****
Family support	Sig	0.105	**0.000****	**0.001****	**0.001****	0.309	0.125	**0.004****	**0.000****
Whether this background factor is included in the final model?		Yes	No	Yes	No	Yes	Yes	Yes	Yes

Significance levels: ***$p<0.001$. **$p<0.01$. *$p<0.05$; The bolded coefficients indicate that the results of the binary analysis are significant and this relationship will be included in the final model

9.3 Results of the one-way ANOVA (for multi-categorical background variables)

ANOVA	Education (parents' highest)	Hukou status	Marital status	Current live city	Family income
Mean intention					
ANOVA/Welch's F	F(3, 1061)=1.211	F(2, 1062)=21.967	F(2, 1062)=9.568	F(3, 1061)=1.974	F(3, 1061)=14.369
Sig	0.305	**0.000****	**0.000****	0.116	**0.000****
Investment					

ANOVA	Education (parents' highest)	Hukou status	Marital status	Current live city	Family income
ANOVA/Welch's F	F(3, 1061)=1.692	F(2, 1062)=1.557	F(2, 1062)=5.730	F(3, 1061)=0.702	F(3, 1061)=5.921
Sig	0.167	0.211	**0.003****	0.551	**0.001*****
Educational resources					
ANOVA/Welch's F	F(3, 1061)=3.458	F(2, 1062)=2.555	F(2, 1062)=6.386	F(3, 1061)=0.526	F(3, 1061)=1.937
Sig	0.016*	0.078	**0.002****	0.665	0.122
Sense of belonging					
ANOVA/Welch's F	F(3, 1061)=2.902	F(2, 1062)=3.234	F(2, 1062)=1.059	F(3, 1061)=0.649	F(3, 1061)=1.236
Sig	0.034*	**0.040***	0.347	0.584	0.295
Parents					
ANOVA/Welch's F	F(3, 1061)=10.014	F(2, 1062)=7.357	F(2, 1062)=2.470	F(3, 1061)=2.691	F(3, 1061)=0.440
Sig	**0.000*****	**0.001*****	0.052	0.045*	0.724
Partner					
ANOVA/Welch's F	F(3, 1061)=0.534	F(2, 1062)=6.682	F(2, 1062)=27.413	F(3, 1061)=1.172	F(3, 1061)=9.092
Sig	0.659	**0.001*****	**0.000*****	0.319	**0.000*****
Who bought					
ANOVA/Welch's F	F(3, 1061)=2.803	F(2, 1062)=2.989	F(2, 1062)=0.456	F(3, 1061)=1.532	F(3, 1061)=0.405
Sig	0.039*	0.052	0.634	0.205	0.749
Down payment					
ANOVA/Welch's F	F(3, 1061)=3.313	F(2, 1062)=5.341	F(2, 1062)=9.211	F(3, 1061)=2.666	F(3, 1061)=15.977
Sig	0.020*	**0.005****	**0.000*****	0.047	**0.000*****
Mortgage					
ANOVA/Welch's F	F(3, 1061)=0.584	F(2, 1062)=3.728	F(2, 1062)=2.200	F(3, 1061)=2.011	F(3, 1061)=7.569
Sig	0.626	**0.024***	0.111	0.111	**0.000*****
Settle down					
ANOVA/Welch's F	F(3, 1061)=1.930	F(2, 1062)=45.898	F(2, 1062)=14.857	F(3, 1061)=5.228	F(3, 1061)=22.620
Sig	0.123	**0.000*****	**0.000*****	0.001***	**0.000*****
Family support					
ANOVA/Welch's F	F(3, 1061)=24.261	F(2, 1062)=25.118	F(2, 1062)=0.737	F(3, 1061)=2.763	F(3, 1061)=9.812
Sig	0.000***	**0.000*****	0.479	0.041*	**0.000*****
Whether this background factor is included in the final model?	No	Yes	Yes	No	Yes

Significance levels: ***$p<0.001$. **$p<0.01$. *$p<0.05$; The results of Post Hoc Tests (multiple comparison) are not presented due to the limited length of the paper; The bolded coefficients indicate that the results of the binary analysis are significant and this relationship will be included in the final model

Declarations

References

Aguda, O. (2018). *The influence of socio-psychological factors on housing tenure decisions among British young adults*. Heriot-Watt University.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t

Ajzen, I. (2002). Constructing a TpB Questionnaire: Conceptual and methodological considerations. Technical Report. University of Massachusetts Amherst.

Ajzen, I. (2005). Attitudes, personality and behavior (2nd ed.). Open University Press.

Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health, 26*(9), 1113–1127. https://doi.org/10.1080/08870446.2011.613995

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies, 2*(4), 314–324.

Ajzen, I., Joyce, N., Sheikh, S., & Cote, N. G. (2011). Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology, 33*(2), 101–117. https://doi.org/10.1080/01973533.2011.568834

Aner, L. G. (2016). Dwelling habitus and urban out-migration in Denmark. *European Urban and Regional Studies, 23*(4), 662–676. https://doi.org/10.1177/0969776414532932

Arimah, B. C. (1997). The determinants of housing tenure choice in Ibadan, Nigeria. *Urban Studies, 34*(1), 105–124.

Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research, 22*(1), 57–74. https://doi.org/10.1108/10662241211199960

Bazyl, M. (2009). Factors influencing tenure choice in European countries. *Central European Journal of Economic Modelling and Econometrics, 1*(4), 371–387.

Belsky, E. S. (2013). *The dream lives on: The future of homeownership in America*. Retrieved from https://www.jchs.harvard.edu/sites/default/files/w13-1_belsky_0.pdf

Ben-Shahar, D. (2007). Tenure choice in the housing market - Psychological versus economic factors. *Environment and Behavior, 39*(6), 841–858. https://doi.org/10.1177/0013916506297829

Boelhouwer, P. (2011). Neo-classical economic theory on housing markets and behavioural sciences: Ally or opponent? *Housing, Theory and Society, 28*(3), 276–280.

Boelhouwer, P. (2020). The housing market in The Netherlands as a driver for social inequalities: Proposals for reform. *International Journal of Housing Policy, 20*(3), 447–456. https://doi.org/10.1080/19491247.2019.1663056

Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology, 20*, 115–140. https://doi.org/10.2307/271084

Bourassa, S. C. (1995). A model of housing tenure choice in Australia. *Journal of Urban Economics, 37*(2), 161–175.

Bourassa, S. C., & Yin, M. (2006). Housing tenure choice in Australia and the United States: Impacts of alternative subsidy policies. *Real Estate Economics, 34*(2), 303–328.

Campbell, J. Y., & Cocco, J. F. (2007). How do house prices affect consumption? Evidence from micro data. *Journal of Monetary Economics, 54*(3), 591–621.

Carliner, G. (1974). Determinants of home ownership. *Land Economics, 50*(2), 109–119.

Case, K. E., & Shiller, R. J. (2003). Is there a bubble in the housing market? *Brookings Papers on Economic Activity, 2003*(2), 299–362.

CBRE. (2020). *Global Living 2020*. Retrieved from https://www.chrome-extension://ikhdkkncnoglghljlkmci mlnlhkeamad/pdf-viewer/web/viewer.html?file=https%3A%2F%2Fwww.cbreresidential.com%2Fuk% 2Fsites%2Fuk-residential%2Ffiles%2FCBRE-Global%2520Living_2020_Final.pdf

Chan, D. K. C., Hardcastle, S., Dimmock, J. A., Lentillon-Kaestner, V., Donovan, R. J., Burgin, M., & Hagger, M. S. (2015). Modal salient belief and social cognitive variables of anti-doping behaviors in sport: Examining an extended model of the theory of planned behavior. *Psychology of Sport and Exercise, 16*, 164–174. https://doi.org/10.1016/j.psychsport.2014.03.002

Chan, K. W. (2010). The household registration system and migrant labor in China: Notes on a debate. *Population and Development Review, 36*(2), 357–364.

Chen, L., Du, H., Hui, E.C.-M., Tan, J., & Zhou, Y. (2022). Why do skilled migrants' housing tenure outcomes and tenure aspirations vary among different family lifecycle stages? *Habitat International, 123*, Article 102553.

Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS Quarterly, 22*(1), vii–xvi.

Clark, W. W. A., & Dieleman, F. M. (1996). *Households and housing: Choice and outcomes in the housing market*. Transaction Publishers.

Cohen, T. R., Lindblad, M. R., Paik, J. G., & Quercia, R. G. (2009). Renting to owning: An exploration of the theory of planned behavior in the homeownership domain. *Basic and Applied Social Psychology, 31*(4), 376–389. https://doi.org/10.1080/01973530903316971

Collier, J. E. (2020). *Applied structural equation modeling using AMOS: Basic to advanced techniques*. Routledge.

Coolen, H., Boelhouwer, P., & Van Driel, K. (2002). Values and goals as determinants of intended tenure choice. *Journal of Housing and the Built Environment, 17*(3), 215–236.

Corcoran, J., Faggian, A., & McCann, P. (2010). Human capital in remote and rural Australia: The role of graduate migration. *Growth and Change, 41*(2), 192–220. https://doi.org/10.1111/j.1468-2257.2010.0 0525.x

Cui, C., Geertman, S., & Hooimeijer, P. (2015). Residential mobility of skilled migrants in Nanjing, China. *Environment and Planning a: Economy and Space, 47*(3), 625–642. https://doi.org/10.1068/a140079p

Cui, C., Geertman, S., & Hooimeijer, P. (2016). The mediating effects of parental and peer pressure on the migration intentions of university graduates in Nanjing. *Habitat International, 57*, 100–109. https://doi .org/10.1016/j.habitatint.2016.05.010

de Groot, C., Manting, D., & Mulder, C. H. (2013). Longitudinal analysis of the formation and realisation of preferences to move into homeownership in the Netherlands. *Journal of Housing and the Built Environment, 28*(3), 469–488. https://doi.org/10.1007/s10901-012-9320-7

De Jong, G. F., & Fawcett, J. T. (1981). Motivations for migration: An assessment and a value-expectancy research model. In *Migration decision making* (pp. 13–58). Elsevier.

Deng, W. J., Hoekstra, J. S. C. M., & Elsinga, M. G. (2019). Why women own less housing assets in China? The role of intergenerational transfers. *Journal of Housing and the Built Environment, 34*(1), 1–22. https://doi.org/10.1007/s10901-018-9619-0

Doling, J., & Ronald, R. (2010). Home ownership and asset-based welfare. *Journal of Housing and the Built Environment, 25*, 165–173.

Dong, Z., Hui, E. C. M., Yi, D., & Zhang, W. (2022). How is housing purchase intention related to consumption? The role of market sentiment. *Housing Studies*. https://doi.org/10.1080/02673037.2022.2101628

Drew, R. B. (2014). *Believing in homeownership: Behavioral drivers of housing tenure decisions*. Retrieved from https://www.jchs.harvard.edu/sites/default/files/w14-3_drew.pdf

Druta, O., & Ronald, R. (2017). Young adults' pathways into homeownership and the negotiation of intra-family support: A home, the ideal gift. *Sociology, 51*(4), 783–799. https://doi.org/10.1177/0038038516629900

Evans, M. G. (1991). The problem of analyzing multiplicative composites: Interactions revisited. *American Psychologist, 46*(1), 6.

Florida, R. (2002). *The rise of the creative class* (Vol. 9). Basic Books.

Florida, R. L. (2005). *Cities and the creative class*. Psychology Press.

French, D. P., & Hankins, M. (2003). The expectancy-value muddle in the theory of planned behaviour—and some proposed solutions. *British Journal of Health Psychology, 8*(1), 37–55. https://doi.org/10.1348/1 35910703762879192

Gagné, C., & Godin, G. (2000). The theory of planned behavior: Some measurement issues concerning belief-based variables. *Journal of Applied Social Psychology, 30*(10), 2173–2193. https://doi.org/10.1111/j.1559-1816.2000.tb02431.x

Haan, M., Finlay, L., & Cheng, W. (2024). Independent household formation: Disparities in the housing behaviours of ethno-racial groups in Canada and the United States. *Journal of Housing and the Built Environment, 39*(2), 1013–1034. https://doi.org/10.1007/s10901-024-10114-9

Hair, J. F. (2009). *Multivariate data analysis*. Prentice Hall.

Haurin, D. R., Hendershott, P. H., & Wachter, S. M. (1996). *Borrowing constraints and the tenure choice of young households*. National Bureau of Economic Research.

He, Z., Zhai, G., Asami, Y., & Tsuchida, S. (2016). Migration intentions and their determinants: Comparison of college students in China and Japan. *Asian and Pacific Migration Journal, 25*(1), 62–84.

Henderson, J. V., & Ioannides, Y. M. (1983). A model of housing tenure choice. *The American Economic Review, 73*(1), 98–113.

Jansen, S. J. (2012). What is the worth of values in guiding residential preferences and choices? *Journal of Housing and the Built Environment, 27*, 273–300.

Jin, C., Li, B., Jansen, S. J., Boumeester, H. J., & Boelhouwer, P. J. (2022). What attracts young talents? Understanding the migration intention of university students to first-tier cities in China. *Cities, 128*, Article 103802.

Jin, C., Li, B., Jansen, S. J. T., Boumeester, H. J. F. M., & Boelhouwer, P. J. (2023). Understanding the housing pathways and migration plans of young talents in metropolises—A case study of Shenzhen. *Housing, Theory and Society*. https://doi.org/10.1080/14036096.2023.2200784

Jin, C., Li, B., Jansen, S. J. T., Boumeester, H. J. F. M., & Boelhouwer, P. J. (2025). Young talents' settlement decisions in China's metropolises: An integrated prospect theory framework. *Population, Space and Place, 31*(7), Article e70099. https://doi.org/10.1002/psp.70099

Judge, M., Warren-Myers, G., & Paladino, A. (2019). Using the theory of planned behaviour to predict intentions to purchase sustainable housing. *Journal of Cleaner Production, 215*, 259–267.

Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford.

Kohl, S., Li, B., & Cui, C. (2025). Housing segregation in Chinese major cities: A K-nearest neighbor analysis of longitudinal big data. *Computers, Environment and Urban Systems, 121*, 102326.

Koopman, M. J. (2011). Neo-classical economic analysis. In *The Measurement and analysis of housing preference and choice* (pp. 203–223). Springer.

Kumar, J., Rani, G., Rani, M., & Rani, V. (2024). Exploring sustainable pathways in the green housing market: An investigation of green housing purchase behavior by using PLS-SEM. *Property Management*. https://doi.org/10.1108/PM-08-2024-0081

Lennartz, C., Arundel, R., & Ronald, R. (2016). Younger adults and homeownership in Europe through the global financial crisis. *Population, Space and Place, 22*(8), 823–835. https://doi.org/10.1002/psp.1961

Li, B. (2023). The realization of class-monopoly rents: Landlords' class power and its impact on tenants' housing experiences. *Journal of Urban Management, 12*(4), 360–374. https://doi.org/10.1016/j.jum.2023.08.002

Li, B., Aalbers, M. B., Chen, J., & Kohl, S. (2025). Managing overaccumulation: China's new affordable rental housing programme and its financialization through REITs. *Environment and Planning a: Economy and Space.* https://doi.org/10.1177/0308518x251360878

Li, B., Jansen, S. J., van der Heijden, H., Jin, C., & Boelhouwer, P. (2022). Unraveling the determinants for private renting in metropolitan China: An application of the Theory of Planned Behavior. *Habitat International, 127*, Article 102640.

Li, B., Jin, C., Jansen, S. J., van der Heijden, H., & Boelhouwer, P. (2023). Understanding the relationship between residential environment, social exclusion, and life satisfaction of private renters in Shenzhen. *Journal of Housing and the Built Environment, 38*(4), 2449–2472.

Li, B., van der Heijden, H., Jansen, S. J., Yan, J., & Boelhouwer, P. (2024). Promoting the private rented sector in metropolitan China: Key challenges and solutions. *International Journal of Housing Policy*. https://doi.org/10.1080/19491247.2024.2308735

Liadi, O. F., & Tapamose, A. S. (2021). Homeownership intention among Igbo ethnic group in Ilorin. *African Sociological Review/revue Africaine De Sociologie, 25*(1), 169–193.

Lian, H. (2022). The Beijing dream: Housing differentiation and experiences of young professional Beijingers. *Housing Policy Debate, 32*(4–5), 802–818.

Lindblad, M. R., Han, H.-S., Yu, S., & Rohe, W. M. (2017). First-time homebuying: Attitudes and behaviors of low-income renters through the financial crisis. *Housing Studies, 32*(8), 1127–1155.

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. https://doi.org/10.3130/jaabe.17.299

Liu, Y., & Shen, J. (2014). Jobs or amenities? Location choices of interprovincial skilled migrants in China, 2000–2005. *Population, Space and Place, 20*(7), 592–605.

Liu, Z., Qian, Q. K., Li, B., Jin, C., & Visscher, H. (2025). Dutch householders' intentions to adopt shallow geothermal systems for energy transition of existing buildings: A theory of planned behavior approach. *Energy and Buildings, 347*, Article 116386. https://doi.org/10.1016/j.enbuild.2025.116386

Lux, M., Samec, T., Bartos, V., Sunega, P., Palguta, J., Boumová, I., & Kážmér, L. (2018). Who actually decides? Parental influence on the housing tenure choice of their children. *Urban Studies, 55*(2), 406–426. https://doi.org/10.1177/0042098016646665

Marsh, A., & Gibb, K. (2011). Uncertainty, expectations and behavioural aspects of housing market choices. *Housing, Theory and Society, 28*(3), 215–235.

McCabe, B. J. (2018). Why buy a home? Race, ethnicity, and homeownership preferences in the United States. *Sociology of Race and Ethnicity, 4*(4), 452–472.

McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviours with the theory of planned behaviour: A meta-analysis. *Health Psychology Review, 5*(2), 97–144. https://doi.org/10.1080/17437199.2010.521684

Mulder, C. H. (2006a). Home–ownership and family formation. *Journal of Housing and the Built Environment, 21*(3), 281–298. https://doi.org/10.1007/s10901-006-9050-9

Mulder, C. H. (2006b). Population and housing: A two-sided relationship. *Demographic Research, 15*(13), 401–412.

Mulder, C. H., & Wagner, M. (2001). The connections between family formation and first-time home ownership in the context of West Germany and the Netherlands. *European Journal of Population = Revue Européenne De Démographie, 17*(2), 137–164. https://doi.org/10.1023/A:1010706308868

National Bureau of Statistics of China. (2021). National data. Retrieved from https://data.stats.gov.cn/search.htm?s=2020%E5%B9%B4%E5%8C%97%E4%BA%AC%E4%BA%BA%E5%8F%A3

National Bureau of Statistics of China. (2023). The average sales price of residential commercial housing. Retrieved from https://data.stats.gov.cn/easyquery.htm?cn=E0105&zb=A03&reg=110000&sj=2022

Newton, J. D., Ewing, M. T., Burney, S., & Hay, M. (2012). Resolving the theory of planned behaviour's 'expectancy-value muddle' using dimensional salience. *Psychology & Health, 27*(5), 588–602. https://doi.org/10.1080/08870446.2011.611244

Njo, A., & Sugeng, K. (2023). House purchase intention during pandemic COVID-19 in Surabaya, Indonesia. *Property Management, 41*(2), 191–211.

Odermatt, R., & Stutzer, A. (2022). Does the dream of home ownership rest upon biased beliefs? A test based on predicted and realized life satisfaction. *Journal of Happiness Studies, 23*(8), 3731–3763.

Qian, H. (2010). Talent, creativity and regional economic performance: The case of China. *The Annals of Regional Science, 45*(1), 133–156. https://doi.org/10.1007/s00168-008-0282-3

Raya, J., & Garcia, J. (2012). Which are the real determinants of tenure? A comparative analysis of different models of the tenure choice of a house. *Urban Studies, 49*(16), 3645–3662. https://doi.org/10.1177/0042098012446998

Reid, C. (2013). *To buy or not to buy? Understanding tenure preferences and the decision-making processes of lower-income households*. Retrieved from https://www.jchs.harvard.edu/sites/default/files/hbtl-14.pdf

Stemn, E., Koomson, E., & Fosu, S. (2024). Determinants of university students' choice of accommodation: An analysis of risk perception and safety awareness. *Journal of Housing and the Built Environment, 39*(4), 2171–2193. https://doi.org/10.1007/s10901-024-10162-1

Tang, D., Li, Q., Liu, M., Gong, X., & Huang, C. (2025). Uncovering renting intention of young adults toward long-term rental apartments based on an extended theory of planned behavior: evidence from Shanghai, China. *Journal of Housing and the Built Environment*. https://doi.org/10.1007/s10901-025-10225-x

Teixeira, C., & Drolet, J. L. (2018). Settlement and housing experiences of recent immigrants in small- and mid-sized cities in the interior of British Columbia (Canada). *Journal of Housing and the Built Environment, 33*(1), 19–43. https://doi.org/10.1007/s10901-017-9550-9

van Gent, W., & Zorlu, A. (2024). A generational perspective on owner-occupation rates among migrants and their (grand)children in the Netherlands. *Journal of Housing and the Built Environment, 39*(3), 1231–1252. https://doi.org/10.1007/s10901-024-10125-6

Wang, D., & Li, S. M. (2006). Socio-economic differentials and stated housing preferences in Guangzhou, China. *Habitat International, 30*(2), 305–326. https://doi.org/10.1016/j.habitatint.2004.02.009

Wen, H., Xiao, Y., & Zhang, L. (2017). School district, education quality, and housing price: Evidence from a natural experiment in Hangzhou, China. *Cities, 66*, 72–80.

Wen, J., Jansen, S. J. T., van der Heijden, H., & Boelhouwer, P. J. (2024). Migration across the urban hierarchy: Has China's urbanisation transitioned from the primate city stage to the secondary city stage? *Urban Studies*. https://doi.org/10.1177/00420980241259923

Yi, C., & Lee, S. (2014). An empirical analysis of the characteristics of residential location choice in the rapidly changing Korean housing market. *Cities, 39*, 156–163. https://doi.org/10.1016/j.cities.2014.03.002

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.

Zheng, H., Qian, J., Liu, G., Wu, Y., Delang, C. O., & He, H. (2023). Housing prices and household consumption: A threshold effect model analysis in central and western China. *Humanities and Social Sciences Communications, 10*(1), 764. https://doi.org/10.1057/s41599-023-02258-w