

# Universalism values on sharing accommodation among domestic Gen Z tourists in China: The moderating effects of ICT use habit

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## ABSTRACT

As part of a broader set of sharing economy practices, sharing accommodation has grown enormously in recent years. There is growing acceptance of sharing accommodation as a pathway for responsible tourism, which coincides with universalism value. Taking Gen Z adults as the research target, this study explored the effect of universalism personal value on tourists' attitudes and behavior intentions regarding the choice of sharing accommodation products in a Chinese context. Additionally, the moderating effects of the habit of ICT use were tested to observe whether it strengthened the influence of universalism personal value on tourists' attitudes. Online questionnaires were distributed to the respondents to obtain the information. To examine the relationship, the analysis was done using SPSS and AMOS for empirical analysis. The findings showed that for Chinese Gen Z adult tourists, universalism-concern personal value positively related to the tourists' attitude to sharing accommodation, and the tourists' attitude also has a significant effect on sharing accommodation choice behaviour intention compared with traditional hotel. However, the hypothesis that universalism-nature personal value will positively influence tourists' attitude was not supported. Besides that, habit of ICT use strengthens the relationship between universalism-concern personal value and tourists' attitude, but the hypothesis of the moderation role of habit of ICT use between universalism-nature and attitude was not supported in this study.

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## 1. Introduction

As part of a broader set of sharing economy practices, sharing accommodation has grown enormously in recent years. Sharing accommodation is also called shared accommodation, peer-to-peer (P2P) accommodation, home-sharing lodging, or short-term rentals by different organisations and researchers. It connects people with idle accommodation assets and people with temporary accommodation needs through the Internet, and idle assets can be used rationally (Hu et al., 2020). Sharing accommodations began to expand after the launch of Airbnb in 2008. The company has experienced greater than 100% growth in supply year-over-year for over a decade (Dogru et al., 2019), offering 5.6 million active listings as of June 2021 and serving over 100,000 cities in over 220 countries and regions around the world. Accordingly, peer-to-peer accommodation (P2P) mediated by sharing economy platforms is expected to challenge forms of traditional accommodation and revolutionise the tourism and hospitality industry (Kuhzady et al., 2022).

China is also a significant player in the sharing accommodation industry, more and more entrants formed a group of leading companies such as Xiaozhu, Airbnb, and Tujia. In China, the most popular calling or term in sharing accommodation areas is Minsu or short-rental platform. Generation Z consumers' growth accompanies the sharing economy's emergence and development. According to data from the Chinese National Bureau of Statistics, at the end of 2019, Chinese Generation Z (born from 1995 to 2009) is about 264 million, accounting for 18.86% of the country's total population. Gen Z is considered the future for many industries, including tourism (Wee, 2019). The study is concerned on Chinese domestic Gen Z tourists' attitude to sharing accommodation.

Personal values are rather stable determinants of behaviour and play significant roles in explaining particular behaviours and beliefs and driving various variables, including personal attitudes and behavioural intentions. Young Gen Z people have never lived without an Internet connection or digital devices; they are called "digital natives," and their perspective differs completely from that of older generations. The wide use of the internet and information and communication technologies (ICTs) by the generation may lead to large differences in personal values and attitudes, including in the tourism consumption area. Whether the use of ICT by the new generation influences their personal values and tourist attitudes is another problem deserving exploration.

Gen Z is growing along with environmental-related issues such as climate change that cause them to prefer natural tourism (Robinson & Schänzel, 2019). The tendency of Gen Z to use certain goods or services only when the requirement is apparent rather than acquire them for personal possession includes a growing awareness of the negative social and environmental consequences of excessive consumption (Jaciow & Wolny, 2021). They are also the generation to see co-habiting and shared economics as the norms while witnessing the increasing ecological concerns (Chang et al., 2023). The high score on universalism of Chinese students seems to show the tendency that Chinese young people are giving more importance to egalitarian rights and care for nature than respondents 20 years ago (Heim et al., 2017). The rise of Gen Z consumers may have different attitudes and show stronger support for sharing accommodation fields. Exploring the effect of universalism value on tourists' attitudes and behaviours is the main objective of this study.

From the overview of previous literature, some articles studied tourist perception, attitude, and behaviour by applying personal value theories, but few studies were taken to analyse tourist choice intention in the hospitality industry, especially seldom in the sharing accommodation field. Besides, this study proposes the habit of ICT use as a moderator variable to explore the new generation, a research gap that has never been touched before because the result will partially indicate the influence of ICT usage on personal value, expelling other environmental factors' roles. Additionally, this study will provide profiles of future consumers-Gen Z-to the marketers of sharing accommodation in the hospitality industry to attract tourists by considering upgrading and developing traditional supply; and the hospitality industry stakeholders may boost their businesses under the empirical lens of this study.

## 2. Literature review

### 2.1 Universalism and Schwartz's personal value theory

From the overview of previous literature, Schwartz's value theory is the most systematic value theory. The earliest literature of Schwartz was made public in 1992, and ten basic values and four higher-order values were raised. The universalism value is one of the ten basic values on the self-transcendence high-order. Schwartz and his colleagues (Schwartz et al., 2012) refined the theory in 2012 and expanded ten values into nineteen distinct values. The conceptual definition of universalism suggests three potential subtypes: tolerance, societal concern, and protecting nature. The refined theory provides greater heuristic and explanatory power than the original theory of ten values, providing greater and more precise insight into the value underpinnings of beliefs. It was found that the refined theory wins empirical support in a Chinese Confucian-influenced cultural context, which also shows the robustness of the theory in capturing the commonality of values in all cultures (Li, 2016).

Considering the advantage of the refined value theory with 19 basic values, this study will accept it as the theory basis rather than the original theory with 10 values. Schwartz and Cieciuch (2022) assessed the latest PVQ-RR scale to measure refined value theory across 49 cultural groups and 32 language versions. The fit of the theory-based measurement models supported the differentiation of almost all values in every cultural group, including Chinese backgrounds. Table 1 shows definitions of three subtypes of universalism basic value in the refined value theory.

Table 1. Conceptual definitions of Universalism Values in the Refined Value Theory

Value	Subtype	Conceptual Definitions
Universalism	Universalism-concern (UNC)	Commitment to equality, justice and protection for all people
	Universalism-nature (UNN)	Preservation of the natural environment
	Universalism-tolerance(UNT)	Acceptance and understanding of those who are different from oneself

Source: Schwartz et al. (2012)

### 2.2 Universalism personal value and sharing accommodation

The sharing economy ethos is related to sustainability, representing thinking such as money spent on locals, environmental friendliness, and the philosophy of Airbnb that supports the community's well-being (Guttentag & Smith, 2017). The ethos coincides with Universalism value. P2P accommodation platforms like Airbnb and Couchsurfing have started incorporating sustainability in their marketing communications (Kuhzady et al., 2022). And yet, it remains uncertain whether travellers are willing to consume on these platforms due to their sustainable promises. There is growing acceptance of P2P accommodation as a pathway for responsible tourism (Balaji et al., 2022).

There are three personal values about universalism in the refined value theory (see Table 1). Universalism-nature means preservation of the natural environment; Universalism-tolerance means acceptance and understanding of others who are different from oneself, while Universalism-concern is about commitment to equality, justice, and protection for all people. A blog by Dragon Trail International from TravelDaily in 2020 investigated China's Gen Z preference for travel destinations and showed that natural scenery is the most appealing element for 77% of respondents. Higher environmental protection awareness may lead to a preference for product sharing. We propose that the universalism-nature value may be an important determinant of Gen Z tourists' preference to share accommodation.

As a strong contributor to the diversification of tourism's accommodation value chain, Airbnb demonstrates its capacity to reduce inequalities by engaging residents by providing them with opportunities for new and additional sources of income (Chen et al., 2022). By increasing access to such underutilised

resources, Airbnb contributes to Sustainable Development Goal 8 (decent work and economic growth) and Sustainable Development Goal 10 (reduced inequalities) of UNWTO Development Goal 2020. Universalism refers to the commitment to equal treatment, justice, and protection for all individuals. Sharing accommodation ethos and contributions is more congenial with the personal value of universalism-concern.

All these findings show Gen Z may have a stronger universalism personal value, both the universalism-nature and universalism-concern values may positively affect preference for sharing accommodation products. However, the universalism-tolerance value did not find any support or effect on tourists' attitudes or behaviours in previous literature. Hence, only universalism-nature and universalism-concern values are considered in this study.

### *2.3 Tourist attitude and behavior intention to sharing accommodation*

Personal values have been associated with attitudes and behaviour (Roccas & Sagiv, 2010). When the consumer decides on a goal (e.g., product or service), it is common to observe that the consumer's attitude determines the purchase intention (Bagozzi & Dholakia, 1999). Research on tourist attitudes and behavioural intentions covers multiple aspects of the tourism industry. Some researchers concentrate on tourist attitude and intention to visit or revisit a destination (Huang & van der Veen, 2019; Kasim et al., 2019; Hasan et al., 2019; Gosal et al., 2020). Some researchers study attitude towards sustainable tourism or ecotourism (Hsu et al., 2020; Thi Khanh & Phong, 2020; Santos-Roldán et al., 2020; Palacios-Florencio et al., 2021); Some studies focus on the consumption attitude and intention for food and event (Ahmad et al., 2020; Rousta & Jamshidi, 2020; Hanafiah & Hamdan, 2021; Liu et al., 2021). Not many studies research on tourist attitude and behaviour intention by applying personal value theories in hospitality industry.

Some studies have indicated that Gen Z has unique shared values priorities, beliefs, attitudes and behaviours (Inglehart, 1997; Egri & Ralston, 2004). In the European context, some studies found that higher education and lower age determined whether inhabitants of these countries used sharing economy services. In addition, in 2022, the Chinese Gen Z occupied over half of the Minsu market, as discussed above.

Consumer choice has become more complicated because sharing accommodation has provided an alternative category of lodging products. Consumers have to choose between hotels and sharing accommodation before deciding which accommodation unit to stay in (Ye et al., 2023). And comparing how consumers choose between hotel and home-sharing offerings is critical to obtaining a more comprehensive and realistic understanding of consumer behaviour in the accommodation sector (Mody et al., 2023). But there is still no conclusion that proves sharing accommodation has distinctive advantages in attracting young people compared to traditional accommodation.

Based on the previous studies on sharing accommodation, a range of personal values can motivate different value-expressive attitudes and behaviours (Lee et al., 2010), and attitude must be a determinant factor in behavioural intention. This study explores the tourists' attitudes influenced by universalism personal value towards sharing accommodation; furthermore, it investigates choice behavioural intention from the perspective of comparison between traditional accommodation and sharing accommodation. In this study, behavioural intention (BI) means the preference to share accommodation products rather than traditional hotel products. Attitude (ATT) means Chinese Gen Z tourists' attitude toward sharing accommodation products. The hypotheses are formulated:

*Hypothesis 1: Universalism-concern value will positively influence tourist attitudes toward sharing accommodation.*

*Hypothesis 2: Universalism-nature value will positively influence tourist attitudes toward sharing accommodation.*

*Hypothesis 3: Tourist attitude has a positive effect on sharing accommodation choice behaviour intention.*

## 2.4 Moderating role of habit of use

Some researchers believe a relationship between values and ICT use exists (Furner & George, 2012; Straub, 1994). Global mobile trends in 2017 show information and communication technology (ICT) connects two-thirds of the global population. Nourished by information technologies, the internet, and social networks, Generation Z is the first generation to use mobile devices from a very young age. Prensky (2001) was the first to coin the term digital natives for Gen Z and characterised this generation as a group that thinks and processes information fundamentally differently from their predecessors. Gen Z is always connected (Turner, 2015) and linked to their digital devices for various activities, including social relationships, entertainment, information, shopping (Smith, 2019), tourism decisions, and behaviour.

The depiction of individual information systems adoption research is one of the mature research streams in the contemporary ICT research area (Venkatesh et al., 2007; Williams et al., 2009). The Unified Theory of Acceptance and Use of Technology (UTAUT) proposed by Venkatesh et al. (2003) is the most popular theory to explore the acceptance and use of ICT. The UTAUT2 scale, as the latest introduction in 2012, has already garnered over 5000 citations in Google Scholar. It has been frequently cited in information systems and other fields (Tamilmani et al., 2021), including the tourism field. In 2012, the model was extended to technology users' consumer contexts, incorporating three extra factors, including 'Habit' (Venkatesh et al., 2012). 'Habit' was the most important new theoretical construct added to the UTAUT2 model as a key predictor of technology use. Use behaviour occurs automatically as a result of past habits without the formation of evaluation and intention (Kim et al., 2005). To that extent, habit as a key alternative mechanism for predicting consumer behaviour is lauded in the Journal of the Association for Information Systems (JAIS) (Venkatesh et al., 2012). This study explores whether the different extents of use habits will influence tourists' personal values and attitudes, and further influence their behavioral intentions. This study will adopt the 'Habit' factor of UTAUT2 as a moderator variable to measure the habit of ICT use of Gen Z consumers.

From the previous analysis, more use of ICTs may give people more chances to access more information about sharing accommodation platforms and product exhibitions, to know the advantages and differences of multiple products, and an open perspective help them to cultivate more universal opinions like sharing consciousness, sustainability or globalization. Hence, this study proposed that heavy usage of ICT as a moderator affects the personal values of Gen Z and the corresponding attitude to sharing accommodation. Hypotheses are:

*Hypothesis 4: Habit of ICT use strengthens the relationship between Universalism-concern personal value, and attitude to sharing accommodation.*

*Hypothesis 5: Habit of ICT use strengthens the relationship between Universalism-nature personal value, and attitude to sharing accommodation.*

Based on the above hypotheses, Figure 1 represents the study's framework and the proposed hypotheses.

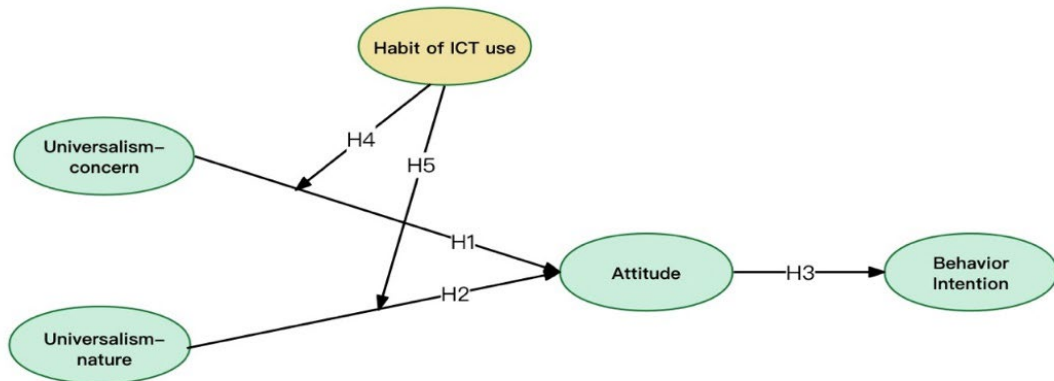


Figure 1. Research framework

### 3. Methodology

#### 3.1 Sample study and questionnaire

Gen Z adults are the target respondents in this study, hence, mature consumers over 18 are the proper respondents. Regarding 2023 as the survey period, the younger people born from 1997 to 2005 were selected during the questionnaire survey. The survey questionnaires were used, and responses were collected online. This questionnaire used a Likert scale method that shows a scale of 1 to 7, where 1 represented “strongly disagree” and 7 represented “highly agree.” This questionnaire has two parts: part A and part B. Part A focuses on the variables that will be tested in this study (see Table 2), while Part B is about the demographics of the respondents.

As mentioned before, universalism values measurement items come from the latest PVQ-RR scale of Schwartz and Cieciuch (2022). The mainstream items in attitude measurement that are normally used (ATT3-ATT5) are accepted, with two items that measure preference (ATT1, ATT2) added to emphasise the comparison of sharing and traditional accommodation. The behaviour intention items from So et al. (2018) were applied to explore the motivations and constraints of Airbnb consumers; the BI1-BI3 coincides with Ajzen (1991) and Ahmad et al. (2020). Habit (HB) has been defined as the extent to which people tend to perform behaviours automatically because of learning (Limayem et al., 2007), while Kim et al. (2005) equate habit with automaticity. Three measure items of habit of ICT use from UTAUT2 are adopted in this study (Venkatesh et al., 2012). Considering the word “addicted” has an extreme pejorative connotation in Chinese context, which shows an obvious emotional deviation from the other two HB items, “fascinated” is accepted instead.

Table 2. Variables and survey scale

Variables	Code	Items	Source
Universalism-concern	UNC1	It is important to me that the weak and vulnerable in society be protected.	Schwartz and Cieciuch, 2022
	UNC2	It is important to me that every person in the world have equal opportunities in life.	
	UNC3	It is important to me that everyone be treated justly, even people I don't know.	
Universalism-nature	UNN1	It is important to me to care for nature.	Schwartz and Cieciuch, 2022
	UNN2	It is important to me to take part in activities to defend nature.	

Variables	Code	Items	Source
Universalism-nature	UNN3	It is important to me to protect the natural environment from destruction or pollution.	
Attitude	ATT1	Compare with traditional accommodation, I prefer sharing accommodation.	Louis and Lombart (2010); Charton-Vachet et al. (2020)
	ATT2	When I have to choose between sharing accommodation and traditional accommodation, I prefer to buy sharing accommodation.	
	ATT3	I find sharing accommodation is more pleasant.	Spears and Singh (2004); Charton-Vachet et al. (2020)
	ATT4	I find sharing accommodation is more likable.	
	ATT5	I find sharing accommodation is more appealing.	
Behavior Intention	BI1	I intend to purchase sharing accommodation product in my next travel.	Ajzen (1991); Ahmad et al. (2020)
	BI2	I plan to make efforts to select sharing accommodation within next travel.	
	BI3	I am seriously considering select sharing accommodation as part of my travel plans.	So et al. (2018)
	BI4	I would recommend sharing accommodation as a viable lodging option.	
Habit of ICT use	HB1	The use of Internet has become a habit for me.	Venkatesh et al. (2012)
	HB2	I am fascinated to using Internet.	
	HB3	I must use Internet.	

The most suitable sampling method for this study is stratified sampling, which is a probability sampling method that is implemented in sample surveys. In this study, stratified sampling is adopted, and the population of Chinese Gen Z consumers is stratified into two parts by the state of study or work. The respondents who feed themselves will be sampled by simple random sampling from social channels; the other type—student respondents—will be further stratified in order to cover more geographic areas on the mainland of China.

While SEM is a large-sample approach, based on the sample size argued by Kline (2023) that the typical sample size in SEM studies is 200–300, and Hair et al. (2014) stated that the sample size needs to be at least four or five times the total number of items, the researcher planned to distribute questionnaires to 400 respondents. Finally, 458 respondents were collected, and after checking the screening questions about age and trap questions, 375 effective papers were kept.

### 3.2 Statistical analysis

Structural Equation Modeling (SEM) is a prominent approach to data analysis and is used in this study to analyse the relationship between personal values and tourists' attitudes and behavioural intentions. Statistical Package for Social Sciences (SPSS) version 27 was used for initial data assessment and common descriptive tools such as frequency analysis, reliability analysis, and exploratory factor analysis. Analysis of Moment Structure (AMOS) version 26 will be used for the final analysis, including confirmatory and structural model analysis utilising structural equation modelling (SEM).

## 4. Findings

The demographic background of this sample facilitates explaining the analysis process for this study. Table 3 represents the demographics of the 375 respondents that participated in the study. In this group of samples, 30.9% were male and 69.1% were female. Most respondents were students over 18 years old, representing more than half of the study population, which is 80%, which may show a reasonable percentage of mature Gen Z youngsters; the other 20% are people who have jobs. Most of the respondents are Gen Z people with a bachelor's degree or higher. From the table, in China, young Gen Z consumers with disposable income below 2000 yuan have a normal level of 65.1%; another 29.1% of respondents have 2000–4000 yuan to be disposed of. In addition, in this survey, the data on their sharing accommodation and

living experience during their travel were collected; 57.9% of respondents had the experience, which occupied over half of the whole group.

Table 3. Respondents' profile (N=375)

	Frequency (N)	Percent (%)
<i>Gender</i>		
Male	116	30.9
Female	259	69.1
<i>Occupation</i>		
<i>Student</i>	300	80
Corporate employee	39	10.4
Civil servant	3	0.8
Freelancer	7	1.9
Other	26	6.9
<i>Education</i>		
Graduate/postgraduate degree	17	4.5
Bachelor degree	317	84.5
High school or below	41	10.9
<i>Disposable income (Chinese RMB/month)</i>		
Below 2,000	244	65.1
2,000 – 4,000	109	29.1
4,000 – 6,000	15	4
6,000 – 8,000	3	0.8
Over 8,000	4	1.1
<i>Sharing accommodation experience</i>		
Yes	217	57.9
No	158	42.1

### Normality analysis

This study tests the univariate normality of all measurement items in this thesis by checking the kurtosis and skewness. According to Kline (2023), each variable's kurtosis and skewness level values should not exceed 8 and 3 to achieve the data normality distribution. Table 4 shows the skewness and kurtosis in this survey, indicating the data were approximately normally distributed, and all values were in an acceptable normality range.

Table 4. Univariate normality test results (N = 375)

Variables	Mean	S.D.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	S.E.	Statistic	S.E.
UNC1	5.78	1.27	-1.195	0.126	1.898	0.251
UNC3	5.62	1.29	-0.808	0.126	0.518	0.251
UNN1	6.08	1.185	-1.363	0.126	1.863	0.251
UNN2	5.98	1.176	-1.095	0.126	1.054	0.251
UNN3	6.12	1.148	-1.489	0.126	2.663	0.251
ATT1	4.46	1.549	-0.065	0.126	-0.308	0.251
ATT2	4.34	1.529	0.071	0.126	-0.217	0.251
ATT3	4.33	1.526	0.042	0.126	-0.17	0.251
ATT4	4.37	1.498	0.021	0.126	-0.004	0.251
ATT5	4.4	1.513	-0.052	0.126	-0.105	0.251

Variables	Mean	S.D.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	S.E.	Statistic	S.E.
BI1	4.34	1.581	-0.08	0.126	-0.271	0.251
BI2	4.33	1.565	-0.1	0.126	-0.258	0.251
BI3	4.48	1.542	-0.209	0.126	-0.166	0.251
BI4	4.45	1.533	-0.137	0.126	-0.145	0.251
HB1	5.82	1.201	-0.929	0.126	0.785	0.251
HB2	5.78	1.23	-1.023	0.126	1.365	0.251
HB3	5.61	1.371	-0.718	0.126	-0.119	0.251

Source: Authors' calculations

### Reliability and validity analysis

Table 5 shows all items measuring results; the targeted variables have a Cronbach's alpha ( $\alpha$ ) greater than 0.8 and a factor loading value greater than 0.7. Other criteria, such as average variance extracted (AVE) and composite reliability (CR) for each variable, also meet the minimum requirements of 0.50 and 0.70 (Hair et al., 2019). Therefore, the convergent validity is still adequate for the study.

Table 5: Factor loading, AVE, CR and Cronbach's alpha of measurement model

Variables	Factor loading	AVE	CR	$\alpha$
<i>Universalism-concern</i>				
UNC1	0.765	0.678	0.863	0.860
UNC2	0.886			
UNC3	0.814			
<i>Universalism-nature</i>				
UNN1	0.960	0.864	0.950	0.949
UNN2	0.918			
UNN3	0.910			
<i>Attitude</i>				
ATT1	0.798	0.817	0.957	0.958
ATT2	0.895			
ATT3	0.948			
ATT4	0.972			
ATT5	0.896			
<i>Behavioral intention</i>				
BI1	0.941	0.890	0.970	0.970
BI2	0.968			
BI3	0.924			

In terms of discriminant validity, Table 6 shows that each was distinguishable from the others. Discriminant validity is ascertained by the inter-correlation values among the four factors: attitude (ATT), universalism-concern (UNC), universalism-nature (UNN), and behavioural intention (BI). The diagonal values are greater than the respective highest correlation value under each factor. As a result, it confirms that each variable in this measurement model has optimal convergence and discriminant validity.

Table 6: Discriminant analysis for measurement model

	ATT	UNC	UNN	BI
ATT	0.904			
UNC	0.355	0.823		
UNN	0.255	0.762	0.930	
BI	0.871	0.318	0.250	0.943

Note: ATT=Attitude; UNC=Universalism-concern; UNN=Universalism-nature; BI=Behavioral intention

### *CFA measurement model*

The CFA measurement model is illustrated above in Figure 2. Table 7 shows an acceptably good fit index, where the RMSEA was 0.077, lower than 0.08;  $\chi^2/df$  is 3.231, which is regarded as good; and the CFI and TLI are 0.973 and 0.966, both greater than 0.90. These results suggest that the model fits the data and meets the fundamental requirements.

Table 7: Model fit statistic (CFA measurement model)

Index Name	Threshold	Test result
$\chi^2/df$	1.0 < $\chi^2$ < 3.0 is excellent 3.0 < $\chi^2$ < 5.0 is good	3.231
RMSEA	RMSEA < 0.08	0.077
CFI	CFI > 0.90 is excellent CFI > 0.80 is good	0.973
TLI	TLI > 0.90 is excellent TLI > 0.80 is good	0.966

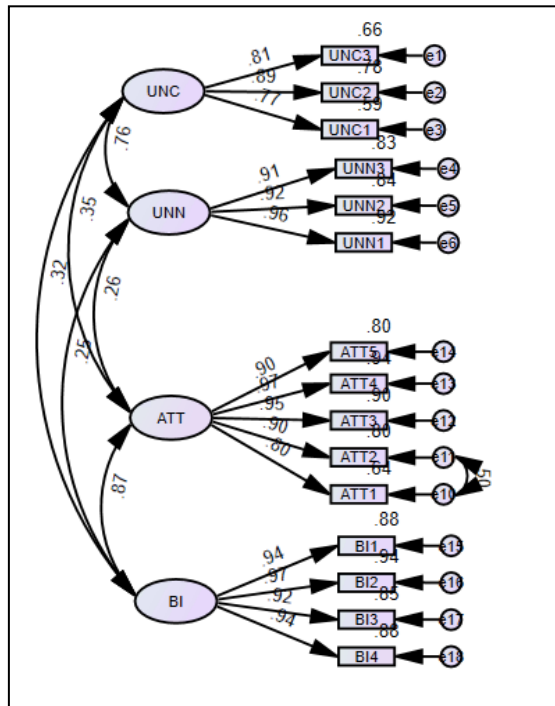


Figure 2. CFA measurement model

Structural model analysis

The final model is illustrated above in Figure 3. Table 8 shows an acceptably good fit index, where the  $\chi^2$  per degree of freedom is 3.167, a little more than 3 but within 5, and RMSEA was below 0.076, indicating a good fit and in an acceptable range. Meanwhile, the CFI value is 0.973, which shows a relatively good fit. The other fit indicator, TLI = 0.967, is over 0.9 for a good fit (Bentler, 1990). These results suggest that the model fits the data and meets the fundamental requirements.

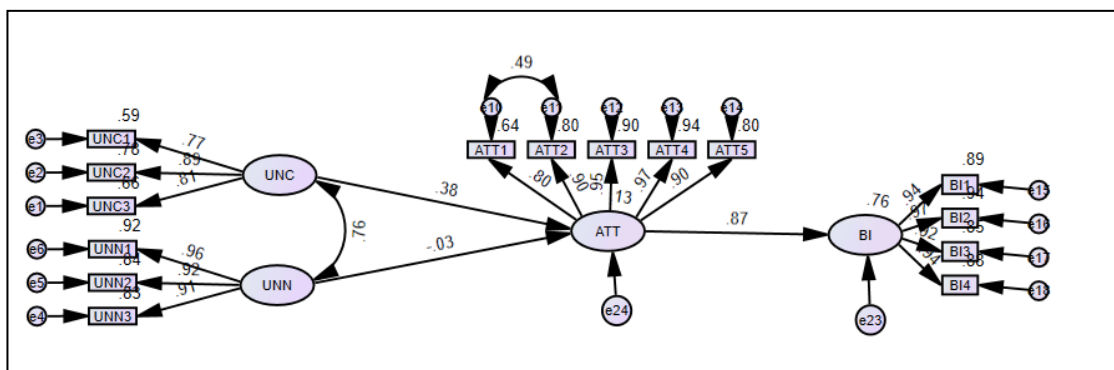


Figure 3. Structural model

Note: ATT=Attitude; UNC=Universalism-concern; UNN=Universalism-nature; BI=Behavioral intention

Table 8: Model fit statistics (SEM model)

Index Name	Threshold	Test result
$\chi^2/df$	1.0 < $\chi^2$ < 3.0 is excellent 3.0 < $\chi^2$ < 5.0 is good	3.167
RMSEA	RMSEA < 0.08	0.076
CFI	CFI > 0.90 is excellent CFI > 0.80 is good	0.973
TLI	TLI > 0.90 is excellent TLI > 0.80 is good	0.967

### Hypotheses testing

Three hypotheses were developed and tested in the main part of this study. Table 9 shows the results of H1–H3. The impact of personal value universalism-concern and Gen Z tourists' attitude on sharing accommodation choice behaviour intention was positive and significant ( $\beta = 0.379$ ,  $p < 0.01$ ); H1 was not supported. The impact of personal value universalism-nature and attitude on sharing accommodation choice behaviour intention was negative but insignificant ( $\beta = -0.031$ ,  $p > 0.1$ ); H2 was not supported. Furthermore, the tourists' attitudes positively and significantly ( $\beta = 0.871$ ,  $p < 0.01$ ) influenced behaviour intention; H3 was supported.

Table 9: Hypotheses 1-3 testing

Hypothesis	Route	Estimate	S.E.	t	p	Result
H1	UNC → ATT	.379	.110	4.059	***	Supported
H2	UNN → ATT	-.031	.104	-.353	.724	Not supported
H3	ATT → BI	.871	.056	18.763	***	Supported

Notes: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$ ; ATT=Attitude; UNC=Universalism-concern; UNN=Universalism-nature; BI=Behavioral intention

### Moderator Role

To measure the moderator role of habit of ICT use (HB) between universalism-concern (UNC), universalism-nature (UNN), and tourists' attitudes to sharing accommodation, the unconstrained model without using the mean structure was recommended by Wen and Wu (2010), which is suitable for SEM analysis with latent interaction and was accepted by this study.

Marsh et al. (2004) concluded that indicators with high loadings should be multiplied in pairs. In order to conduct the interaction role of two latent variables UNC and HB, the three interaction terms were calculated, they are  $inc1\_UNC$ ,  $inc2\_UNC$ , and  $inc3\_UNC$ , as shown in Figure 4. After observing the factor loadings of UNC and HB,  $UNC1-HB2$ ,  $UNC2-HB1$ , and  $UNC3-HB3$  were matched as three pairs. The three interaction terms were calculated as  $inc1\_UNC = UNC1*HB2$ ,  $inc2\_UNC = UNC2*HB1$ , and  $inc3\_UNC = UNC3*HB3$ . Figure 4 shows the result of the HB moderator model. Table 10 shows the results of the model fit indicators and test results. The  $\chi^2/df$ , RMSEA, and CFI values were 2.476, 0.063, and 0.978, respectively, indicating an excellent model fit. Meanwhile,  $UNC*HB$  shows a significant influence on attitude; thus, the H4 hypothesis was supported.

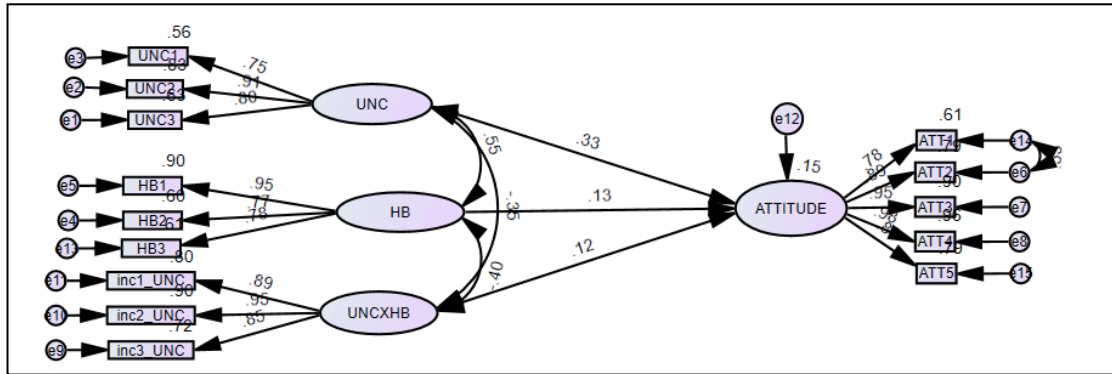


Figure 4. Modelling Habit of ICT use (HB) as a moderator

Note: UNC=universalism-concern; HB=habit of ICT use; UNC\*HB=interaction term of UNC and HB.

Table 10: Universalism-concern Personal Value moderation analysis

	Route	$\chi^2/df$	RMSEA	CFI	Estimate	S.E.	t	p	Result
H4	UNC → ATT	2.476	0.063	0.978	0.326	0.096	4.807	***	Supported
	HB → ATT				0.131	0.095	1.972	0.049	
	UNC*HB → ATT				0.119	0.036	2.088	0.037	

Note: \*\*\*p<0.001; UNC=universalism-concern; HB=habit of ICT use; ATT=attitude;

Same way with UNC, however, the test of UNN showed insignificant influence on tourists' attitudes as Table 11, H5 hypothesis was not supported.

Table 11: Universalism-nature Personal Value moderation analysis

	Route	$\chi^2/df$	RMSEA	CFI	Estimate	S.E.	t	p	Result
H5	UNN → ATT	2.261	0.058	0.984	0.172	0.082	2.484	0.013	Not Supported
	HB → ATT				0.182	0.097	2.693	0.007	
	UNN*HB → ATT				0.046	0.035	0.757	0.449	

Note: UNN=universalism-nature; HB=habit of ICT use; ATT=attitude

## 5. Discussion and conclusion

In conclusion, the findings showed that for Chinese Gen Z adult tourists, universalism-concern personal value positively related to the tourists' attitude toward sharing accommodation. However, the hypothesis that universalism-nature personal value will positively influence tourists' attitudes was not supported. As two aspects of universalism value in Schwartz's theory, universalism-nature means preservation of the natural environment, while universalism-concern means caring about all people. The different results of the two hypotheses may indicate the facts about sharing accommodation products in China. The current sharing accommodation product in China doesn't show better performance in environmental protection and natural location compared with traditional hotels, while being more dependent on good host-guest interaction and humanistic care.

Comparing Chinese and Western reviews on Xiaozhu and Airbnb, Zhu et al. (2019) implied that a close and family-like relationship is expressed and highlighted in Chinese users' reviews. As discussed before, by increasing access to underutilised resources, sharing accommodation products shows good coincidence with the contributions of Sustainable Development Goal 8 and Goal 10 of the UNWTO to develop humanistic care by decreasing inequality. From the results, sharing accommodation ethos and contributions is more congenial with the personal value of universalism-concern.

The tourists' attitude has a significant effect on sharing accommodation choice behaviour intention compared with traditional hotels, which is supported by this study. The tourists' attitude and choice behaviour intention in this study focus on tourists' preference for sharing accommodation compared with traditional accommodation in the tourism industry. The ATT measurement covers preference measurement items by Louis and Lombart (2010) and attitude items normally used by Spears and Singh (2004). The result shows that Chinese Gen Z adult tourists have a significant preference for sharing accommodation products because of the influence of universalism personal value.

Additionally, habit of ICT use strengthens the relationship between universalism-concern value and tourists' attitudes, but the hypothesis of the moderation role of habit of ICT use between universalism-nature and attitude was not supported in this study. The result, to a certain extent, shows the role of ICT use habits for young Gen Z consumers in the hospitality industry. However, the universalism-nature value concerns more about people's caring for nature and the extent to which they are close to nature; to some extent, it stands on the opposite side of heavy use of the Internet and digital instruments. This explained why the habit of ICT use could not strengthen the relationship between universalism-nature value and tourist attitude.

## 6. Limitation

Universalism value is the first exploration for the author to apply Schwartz's personal value system in the sharing accommodation field, indicating some personal value could have a significant effect on young Gen Z tourists' attitudes and tourism behaviour intentions. Further steps could be conducted on the exploration of other personal values effects on sharing accommodation fields or extending to other tourism fields, especially on new industry types or phenomena. Further research could also concentrate on the influence or role of ICT use habits on young tourists.

The age of current Gen Z tourists becomes the main limitation of this study because most of them are young and are still in school. As they grow older and income levels increase, their spending power and consumption preferences may change and show some new characteristics. Therefore, as future mainstream consumers, this group deserves continued attention and research. And seriously speaking, the personal value system is a complicated system; values are inevitably related and commonly affect consumers' attitudes and behaviours. So it will be more meaningful to consider a more complete value system.

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## Conflict of interest statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

## References

- Ahmad, M. S., Jamil, A., Latif, K. F., Ramayah, T., Ai Leen, J. Y., Memon, M., & Ullah, R. (2020). Using food choice motives to model Pakistani ethnic food purchase intention among tourists. *British Food Journal*, 122(6), 1731-1753.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Bagozzi, R. P., & Dholakia, U. (1999). Goal setting and goal striving in consumer behavior. *Journal of Marketing*, 63(4), 19-32.
- Balaji, M. S., Jiang, Y., Roy, S. K., & Lee, J. (2022). To or not to adopt P2P accommodation: The traveler's ethical decision-making. *International Journal of Hospitality Management*, 100, 103085.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238.
- Chang, T. Z., Kong, W. H., & Bahl, A. (2023). Personal values and travel social media use among Generation Z. *Consumer Behavior in Tourism and Hospitality*, 18(1), 49-65.
- Charton-Vachet, F., Lombart, C., & Louis, D. (2020). Impact of attitude towards a region on purchase intention of regional products: the mediating effects of perceived value and preference. *International Journal of Retail & Distribution Management*, 48(7), 707-725.
- Chen, G., Cheng, M., Edwards, D., & Xu, L. (2022). COVID-19 pandemic exposes the vulnerability of the sharing economy: a novel accounting framework. *Journal of Sustainable Tourism*, 30(5), 1141-1158.
- Dogru, T., Mody, M., & Suess, C. (2019). Adding evidence to the debate: Quantifying Airbnb's disruptive impact on ten key hotel markets. *Tourism Management*, 72, 27-38.
- Egri, C. P., & Ralston, D. A. (2004). Generation cohorts and personal values: A comparison of China and the United States. *Organization science*, 15(2), 210-220.
- Furner, C. P., & George, J. F. (2012). Cultural determinants of media choice for deception. *Computers in Human Behavior*, 28(4), 1427-1438.
- Gosal, J., Andajani, E., & Rahayu, S. (2020, January). The effect of e-WOM on travel intention, travel decision, city image, and attitude to visit a tourism city. In *17th International Symposium on Management (INSYMA 2020)* (pp. 261-265). Atlantis Press. <https://doi.org/10.2991/aebmr.k.200127.053>
- Guttentag, D. A., & Smith, S. L. (2017). Assessing Airbnb as a disruptive innovation relative to hotels: Substitution and comparative performance expectations. *International Journal of Hospitality Management*, 64, 1-10.

- Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-Sem)*. Sage.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hanafiah, M. H., & Hamdan, N. A. A. (2021). Determinants of Muslim travellers Halal food consumption attitude and behavioural intentions. *Journal of Islamic Marketing*, 12(6), 1197-1218.
- Hasan, M. K., Abdullah, S. K., Lew, T. Y., & Islam, M. F. (2019). The antecedents of tourist attitudes to revisit and revisit intentions for coastal tourism. *International Journal of Culture, Tourism and Hospitality Research*, 13(2), 218-234.
- Heim, E., Scholten, S., Maercker, A., Xiu, D., Cai, D., Gao, Z. H., ...Margraf, J. (2017). Students' value orientations in contemporary China: Analysis of measurement invariance and latent mean differences in comparison with students from Germany and Russia. *Journal of Cross-Cultural Psychology*, 48(4), 511-531.
- Hsu, C. Y., Chen, M. Y., Nyaupane, G. P., & Lin, S. H. (2020). Measuring sustainable tourism attitude scale (SUS-TAS) in an Eastern Island context. *Tourism Management Perspectives*, 33, 100617.
- Huang, S., & van der Veen, R. (2019). The moderation of gender and generation in the effects of perceived destination image on tourist attitude and visit intention: A study of potential Chinese visitors to Australia. *Journal of Vacation Marketing*, 25(3), 375-389.
- Hu, S, Yang X, Wang Q. (2020). Research Review on Sharing Accommodation at Home and Abroad. *Tourism Science*, 34(2), 41-57.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic and political change in 43 societies*. Princeton University Press.
- Jaciow, M., & Wolny, R. (2021). New technologies in the ecological behavior of generation Z. *Procedia Computer Science*, 192, 4780-4789.
- Kasim, H., Abdurachman, E., Furinto, A., & Kosasih, W. (2019). Social network for the choice of tourist destination: Attitude and behavioral intention. *Management Science Letters*, 9(13), 2415-2420.
- Kim, S. S., Malhotra, N. K., & Narasimhan, S. (2005). Research note-two competing perspectives on automatic use: A theoretical and empirical comparison. *Information Systems Research*, 16(4), 418-432.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford Publications.
- Kuhzady, S., Seyfi, S., & Béal, L. (2022). Peer-to-peer (P2P) accommodation in the sharing economy: A review. *Current Issues in Tourism*, 25(19), 3115-3130.
- Lee, J. A., Soutar, G. N., & Sneddon, J. (2010). Personal values and social marketing: Some research suggestions. *Journal of Research for Consumers*, 18(1), 1-7.
- Li, J. (2016). Assessing Schwartz's refined value theory in the Chinese context. *China Media Research*, 12(1), 95-107.
- Limayem, M., Hirt, S. G., & Cheung, C. M. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS Quarterly*, 31(4), 705-737.
- Liu, C., Zheng, Y., & Cao, D. (2021). An analysis of factors affecting selection of organic food: Perception of consumers in China regarding weak signals. *Appetite*, 161, 105145.

- Louis, D., & Lombart, C. (2010). Impact de la personnalité de la marque sur la satisfaction et la fidélité du consommateur. *Revue Management et Avenir*, 31, 31-49.
- Marsh, H. W., Wen, Z., & Hau, K. T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods*, 9(3), 275–300.
- Mody, M. A., Jung, S., Dogru, T., & Suess, C. (2023). How do consumers select between hotels and Airbnb? A hierarchy of importance in accommodation choice. *International Journal of Contemporary Hospitality Management*, 35(4), 1191-1218.
- Palacios-Florencio, B., Santos-Roldán, L., Berbel-Pineda, J. M., & Castillo-Canalejo, A. M. (2021). Sustainable tourism as a driving force of the tourism industry in a post-COVID-19 Scenario. *Social Indicators Research*, 158(3), 991-1011.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon*, 9(5), 1-5.
- Robinson, V. M., & Schänzel, H. A. (2019). A tourism inflex: Generation Z travel experiences. *Journal of Tourism Futures*, 5(2), 127-141.
- Roccas, S., & Sagiv, L. (2010). Personal values and behavior: Taking the cultural context into account. *Social and Personality Psychology Compass*, 4(1), 30-41.
- Rousta, A., & Jamshidi, D. (2020). Food tourism value: Investigating the factors that influence tourists to revisit. *Journal of Vacation Marketing*, 26(1), 73-95.
- Santos-Roldán, L., Castillo Canalejo, A. M., Berbel-Pineda, J. M., & Palacios-Florencio, B. (2020). Sustainable tourism as a source of healthy tourism. *International Journal of Environmental Research and Public Health*, 17(15), 5353.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., ...Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663.
- Schwartz, S. H., & Cieciuch, J. (2022). Measuring the refined theory of individual values in 49 cultural groups: Psychometrics of the revised portrait value questionnaire. *Assessment*, 29(5), 1005-1019.
- Smith, K. T. (2019). Mobile advertising to digital natives: Preferences on content, style, personalization, and functionality. *Journal of Strategic Marketing*, 27(1), 67-80.
- So, K. K. F., Oh, H., & Min, S. (2018). Motivations and constraints of Airbnb consumers: Findings from a mixed-methods approach. *Tourism Management*, 67, 224-236.
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53-66.
- Straub, D. W. (1994). The effect of culture on IT diffusion: E-mail and fax in Japan and the US. *Information Systems Research*, 5(1), 23-47.
- Tamilmani, K., Rana, N. P., Wamba, S. F., & Dwivedi, R. (2021). The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2): A systematic literature review and theory evaluation. *International Journal of Information Management*, 57, 102269.
- Thi Khanh, C. N., & Phong, L. T. (2020). Impact of environmental belief and nature-based destination image on ecotourism attitude. *Journal of Hospitality and Tourism Insights*, 3(4), 489-505.
- Turner, A. (2015). Generation Z: Technology and social interest. *The Journal of Individual Psychology*,

71(2), 103-113.

- Venkatesh, V., Davis, F., & Morris, M. G. (2007). Dead or alive? The development, trajectory and future of technology adoption research. *Journal of the Association for Information Systems*, 8(4), 267–286.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.
- Wee, D. (2019). Generation Z talking: transformative experience in educational travel. *Journal of Tourism Futures*, 5(2), 157–167.
- Wen, Z., & Wu, Y. (2010). Evolution and simplification of the approaches to estimating structural equation models with latent interaction. *Advances in Psychological Science*, 18(8), 1306-1313.
- Williams, M. D., Dwivedi, Y. K., Lal, B., & Schwarz, A. (2009). Contemporary trends and issues in IT adoption and diffusion research. *Journal of Information Technology*, 24, 1-10.
- Ye, S., Lei, S. I., Zhao, X., Zhu, L., & Law, R. (2023). Modeling tourists' preference between hotels and peer-to-peer (P2P) sharing accommodation: A pre-and post-COVID-19 comparison. *International Journal of Contemporary Hospitality Management*, 35(4), 1423-1447.
- Zhu, Y., Cheng, M., Wang, J., Ma, L., & Jiang, R. (2019). The construction of home feeling by Airbnb guests in the sharing economy: A semantics perspective. *Annals of Tourism Research*, 75, 308-321.

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### Authors' contributions

Qi Xinzheng carried out the research, conceptualised the central research idea, provided the theoretical framework and wrote the article. Aslinda Mohd Shahril supervised research progress and revised the article.



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