

A Study on the Influence of Broker Professionalism Characteristics on Consumers' Hedonic Consumption Behavior in the Chinese Painting Market

Yansheng Song¹, Patcharee Chayakornsopit², Wenli Chen³

Abstract

This thesis aims to study the influence of Chinese painting market brokers on hedonic consumption behavior. In contemporary society, hedonic consumption behavior has become an increasingly common form of consumption, and Chinese painting, as one of the representatives of traditional culture and art, occupies an important position in the market. However, the development and consumption behavior of Chinese painting market is influenced by market brokers. Therefore, understanding the characteristics of brokers in the Chinese painting market and their influence on consumers is of great significance in understanding consumer behavior.

This study uses a mixed research methodology, combining qualitative and quantitative data collection and analysis. The questionnaire method was utilized to collect data from an extensive sample to quantify the extent and manner in which brokers influence consumers in the Chinese painting market.

By analyzing the collected data and testing the model, the results of the study show that there is a correlation between the professionalism of brokers in the Chinese painting market and the hedonic consumption behavior of consumers. The findings of this study have important implications for the role positioning and marketing of brokers in the Chinese painting market. The findings will provide valuable references for related industries and practitioners to better understand and utilize the characteristics and influence of brokers in the Chinese painting market to promote the healthy development of the Chinese painting market and consumer satisfaction.

Keywords: *Chinese painting market; brokerage characteristics; hedonic consumer behavior; interest relations.*

1. Introduction

China is one of the four ancient civilizations in the world, and Chinese painting represents the essence of our traditional culture. Throughout the development of Chinese painting, it is not difficult to realize that its development is based on China's economy as

¹ Chakrabongse Bhuvanarth International Institute for Interdisciplinary Studies(CBIS), Rajamangala University of Technology Tawan-ok, Bangkok, 10400, Thailand
Xuchang University, Xuchang, Henan, 461000, China

² Chakrabongse Bhuvanarth International Institute for Interdisciplinary Studies(CBIS), Rajamangala University of Technology Tawan-ok, Bangkok, 10400, Thailand

³ Henan University of Economics and Law, Zhengzhou, Henan, 450000, China

a carrier, and Chinese painting has an inseparable and close connection with the market economy. With the continuous development of China's economy, the Chinese painting market has also been a vibrant development, especially the modern painting and calligraphy auction market to achieve an important breakthrough in volume and price, the art market has a great role in promoting. Achievement of the category in the domestic market key position of the main factors are as follows: first of all, modern painting and calligraphy has a small investment risk, high value retention, strong resistance to decline in the collection of characteristics, can bring more security to the collector; Secondly, through years of continuous excavation of fine works and combing academic vein, the market has reached a consensus on the recognition of the works of the modern masters; Finally, with the value of the traditional and cultural value of the modern painting and calligraphy works Finally, modern painting and calligraphy works with traditional cultural values are able to attract the favor of collectors of different levels and meet the aesthetic preferences of a wider group of people. (Zhang Yuting, 2020). In the midst of the boom, there is also a lack of aesthetics in the art world. At the same time of the prosperous development, chaos still exists, for example, the phenomenon of substandard, fake, false auctions, malicious speculation, and so on. Behind this chaos, the lack of relevant theoretical support and market economy research in the Chinese painting market is exposed. For collectors, enthusiasts and consumers of Chinese paintings, how to be based on the present, the establishment of a reasonable, standardized, fair and just market order and trading environment, and to improve the consumer's level of identification and screening ability, is imperative. As an important role in the market economy, the broker appears in the commercial activities, is an important bridge between the connecting painters and consumers, he exists as an intermediary, assuming the role of the top and bottom, facilitating the transaction between the two sides, to open up the market for painters, brokers are not only the intermediary between the two sides of the transaction, but also shoulder the identification of authenticity, assessment of the market, as well as investment advisers, and other multiple identities! (Xu Hailong, 2021). Brokers are not only intermediaries between the two parties in the transaction, but also have multiple roles such as identifying authenticity, evaluating the market, and investment advisers (Xu, 2021). The existence of brokers ensures the bilateral interests of painters and consumers, and is an effective path to promote the development of the Chinese painting market (Yeh, 2018).

2. Research design

2.1 Research methodology

The research methods of this paper are qualitative research and quantitative research. First, the quantitative research method includes collecting data through questionnaires and using empirical data to study the causal relationship between the influence of the professionalism characteristics of brokers in the Chinese painting market on the hedonic consumption behavior of consumers in the Chinese painting market. Second, the qualitative method includes a systematic combing of the literature on Chinese paintings, Chinese painting market, Chinese painting market brokers, and hedonic consumption, and the data obtained are used to describe and confirm the quantitative results.

2.2 Research tools

This thesis uses a questionnaire as a tool for data collection, which is divided into four sections; section 1 is basic information about the individual; section 2 is the independent variables; section 3 is the measurement items for the mediator variables; and section 4 is the measurement items for the dependent variables. This paper used spss to analyze the data collected. The research hypotheses were tested by utilizing Amos software and structural equation modeling.

2.3 Sample selection

The sample selection for this paper is based on Bazaar Art, a national art media published and distributed globally, which is organized by China Business Press and published by Bazaar Art Magazine in Beijing. The questionnaire was distributed according to the top ten Chinese galleries selected by Bazaar Art. The list is as follows.

Table 1 Top ten Chinese galleries

serial number	name (of a thing)
1	Beijing Commune Gallery
2	Long March space
3	Xin Dong Cheng Contemporary Art Space
4	Dai Mirai - Rinsha Gallery
5	ShanghART Gallery
6	Pin Gallery
7	Art - Triumph Art Space
8	Maibo Gallery
9	Han Ya Xuan Gallery
10	Baiyaxuan 798 Art Center

Therefore, The above galleries will be used as the survey population for this study, and since it is impossible to accurately count the total number of hedonic spenders who spend money in the above galleries, the population of the study will be considered as an infinite aggregate for the purpose of this study.

When investigating the wireless master sample, this study used the basic methodology of Cochrane Systematic Evaluation (W.G. Cochran, 1953) while maintaining a confidence level of 95%, the following formula was used to calculate the sample size for the unlimited master survey:

$$n = \frac{p(1 - p)Z^2}{e^2}$$

where: n is the sample size

Z is the quantile of the standard normal distribution corresponding to the chosen confidence level. For example, for a 95% confidence level, the Z value is 1.96.

p is the estimated proportion of specific attributes in the infinite aggregate. In the absence of a priori knowledge, 0.5 can be used as a conservative estimate.

e is the tolerance for sampling error.

This formula gives an approximate sample size estimate to ensure that the findings have a reasonable level of confidence and error tolerance.

$$n = \frac{0.5(1 - 0.5) (1.96)^2}{(0.05)^2} = 385$$

The calculation shows that at least 385 questionnaires are needed as a sample. According to Bollen (1989, cited in Nonglak Wiratchai.) in the actual operation, if the response rate is low, so, in the specific operation, the recovery rate is estimated to be 70%; the calculation results inn = $\frac{385}{0.7} = 550$ (Kanlaya Vanichbuncha, 2006). Therefore the study

will distribute 55 questionnaires to hedonic consumers in each gallery. a total of 550 questionnaires were distributed in the 10 galleries.

2.4 Preparation of the questionnaire

The questionnaire for this study was subjected to three experts in the relevant fields to review the validity of the content of the questionnaire. Considerations included the Index of Consistency (IOC) of the operational definitions, comprehensiveness of the variables covered by the questions, meaning of the questionnaire questions, accuracy of language, and other points. The questions approved by the experts included eight questions on demographics; five questions on independent variables; six questions on mediating variables; and four questions on dependent variables.

3. Conceptualization

3.1 Conceptualization of hedonic consumption

Hedonic consumption was first proposed by Holbrook and Hirschman (1982), who argued that people's consumption can not only satisfy the basic needs of survival, but also satisfy the pursuit of happiness, relaxation, curiosity and other spiritual needs. Consumption behavior that includes fantasies, senses and emotions is hedonic consumption (Tu Hongwei et al., 2011). Hedonic consumption (Alba & Williams, 2013) It is suggested that the key to determining hedonic consumption is whether the subject feels pleasure when engaging in consumption behaviors. This pleasure can come from two aspects, one is from the goods or services themselves, and the other is the interaction when using or feeling the goods. Hedonic consumption pays more attention to consumption experience and feelings (Liu et al., 2020) Hedonic consumption is more focused on the experience and feeling of consuming. (Seol & Kim, 2022). In the article it is mentioned that Bryan gives a precise definition of hedonic consumption, the aspects of consumer behavior that relate to the sensory, fantasy, and emotional components of the experience of buying or using a product.

3.2 Influences on Hedonic Consumption Behavior

Consumer trust plays an important role in the transaction process in the commodity market. The study of consumer trust by scholars began with the study of trust. In academia, researchers have studied it from various research perspectives such as sociology, psychology, management, organization and behavior, and economics. Representative studies are shown in Table 2-

Table 2: Representative perspectives on trust research

Time (years)	scholars	Research Perspectives	point of view
1979	Luhmann	sociological	Argues that trust refers to confidence in the expectations of others, reducing social complexity to a binary schema of mistrust and trust structures.
1988	Rousseau et al.	psychology	Trust is a psychological state in which people are willing to take possible risks and hold positive expectations about the behavior of others.
2007	Khodyakov et al.	Organizational Behavior	Differences in conceptualizations of trust, such as willingness, expectations, beliefs, confidence, attitudes, feelings, intentions, or

			mental states, have been found to lead to confusion, misunderstanding, and communication barriers between researchers.
2013	Sirdeshmukh	economics (as a field of study)	Trust refers to the customer's trust in the written and verbal commitments made by the enterprise closely related to the product, mutual trust is the basis for successful transactions.
2018	Fulmer and Dirks et al.	management studies	Trust itself is a complex structure about relationships between individuals, groups and organizations.

It is clear from the literature that there are many factors influencing hedonic consumption; affirmative language is more likely to contribute to the realization of consumption, and figurative language prompts consumers to make more hedonic choices. Emotional changes will affect the realization of consumption, motivation, mechanism, pre-investment, consumer's interest orientation, economic strength and so on will affect the hedonic consumption. As a consumer product of hedonic consumption, painting and calligraphy has its own unique nature and characteristics. (Yang et al., 2018) Suggested that the value of calligraphy and painting works is the focus of both buyers and sellers, and consumers' perception of the value will directly affect the hedonic consumption behavior. Ciu-Chen Wu's (2009) study showed that whether hedonically attuned consumers can complete the hedonic consumption behavior under the situation of large amount of pre-investment and many consumer interventions mainly depends on the trust factor.

Therefore, this paper selects two dimensions of value perception and trust degree to establish the evaluation system.

3.3 The Impact of Chinese Painting Broker Characteristics on Hedonic Consumption Behavior

The influence of Chinese painting broker characteristics on hedonic consumption behavior is defined. By combing through the literature on the influence of Chinese painting broker characteristics on hedonic consumption behavior, we find that there is a lack of research on the influence of Chinese painting broker characteristics on hedonic consumption behavior, which is precisely the innovation of this paper. This paper establishes the characteristics of brokers in the Chinese painting market as the dimension of professionalism. The influencing factors of hedonic consumption behavior are established as value perception and trust degree. Chang Hua (2016) mentions that art brokers have qualifications that can qualify them for the corresponding positions, are professionally trained, and have a wealth of practical experience to draw on. Li Peishan (2015) proposed that art brokers should have the ability to appreciate art and professionalism to help consumers identify the value of artworks and promote art investment behavioral activities. Li (2018) proposes that the value of painting and calligraphy works is the focus of the chase between buyers and sellers, and the consumer's perception of value will directly affect hedonic consumption behavior. This shows that the professionalism of brokers in the Chinese painting market has an impact on hedonic consumption behavior. Ye Luanxiang (2021) suggests that painting and calligraphy brokers have rich personal experience and keen market insights, and are able to predict market trends and consumer interest orientations with their experience, and discover the potential of artists. Taking the famous broker Greenberg as an example, the article mentions that Greenberg's art brokerage qualities and traits are: solid art literacy and knowledge, clear business acumen, rich network resources, keen market judgment

and unique aesthetic concepts. Greenberg's achievements come from his artistic foresight, good at discovering and creating artistic value. His high self-requirements have resulted in a wealth of personal experience, which has led to his dual roles as an art dealer and art critic.

4. Conceptual framework and research hypotheses

4.1 Conceptual framework

Mehrabian and Russell proposed the Stimulus-Organism-Response (S-O-R) model in 1974, which explains consumers' psychological changes and purchasing behaviors by taking the shopping environment factors as the stimulus, also known as the independent variable, the psychological motives such as consumers' emotions and cognition as the mediating variables, and the behavioral state of convergence or avoidance as the outcome. Subsequently, the S-O-R model has been widely used in the study of consumer buying behavior. The research focuses on which stimuli can stimulate consumers' purchase behavior (Chang et al., 2011) The S-O-R model has been widely used to explain consumer purchasing behavior.

Human behavior usually follows the S-O-R model, i.e., "stimulus-individual physiological, psychological-response".

Based on this, the text proposes the following model.

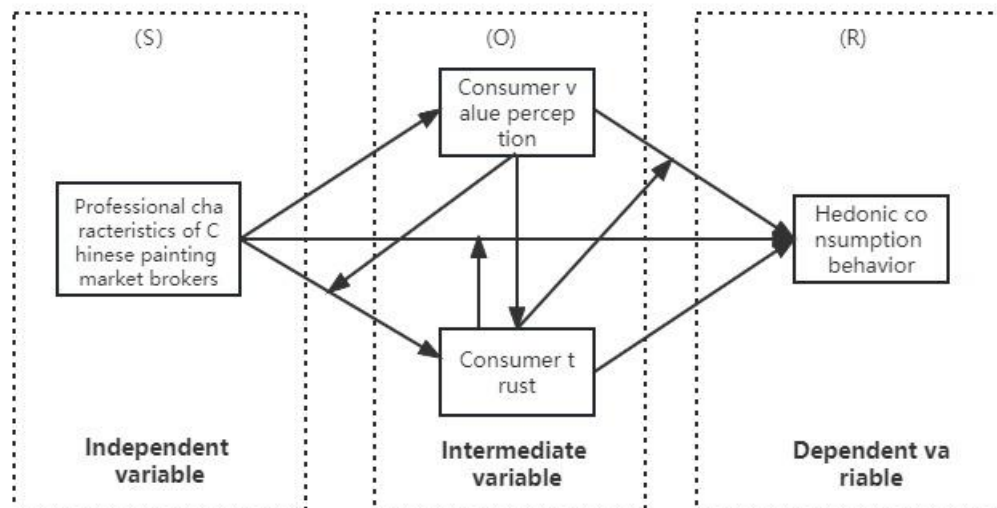


Figure 1 Conceptual model

4.2 Research hypothesis

Based on the previous literature review, this paper proposes the following hypotheses.

H1: Characteristics of brokers' professionalism in the Chinese painting market have a significant positive effect on consumers' hedonic consumption behavior.

H2: Characteristics of brokers' professionalism in the Chinese painting market have a significant positive effect on consumers' value perceptions.

H3: Characteristics of brokers' professionalism in the Chinese painting market have a significant positive effect on consumer trust.

H4: Consumer trust has a significant positive effect on consumer hedonic consumption behavior.

H5: Consumer value perception has a significant positive effect on consumer hedonic consumption behavior.

H6: Consumer value perception has a significant positive effect on consumer trust.

H7: Consumer Trust There is a significant mediating effect between the professionalism of brokers in the Chinese painting market and consumers' hedonic consumption behavior.

H8: Consumer value perception has a significant mediating role between broker professionalism and consumer trust in the Chinese painting market.

H9: Consumer trust has a significant mediating role between consumer value perception and consumer hedonic consumption behavior.

5. Data analysis

5.1 Basic Characteristics of Respondents

The information of the 504 valid samples in this study is shown in Table 3. First, there is no significant difference in the gender of the respondents, which reduces the variability of the results due to gender differences. Secondly, the age of the respondents is mainly middle-aged below 45 years old, which roughly coincides with the age of the main consumer group in the Chinese painting market. Furthermore, the respondents' education level is high, which enhances their ability to understand and grasp the questionnaire items. Of course, the most numerous occupational sources are career workers and self-employed/freelancers, whose freedom of time and disposability of funds enhance their hedonistic consumption behaviors. Moreover, the monthly income of the respondents is mainly 5,000-10,000 RMB, which matches the current occupational income of the respondents. Of course, a certain amount of experience in purchasing Chinese paintings enhances the level of understanding of each variable by the researched. Finally, the amount of money that the researched purchased each time they bought Chinese paintings and calligraphy also shows that 5000-1000 RMB is the most frequently chosen amount by 46.6% of the researched, which matches with the income of the researched, and the researched have a certain financial ability to pay.

Table 3 Information on the study population

variant	form	frequency	Percentage %	variant	form	frequency	Percentage %
distinguishing between the sexes	male	254	50.4		less than 5000	61	12.1
	daughter	250	49.6		5000-10000	259	51.4
(a person's) age	Under 25 years of age	99	19.6	monthly salary	10000-20000	168	33.3
	26-35 years old	218	43.3		20000-30000	10	2.0
	36-45 years old	108	21.4		30,000 or more	6	1.2
	46-55 years old	38	7.5	How often do you buy	Within 1 month	48	9.5

education attainment	56 years and over	41	8.1	Chinese paintings on average	1 to 3 months	116	23.0
	congrats! (on passing an exam)	82	16.3		3 to 6 months	198	39.3
	three-year college	277	55.0		6 to 9 months	96	19.0
	undergraduate (adjective)	103	20.4		More than 9 months	46	9.1
	Master's degree student	28	5.6		less than 5000	114	22.6
	PhD student	14	2.8	Amount of each purchase of	5000-10000	235	46.6
	schoolchildren	62	12.3	of paintings and calligraphy	10000-20000	49	9.7
careers	unit worker	260	51.6		20000-30000	57	11.3
	business manager	66	13.1		30,000 or more	49	9.7
	Self-employed/freelance	116	23.0				

5.2 Reliability test

In this paper, the reliability situation of the questionnaire was examined by using SPSS 26.0 data analysis software. The Cronbach's Alpha coefficient value is usually used to test the questionnaire reliability level in academia, and academics stipulate that the questionnaire reliability level passes the test when Cronbach's Alpha coefficient is >0.6 . The results (see Table 4) show that the Cronbach's Alpha coefficients of all variables in this study reached 0.8 or more, which indicates that the reliability level of the questionnaire is high and the questionnaire design is more reliable.

This study was mainly measured with the help of KMO test and Bartlett's spherical test. Academics stipulate that when $KMO > 0.8$, it means that the questionnaire is suitable for factor analysis; the results of the validity test are shown in Table 4, the KMO value of each variable is greater than 0.7, and the p-value of Bartlett's spherical test is 0.000 (less than 0.001), the data results sufficiently illustrate that the questionnaire scales have high correlations with each other, and are suitable for factor analysis.

Standardized factor loading coefficients reflect the correlation between latent variables and explicit variables; when the standardized loading coefficients are greater than 0.6 ($P < 0.05$), it indicates that there is a strong correlation between the variables. Usually, if the AVE is greater than 0.5 and the CR value is greater than 0.7, it means that the aggregation validity is high. The data results (Table 4) show that the absolute value of the standardized loading coefficient between each measurement item is greater than 0.6 and

significant, which means that there is a good measurement relationship. 5 factors corresponding to the AVE value is greater than 0.5 and the CR value is higher than 0.7, which means that the data of the present analysis has good convergent validity and the questionnaire data have good convergent validity.

Table 4 Results of validated factor analysis and reliability and validity analysis of variables

variant	serial number	factor loading	Average Variance Extracted Value (AVE)	Combined Reliability (CR)	Cronbach's Alpha	KMO
professionalism	A1	0.746	0.571	0.869	0.866	0.834
	A2	0.744				
	A3	0.742				
	A4	0.735				
	A5	0.808				
Perceived Functional Value	B11	0.774	0.563	0.794	0.792	0.708
	B12	0.750				
	B13	0.726				
Perceived cultural value	B21	0.753	0.630	0.836	0.828	0.706
	B22	0.860				
	B23	0.763				
Consumer trust	M1	0.809	0.650	0.928	0.928	0.908
	M2	0.839				
	M3	0.798				
	M4	0.786				
	M5	0.758				
	M6	0.784				
	M7	0.864				
Consumer Hedonic Consumption Behavior	C1	0.753	0.565	0.839	0.838	0.809
	C2	0.736				
	C3	0.730				
	C4	0.787				

The test of discriminant validity focuses on comparing the square root of the AVE of the latent variable with the absolute value of the correlation coefficients between the other latent variables, and when the square root of the AVE of the latent variable is greater than the absolute value of the correlation coefficients between the other latent variables on the diagonal, it means that the questionnaire passes the test of discriminant validity. The results in Table 5 show that the square root values of AVE on the diagonal are greater than the absolute values of the correlation coefficients between the individual latent variables, which indicates that there is a good discriminant validity between the factors.

Table 5 Distinction validity test

	professionalism	Perceived Functional Value	Perceived cultural value	confidence level	Hedonic consumer behavior
professionalism	0.755				
Perceived Value	0.710	0.750			
Perceived cultural value	0.581	0.482	0.793		
confidence level	0.599	0.559	0.534	0.806	
Hedonic behavior	0.650	0.619	0.561	0.597	0.752
AVE value	0.571	0.563	0.630	0.650	0.565
average value	3.62	3.79	3.54	3.49	3.60
(statistics) standard deviation	1.006	0.944	1.011	1.149	1.001

Note: Values on the diagonal are the square root of the mean variance extracted, numbers below the diagonal are the correlation coefficients, ** indicates significant at the $p < 0.01$ level

5.3 Structural equation modeling analysis

5.3.1 Model fit test

The results of the model fit test for structural equation modeling are shown in Table 6 below. The results show that $\chi^2/df = 2.173 < 3$, $GFI = 0.930 > 0.9$, $AGFI = 0.911 > 0.9$, $RMR = 0.052 < 0.08$, $IFI = 0.964 > 0.9$, $TLI = 0.958 > 0.9$, $CFI = 0.963 > 0.9$, $RMSEA = 0.048 < 0.08$, $PGFI = 0.735 > 0.5$, $PNFI = 0.809 > 0.5$; $PCFI = 0.834 > 0.5$. All indicators are within the acceptable range for academics, and the model fit indicators passed the test.

Table 6 Analysis of structural equation model fit metrics

Commonly used indicators	χ^2/df	GFI	AGFI	RMR	IFI	TLI	CFI	RMSEA	PGFI	PNFI	PCFI
standard of judgment	<3	>0.9	>0.9	<0.08	>0.9	>0.9	>0.9	<0.08	>0.5	>0.5	>0.5
(be) worth	2.173	0.930	0.911	0.052	0.964	0.958	0.963	0.048	0.735	0.809	0.834

5.3.2 Direct path test

The standardized path analysis and hypothesis testing results are shown in Table 7. The results of getting the hypothesis testing of this paper's research show that (1) in the path of professional literacy \rightarrow functional value perception, the standardized influence coefficient of professional literacy on functional value perception is 0.718, $p=0.000 < 0.05$, therefore, professional literacy has a significant positive influence on functional value perception. (2) In the path of professional literacy \rightarrow cultural value perception, the standardized influence coefficient of professional literacy on cultural value perception is 0.591, $p=0.000 < 0.05$, therefore, professional literacy has a significant positive influence

on cultural value perception. (3) In the path of professional literacy → trust, the standardized influence coefficient of professional literacy on trust is 0.280, $p = 0.000 < 0.05$, therefore, professional literacy has a significant positive influence on trust. (4) In the path of professional literacy → hedonic consumption behavior, the standardized influence coefficient of professional literacy on hedonic consumption behavior is 0.260, $p = 0.000 < 0.05$, therefore, professional literacy has a significant positive influence on hedonic consumption behavior. (5) In the path of cultural value perception → trust, the standardized influence coefficient of cultural value perception on trust is 0.260, $p = 0.000 < 0.05$, therefore, cultural value perception has a significant positive influence on trust. (6) In the path of professionalism → hedonic consumption behavior, the standardized influence coefficient of professionalism on hedonic consumption behavior is 0.239, $p = 0.002 < 0.05$, therefore, professionalism has a significant positive influence on hedonic consumption behavior. (7) In the path of Trust → Hedonic Consumption Behavior, the standardized influence coefficient of trust on hedonic consumption behavior is 0.221, $p = 0.000 < 0.05$, therefore, trust has a significant positive influence on hedonic consumption behavior. (8) In the path of Functional Value Perception → Hedonic Consumption Behavior, the standardized influence coefficient of Functional Value Perception on Hedonic Consumption Behavior is 0.234, $p = 0.001 < 0.05$, therefore, Functional Value Perception has a significant positive influence on Hedonic Consumption Behavior. (9) In the path of cultural value perception → hedonic consumption behavior, the standardized influence coefficient of cultural value perception on hedonic consumption behavior is 0.195, $p = 0.000 < 0.05$, therefore, cultural value perception has a significant positive influence on hedonic consumption behavior.

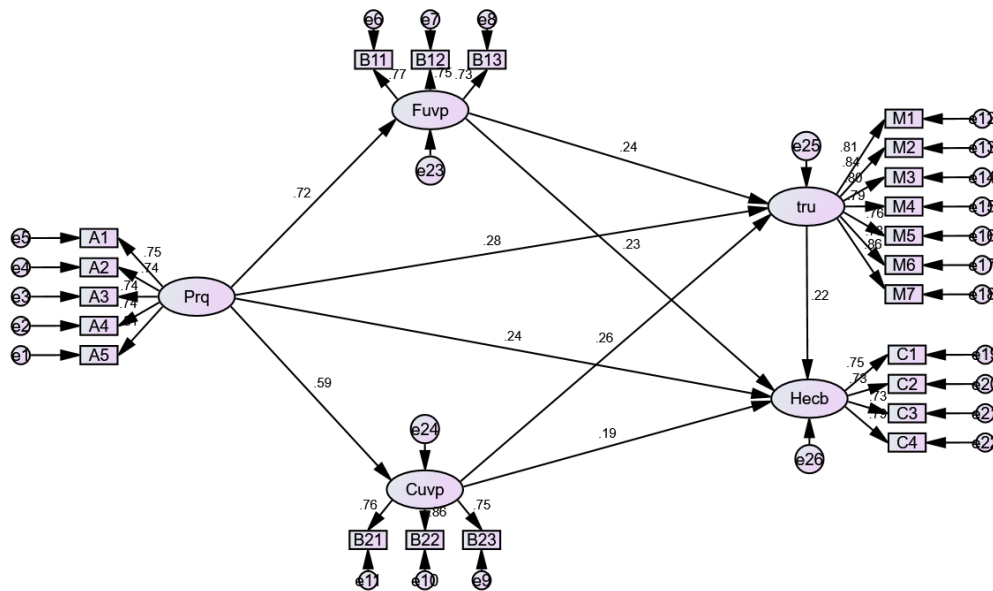


Fig. 2 Structural equation modeling diagram

Table 7 Standardized path analysis and hypothesis testing results analysis

trails	Non-standardized impact factor	S.E.	C.R.	P	Standardized impact factor	Assuming that holds true
Professionalism → perceived functional value	0.574	0.046	12.506	***	0.718	be tenable
Professionalism → Perception of cultural values	0.557	0.051	10.960	***	0.591	be tenable

Professionalism → trust	0.328	0.090	3.632	***	0.280	be tenable
Perceived functional value → trust	0.346	0.102	3.398	***	0.237	be tenable
Perceived cultural value → trust	0.323	0.068	4.783	***	0.260	be tenable
Professionalism → hedonic consumer behavior	0.238	0.079	3.027	0.002	0.239	be tenable
Trust → hedonic consumer behavior	0.188	0.047	4.038	***	0.221	be tenable
Functional value perception → hedonic consumer behavior	0.291	0.090	3.246	0.001	0.234	be tenable
Perceived cultural value → hedonic consumption behavior	0.206	0.060	3.448	***	0.195	be tenable

5.3.3 Tests for mediating effects

In this paper, the mediation effect is verified using Bootstrapping processing analysis, which determines the mediation effect by selecting 5000 runs based on the level value at 95% confidence level. When the confidence interval of bootstrap does not contain 0, it indicates that the corresponding effect is established. The mediating effect test results (Table 8) show that (1) the mediating effect path test result of professional literacy→consumer trust→consumers' hedonic consumption behavior shows that the standardized impact coefficient of the indirect effect is 0.062, $P=0.005<0.05$, and the 95% confidence interval is [0.015; 0.151], which does not include 0 in the 95% confidence interval, so that consumer trust has a significant mediating role between professionalism and consumer hedonic consumption behavior. And combining the results of the direct effect, it can be seen that the impact coefficient of the direct effect is 0.238, and the 95% confidence interval does not include 0. Therefore, consumer trust has a partially mediating role between professional literacy and consumer hedonic consumption behavior. Similarly, functional value perception has a partially mediating role between professional literacy and consumer trust. Cultural value perception partially mediates between professional literacy and consumer trust. Consumer trust is partially mediated between perceived functional value and consumer hedonic consumption behavior. Consumer trust is partially mediated between perceived cultural values and consumer hedonic consumption behavior.

Table 8 Analysis of Bootstrap test results for mediating role

trails	effect phenomenon)	(scientific	Estimate	S.E.	p	95% CI	
						Lower	Upper
Professionalism → consumer trust	indirect effect		.062	.032	.005	.015	.151
→ hedonic	direct effect		.238	.091	.009	.061	.417

consumer behavior	aggregate effect	.300	.09 2	.00 3	.119	.482
Professionalism → perceived functional value → consumer trust	indirect effect	.199	.07 6	.00 2	.074	.373
	direct effect	.328	.117	.00 7	.089	.561
	aggregate effect	.527	.08 0	.00 0	.372	.688
Professionalism → perceived cultural value → consumer trust	indirect effect	.180	.04 9	.00 0	.097	.287
	direct effect	.328	.117	.00 7	.089	.561
	aggregate effect	.508	.10 2	.00 0	.310	.710
Perceived Functional Value → Consumer Trust → Consumer Hedonic Consumption Behavior	indirect effect	.065	.03 5	.00 4	.015	.161
	direct effect	.291	.09 7	.00 3	.109	.488
	aggregate effect	.357	.09 6	.00 1	.177	.552
Perceived cultural value → consumer trust → hedonic consumer behavior	indirect effect	.061	.02 8	.00 3	.017	.132
	direct effect	.206	.07 4	.00 3	.074	.368
	aggregate effect	.267	.07 3	.00 0	.139	.429

6. Summary

Through an in-depth analysis of brokers' roles and behaviors in the marketplace, we find that brokers' professional characteristics significantly influence consumers' decision-making process and purchasing behavior. The characteristics of brokers play a key role in shaping the overall market landscape in terms of information transfer, pricing strategies and market orientation.

6.1 Responses and recommendations

Given the importance of brokers' professional characteristics to the Chinese painting market, we propose the following countermeasures. First, it is suggested that brokers should pay more attention to market orientation when cooperating with painters, adjust the promotion strategy of artworks according to consumers' needs, and improve the market adaptability of artworks. Second, brokers should focus on the transparency of information, and enhance trust with consumers through information delivery methods that are closer to consumers' needs. At the same time, brokers should be more flexible in the use of pricing strategies, so as to make them more in line with the consumers' ability to pay and cognitive expectations, thereby increasing the consumers' desire to buy.

6.2 Directions for future research

Future research could go deeper in several areas. First, the specific influence mechanism of brokers' professional characteristics on consumer decision-making can be further verified through large-scale surveys and data analysis. Second, the research object can be expanded to other art markets to compare the similarities and differences of brokers' characteristics on consumer behavior in different fields. At the same time, emerging technologies and digital means can be combined to dig deeper into the interaction patterns between brokers and consumers in order to improve the efficiency and transparency of the market. Finally, future research could also focus on changes in the socio-cultural and policy environments in order to understand the development trends of the Chinese painting market more comprehensively. These will help provide more practical guidance and suggestions for the sound development of the Chinese painting market.

References

- Alba, J. W., & Williams, E. F. (2013). Pleasure principles: a review of research on hedonic consumption. *Journal of Consumer Psychology*, 23(1), 2-18.
- Chang, H.-J., Eckman, M., & Yan, R.-N. (2011). Application of the Stimulus-Organism-Response model to the retail environment: the role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 233-249.
- Liu, F., Lim, E. T., Li, H., Tan, C.-W., & Cyr, D. (2020). Disentangling utilitarian and hedonic consumption behavior in online shopping: an expectation disconfirmation perspective. *Information & Management*, 57(3), 103199.
- Seol, M., & Kim, Y. (2022). Hedonic consumption and consumer's choice under the windfall gains. *한국산업정보학회논문지*, 27(2), 83-100.
- Yeh, C.-L. (2018). Pursuing consumer empowerment in the age of big data: a comprehensive regulatory framework for data brokers. *Telecommunications Policy*, 42(4), 282- 292.
- Tu, Hongwei, Jia Lei, & Zhou Xing. (2011). Definition of consumer channel migration behavior and its structural dimensions. *Modern Management Science*, 10, 99-102.
- Xu, H. L.. (2021). *Introduction to Cultural Brokerage*. BEIJING BOOK CO. INC.
- Yang, Yang, Li, Xiaofeng, & Liu, Mei Lian. (2018). A study on the influence of perceived value on purchase intention under utilitarian and hedonistic perspectives - A case of cell phone brands. *Research on Business Economics* (01), 50-52.
- Zhang, I.T.. (2020). Analysis of the Chinese painting and calligraphy market in the spring auction of 2020. *China Art* (06), 154-159.