Analysis of Chinese Time-Honored Restaurant Selection Embedded in Customers' Nostalgia: based on Contextual Analysis Model

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Abstract:

Revitalizing China's old restaurant brands is of great significance to the cultural self-confidence of the Chinese nation. In this study, nine old brands in Beijing, Shanghai and Guangzhou were selected, and a total of 543 valid questionnaires were obtained to analyze consumers' willingness to choose old brands. Specifically, based on consumers' perceived attractiveness and visit resistance to old firms, the authors used the contextual analysis model in the hierarchical linear model to explore the perturbation mechanism of the two nostalgic emotions in consumers' choices. The results of the analysis are as follows: first, perceived attractiveness has a positive effect on customer choice, while visit resistance has a negative effect on customer choice. Second, individual nostalgia has a positive effect on customer choice and plays a moderating role in the relationship between attractiveness, visit resistance and choice. Third, urban nostalgia also plays an important role in the relationship between attractiveness, visit resistance and choice. Overall, based on the contextual analysis model, this paper discovered the intrinsic choice mechanism of consumers for Chinese old restaurants, which can play a guiding role for their development.

Keywords: consumer perception of attraction, nostalgia, contextual analysis model, chinese time-honored restaurants.

INTRODUCTION

With the increasingly vigorous development of China's urban economy, a variety of time-honored brands related to commerce and service industry have emerged. In the impression of ordinary people, "time-honored" enterprises are old shops with quaint plaques hanging in ancient blocks and traditional brands. Since its initial establishment, the time-honored brand has been handed down from generation to generation with its unique traditional cultural characteristics and management mode. Nowadays, more and more time-honored brands have been selected into the list of Intangible Cultural Heritage, which has become a highlight of the list. As a member of China's time-honored restaurants, China's time-honored restaurants have experienced dozens of generations of inheritance and development. It is a precious historical heritage of China, a model of blending tradition and modernity, and an important carrier of Chinese commercial culture.

In 2006, the Ministry of Commerce identified more than 1,000 "China Time-honored Brands". Among these time-honored brands, most of them are in poor operating conditions, and most of the once famous time-honored enterprises are in trouble and difficult to survive. Only a small number of time-honored enterprises inherit the brand connotation and value through century-old stores and century-old skills, and at the same time, use innovation and reform to adapt to market changes, thus opening up a new development path [1]. The development of time-honored brands has attracted much attention, and many scholars have studied the brand value and extension of time-honored brands [2-3], brand innovation activation [4], and the difference of spatial distribution characteristics of time-honored brands [5-6]. Among them, Xu and Tang believe that the extension of time-honored brands will be directly affected by its authenticity, which will also indirectly affect the evaluation of time-honored brand extension through brand association and brand identity [7]. Lei and Xu believe that Beijing's time-honored restaurant brands can be divided into two categories: snack and dinner, and the development are relatively mature in the central urban area, but relatively slow in the peripheral urban area [8]. At present, there are many researches on the catering theory of Chinese time-honored brands, but there is a lack of empirical research. Therefore, through data investigation, this study introduces the variables of perceived attractiveness, resistance, individual nostalgia and urban nostalgia, establishes the corresponding hypothesis model, and fits the multi-level situational effect model to explore the psychological of choosing time-honored restaurants, and puts forward targeted opinions.

RESEARCH THEORY AND MODEL HYPOTHESIS

Perceived Attractiveness Hypothesis

Consumers' perceived attractiveness to retail enterprises (hereinafter referred to as "perceived attractiveness") consists of factors such as store characteristics, marketing elements, store location and enterprise nature [9]. Among them, store characteristics such

as in-store environment and in-store equipment functions [10], marketing elements such as price strategy, exhibition activities and service level [11], and store location factors such as the number of shops and passenger flow in the business district where the shops are located determine the level of perceived attractiveness [12]. The history, culture and traditional skills of time-honored brands continue to be inherited, thus forming their own unique brand advantages. As a national brand in China, the spirit of craftsmanship of excellence and the cultural concept of integrity and kindness are the enduring traditional gene of national brands, the internal driving force for their high-quality development, and the important basis for the time-honored brands to be inherited up to now. As the nature of time-honored enterprises, heritage is also one of the determinants of perceived attractiveness [13]. Therefore, the stronger consumers' cultural identity with time-honored brands, the happier and satisfied they will be in the process of consumption the stronger the perceived attractiveness, the more it can stimulate the willingness to consume, thus making consumers have a higher tendency to choose. The hypothesis H1 is put forward.

H1: The perceived attractiveness positively influences customers' intention to choose Chinese time-honored restaurants

Visiting Resistance Hypothesis

The visiting distance between consumers' residence and the location of retail facilities will hinder customers' intention to choose. Resistance can be measured by distance, travel time and transportation cost, traffic congestion degree, and consumers' travel affordability. Coase believes that consumption cost requires the parties to pay for information, invest time and energy and other expenses [14]. Zhao thinks that consumption cost is the sum of money, information, time, risk adaptation and other costs paid by people in the process of completing consumption [15]. In the study of gravity model, transportation cost can be measured not only from the perspective of travel and money expenditure, but also from the dimensions of transportation convenience, shop availability and self-psychological state. When consumers have a high perception of various costs during their trip to the time-honored restaurant, it is easy to cause psychological pressure, which will produce negative evaluation on the time-honored restaurant and reduce customer choice to the the time-honored restaurant. Therefore, when customers have a higher perception of the "resistance" of the time-honored restaurant, and may cause depression, anxiety, etc. The hypothesis H2 is put forward.

H2: The resistance to visiting negatively influences customers' intention to choose Chinese time-honored restaurants

Individual Nostalgia

Nostalgia is the memory of the past or old people, which represents people's memory of the past. When contacting time-honored brands, most consumers will have memories, nostalgia and even yearning for past experiences, and all kinds of emotions give rise to consumers' nostalgic tendency. Brown et al. first proposed the importance of nostalgia tendency to time-honored brands, and it is an effective and feasible marketing method to utilize consumers' nostalgia [16]. "Time-honored brands" can use their unique historical and cultural resources to arouse consumers' wonderful memories of the past through slogans, packaging and stories, etc. Zhang et al. believe that the consumption emotion of contemporary consumers has nothing to do with age [17]. Li and Huang believe that restaurants with nostalgic elements can arouse consumers' good memories by constructing emotional space [18]. The higher the degree of nostalgia, strong recognition of traditional culture of time-honored brands, the stronger the psychological tendency to choose time-honored restaurants. Therefore, the hypothesis H3 is proposed. Nostalgia has a strong subjective color and belongs to the individual characteristics of consumers. Different individual nostalgia levels will have different evaluations of perceived attractiveness and resistance of old restaurants. In the process of customers' consumption of time-honored restaurants, individual nostalgia will weaken the relationship between perceived attractiveness and tendency of choice by reducing the evaluation of perceived attractiveness. For example, when the individual is a strong nostalgic, the nostalgic connotation of catering may be very demanding. Therefore, even if the time-honored restaurant has a high attractiveness, the customer's tendency to choose may not be strong. Therefore, the study has hypothesis H4. That is to say, for the nostalgic individuals, the positive influence of attractiveness on time-honored brand will be weakened. For the weak individual nostalgists, the distance, time, endurance and other resistance factors required to visit time-honored brand cannot be underestimated, because their own motivation to visit is not strong. However, strong individual nostalgic people generally have strong motivation to visit time-honored restaurants, and ignore the resistance factors such as distance, time and affordability. Especially, the harder it is to get the target, the more it will stimulate its desire to go. Therefore, the study has H5. That is to say, for those with strong individual nostalgia, the higher consumers' perception of resistance, the stronger their tendency to choose time-honored brands.

H3: Individual nostalgia level positively influences customers' intention to choose Chinese time-honored restaurants

H4: The effect of perceived attractiveness on the choice of Chinese time-honored restaurants is negatively moderated by the level of individual nostalgia. That is, the effect of perceived attractiveness on the choice of Chinese time-honored restaurants will be weakened for strong individual nostalgists compared to weak individual nostalgists.

H5: The effect of visit resistance on the choice of Chinese time-honored restaurants is positively moderated by the level of customer nostalgia. That is, the effect of visit resistance on the choice of Chinese old-fashioned restaurant will be strengthened for strong individual nostalgists than for weak individual nostalgists.

Urban Nostalgic Situation Effect Hypothesis

Urban nostalgia is different from individual nostalgia. It is aggregated through individual nostalgia and used to express the average nostalgia level of a city. The average degree of nostalgia may vary from city to city. Nostalgia, as the emotional embodiment of modern people, carries specific people or things, and the commercial material space shaped by nostalgic elements will affect consumption willingness [19-21]. The higher the level of city nostalgia, the stronger the psychological tendency of customers to choose time-honored restaurants, so hypothesis 6 is proposed. Group-reference effect means that people belong to social creatures, and their survival must depend on a certain group, and group behavior will affect individual behavior [22]. Therefore, under the group reference effect, the nostalgic atmosphere in different cities makes consumers have different evaluations on perceived attractiveness and resistance, thus affecting consumers' intention to choose. In the process of food consumption, its loyalty will be affected by local dependence in different cities [23]. In the process of customers' consumption of time-honored restaurants, when the level of urban nostalgia is high, it will weaken the relationship between perceived attractiveness and customers' intention to choose by lowering the evaluation of perceived attractiveness. Therefore, the hypothesis H6 is proposed.

When the level of urban nostalgia is high, urban nostalgia strengthens the visiting motivation of customers, and weakens the influence of resistance factors such as distance. In the strong urban nostalgic atmosphere, even if the time-honored restaurant has a high perceived attractiveness, customers often may produce "aesthetic fatigue", cannot stimulate the corresponding motivation to visit. On the contrary, driven by the psychology of "trying new things", "seeking novelty" in other types of catering will reduce the psychological tendency of choosing old brands. Different nostalgic atmosphere in cities can regulate the evaluation mechanism of time-honored restaurants, that is, in cities with strong nostalgic atmosphere, the positive impact of perceived attractiveness on time-honored restaurants will be weakened. In the nostalgic atmosphere of weak cities, people's attention and interest in time-honored restaurants are not high, and they will not underestimate the resistance factors such as distance, time and affordability required to visit time-honored brands. Hypothesis H7 is put forward. However, in the nostalgic atmosphere of strong cities, people may underestimate or ignore their visit costs. It is more likely that the farther away the old restaurants are, the more people want to taste and experience them, which is consistent with the reason why urban residents like to go to farmhouses in the outer suburbs of cities in recent years. Perhaps it is caused by the psychological illusion that you can taste different meals only when you go further away. Therefore, the study has H8. That is to say, in the nostalgic atmosphere of a strong city, the stronger the resistance to visit, the stronger the psychological tendency of consumers to choose the time-honored brand. According to the above logical relationship, the framework diagram of hypothesis model proposed in this study is drawn (see Figure 1).
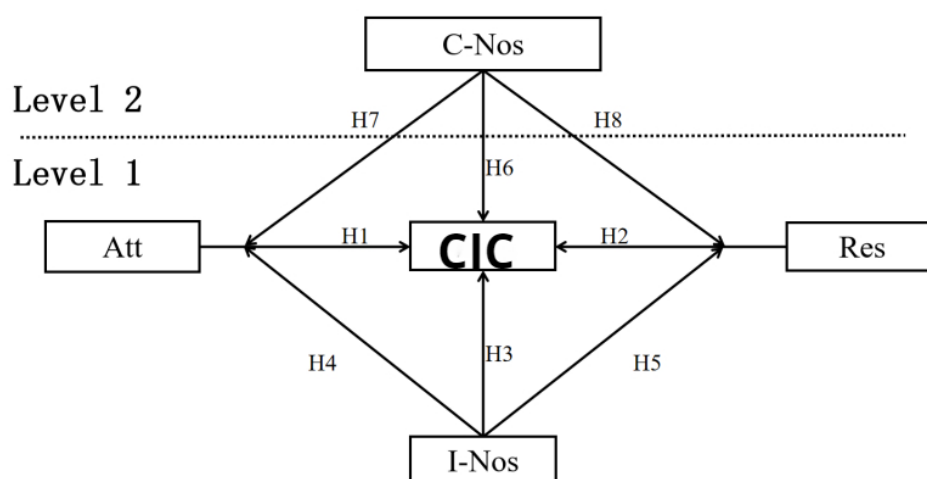

Figure 1. Hypothesis model diagram of multi-level situational effect analysis

H6: The urban nostalgic atmosphere positively influences customers' intention to choose Chinese time-honored restaurants

H7: The effect of perceived attractiveness on the choice of Chinese time-honored restaurants is negatively moderated by urban nostalgic atmosphere. That is, the effect of perceived attractiveness on the choice of Chinese time-honored restaurants will be weakened in a strong urban nostalgia atmosphere compared to weak urban nostalgia atmosphere.

H8: The effect of visit resistance on the choice of Chinese time-honored restaurants is positively moderated by urban nostalgic atmosphere. That is, the effect of visit resistance on the choice of Chinese time-honored restaurants will be strengthened in a strong urban nostalgia atmosphere compared to weak urban nostalgia atmosphere.

RESEARCH DESIGN

Sample Selection and Data Sources

According to the distribution of Chinese time-honored restaurants, the investigation areas are limited to Beijing, Shanghai and Guangzhou with good economic development and high market opening degree since modern times. In each city, we first searched the list of Chinese time-honored restaurants included by the Ministry of Commerce, and then selected the top three restaurants with high average scores on experience-sharing apps like Dian Ping, Koubei and Xiaohongshu. A total of 9 Chinese-time-honored restaurants were obtained. They are Quanjude, Bianyifang and Hongbinlou in Beijing, Xinghualou, Godly and Shanghai Lao restaurant in Shanghai, Guangzhou Restaurant, Panxi Restaurant and Beiyuan Restaurant in Guangzhou. This research was paid and commissioned by a professional research company in June 2022. 560 questionnaires were distributed, which were directed by cities, and 543 valid answers were obtained, with an effective rate of 96.96%.

Variable Selection

The questionnaire mainly consists of four parts. The first part includes demographic variables such as gender, age; educational background, occupation and monthly income, and the problem item "Favorite Chinese Time-honored Restaurants" (one out of three time-honored restaurants given by researchers in each city). The second part is about 13 questions about the perceived attractiveness of 9 time-honored brands. The third part is about five questions about the resistance of nine time-honored brands. The fourth part is 6 questions about consumers' nostalgia tendency, referring to the "nostalgia tendency" scale proposed [24-25]. The fifth part is the customers' intention to choose (Z1: the consumption in this time-honored brand is worthwhile; Z2: The degree of willingness to go to time-honored restaurants). Likert scale with 7 points was used for variable problems

Description of demographic variables

Table 1 describes the statistics of demographic variables and consumption habits, as follows. (1) Gender: There are 221 men and 322 women, accounting for 40.67% and 59.31% of the total number respectively, and the ratio of men and women is reasonable. (2) Age: Mainly concentrated in 21~30 years old and 31~40 years old, with 273 and 213 people respectively, accounting for 50.28% and 39.32% respectively, and the number of other age groups is small. The sample age basically meets the requirements of this survey. (3) Occupation: mainly concentrated in public ownership or large enterprises, small and medium-sized centralized systems or private enterprises, accounting for 28.36% and 44.57% respectively, followed by civil servants, public institutions staff accounting for 11.79% and students accounting for 8.47%. (4) Education background: Undergraduate and junior college account for the vast majority, accounting for 85.08%, 72 samples with master's degree or above, accounting for 13.26%, and few samples with high school or below. (5) Monthly income: As the surveyed city is Beijing-Shanghai-Guangzhou, it is mainly concentrated in more than 5,000 yuan. The number of people whose monthly income is less than 5,000 yuan, 5,000~8,000 yuan, 8,000~10,000 yuan and more than 10,000 yuan is 93, 148, 164 and 138 respectively, accounting for 17.13%, 27.26%, 30.20% and 25.41% respectively. (6) Favorite Chinese time-honored restaurants: In Beijing, the number of people who choose Quanjude, Bianyifang and Hongbinlou is 100, 63 and 28 respectively, accounting for 52.36%, 32.98% and 14.66% respectively; In Shanghai, the number of people who chose Xinghualou, Godly and Shanghai Lao Restaurant was 94, 38 and 40 respectively, accounting for 81.11%, 13.89% and 5.00% respectively. In Guangzhou, the number of people who chose Guangzhou Restaurant, Panxi Restaurant and Beiyuan Restaurant was 146, 25 and 9 respectively, accounting for 54.65%, 22.09% and 23.26% respectively.

Selection of perceived charisma, visiting resistance and individual nostalgia variables

For the related problems of perceived attractiveness, it is measured from four dimensions: store characteristics, marketing elements, store location and enterprise nature. According to reliability analysis, Cronbach α value is 0.653. For the related problems of resistance, it is measured from five dimensions: transportation convenience, shop availability, travel time,

transportation cost and travel psychological state. According to reliability analysis, Cronbach α value is 0.715. For the related problems of nostalgia tendency, according to the reliability analysis, the Cronbach α value is 0.695 and the questionnaire design is reliable, as shown in Table 2.

Table 1. Demographic variables and descriptive statistics of consumption habits

Variable	Classification	N	%	Variable	Classification		N	%
A1. Gender	(1) Male	221	40.69	A1. Gender	(2) Female		322	59.31
A2. Age	(1) 20 and under	9	1.66	A5. Monthly income	(1) 1500 yuan and below		13	2.39
	(2) 21-30 years old	273	50.28		(2) 1500-2500 yuan		24	4.42
	(3) 31-40 years old	213	39.23		(3) 2500-3500yuan		16	2.95
	(4) 41-50 years old	38	7.00		(4) 3500-5000 yuan		40	7.37
	(5) 51 years old and above	10	1.84		(5) 5000-8000 yuan		148	27.26
A3. Occupation:	(1) Civil servants and public institutions	64	11.79		(6) 8000-10000 yuan		164	30.20
	(2) Public ownership or large enterprises	154	28.36		(7) More than RMB 10000		138	25.41
	(3) Small and medium-sized centralized enterprises or private enterprises	242	44.57	A6. Favorite Chinese Time-honored Restaurants	Beijing	(1) Quanjude	100	52.36
	(4) Small and micro self-employed and freelancers	32	5.89			(2) Bianyifang Restaurant	63	32.98
	(5) Student	46	8.47			(3) Hongbinlou Restaurant	28	14.66
	(6) Retirement, resignation	0	0.00		Guangzhou	(1) Guangzhou Restaurant	146	81.11
	(7) Unemployed and others	5	0.92			(2) Panxi Restaurant	25	13.89
A4. Educational background	(1) Junior high school and below (including reading)	4	0.74			(3) Beiyuan Restaurant	9	5.00
	(2) High school (including reading)	5	0.92		Shanghai	(1) Xinghualou Restaurant	94	54.65
	(3) Junior College/Undergraduate (including in-school)	462	85.08			(2) Godly	38	22.09
	(4) Master's degree or above (including in-school)	72	13.26			(3) Shanghai Lao Restaurant	40	23.26

Table 2. Related items of each variable

Perceived attractiveness variable items	Resistance, individual nostalgia variable items
B1. The time-honored brand has a long history.	F1 When you go to this time-honored brand, there are fewer modes of transportation to choose from.
B2. This time-honored brand is one of the representatives of traditional catering culture.	F2 trip to this time-honored brand is expensive.
B3. This time-honored brand has a skill or culture that has been passed down to this day.	F3 on the way to the time-honored brand, your enthusiasm for consumption is generally reduced.
B4. People are interested in the culture of this time-honored brand.	F4 The geographical location of this time-honored brand is generally not easy to find.
B5. The time-honored brand provides reservation ordering and queuing service.	F5 takes a long trip to the old name
B6. The time-honored brand provides scanning code to order food, which makes it convenient and comprehensive to obtain food information.	Individual nostalgic variable items
B7. The facilities and equipment in the old store are modernized.	G1 time-honored brand reminds me of those beautiful memories in the past

B8. The decoration style of this old store is fashionable.	G2 time-honored brand reminds me of a certain historical period
B9. The price of this time-honored dish is reasonable.	The G3 brand reminds me of my own or others' youth or childhood
B10. This time-honored brand has a strong discount.	The G4 brand is a reminder of the happy past
B11. The shop assistant of this time-honored brand has a warm attitude and thoughtful service.	G5 old brand brings the beautiful memories of the past to the present
B12. There are a large number of shops in the location where the time-honored brand is located.	G6 old brand products make me feel a little nostalgic
B13. The location where the time-honored brand is located has a large passenger flow.	

Model Setup

Empty model

As a situational variable at collective level, "urban nostalgia" has a nested structure with individual level data. When there is a multi-level effect that the individual class belongs to the group, the individual behavior will be affected by multi-level independent variables, and the classical hypothesis of ordinary least squares is difficult to satisfy. In view of the characteristics of the data structure in the study, the Hierarchical Linear Model (HLM) is adopted to analyze. In order to test whether the data has hierarchical structure, the zero model of Model1 is judged first, and its model form is shown in formulas (1) ~ (3):

Individual level (Level 1): $Y_{ij} = \beta_{oj} + \varepsilon_{ij}$ (1)

Collective level (Level 2): $\beta_{oj} = \gamma_{00} + \mu_{ij}$ (2)

Total model: $Y_{ij} = \gamma_{00} + \varepsilon_{ij} + \mu_{0j}$ (3)

For individual level, the dependent variable Y_{ij} is determined by intercept β_{0j} and individual level residual term ε_{ij}, $\varepsilon_{ij} \sim N(0, \sigma^2)$. The parameter σ^2 represents within-group variability. For the collective level, the dependent variable β_{0j} is determined by the intercept γ_{00} and the residual term μ_{0j} of the collective level, where γ_{00} is the total mean value, μ_{0j} is the random effect related to the j-th unit, and $\mu_{0j} \sim N(0, \tau_{00})$. The parameter τ_{00} reflects the between-group variability.

Intra-group correlation coefficient ICC (1) is the ratio of inter-group variance to total variance, and the calculation formula isas follows:

$$ICC(1) = \frac{\tau_{00}}{\tau_{00} + \sigma^2}$$ (4)

Intra-group correlation coefficient ICC (1) is used to measure the variation degree between groups, and its range is between 0 and 1. When ICC (1) is greater than 0.059, multilevel model [26] should be considered, otherwise, simple fixed effect model should be adopted.

The internal consistency reliability ICC (2) of group mean, see formula (5), is used to measure the extent to which group mean can represent group variables, and its range is between 0 and 1. When its value is greater than 0.75, it means that the mean can represent its overall level.

$$ICC(2) = \frac{n \times ICC(1)}{1 + (n-1) \times ICC(1)}$$ (5)

Multilevel linear situational effect model

A multi-level linear model containing both individual (Level 1) variables and collective (Level 2) situational variables is called Contextual Analysis Model [27, 28]. In this study, the average value of "individual nostalgia" group in each region is regarded as the variable of "urban nostalgia". Because there is still a problem of violating the independence hypothesis of random error when analyzing nested data, the intercept of the situation effect analysis model involved is set as random effect and the slope is set as fixed effect [29], see formulas (6) ~ (8).

Individual level (Level 1): $Y_{ij} = \beta_{oj} + \beta_{1j}(NOS_{ij} - \overline{NOS_{.j}}) + \varepsilon_{ij}$ (6)

Collective level (Level 2): $\beta_{5j} = \gamma_{50}$ (7)

$\beta_{ij} = \gamma_{10}$ (8)

Among them, Yij is the explained variable, and Nosij is Level 1 Individual Nostalgia (Individual Nostalgia, I-Nos for short), which is intra-group variation $NOS_{ij} - \overline{NOS}_{.j}$ at individual level. City Nostalgia (City Nostalgia, C-Nos for short) is the mean value of "individual nostalgia" variables $\overline{NOS}_.$ in the whole sample, which is the inter-group variation $\overline{NOS}_{.j} - \overline{NOS}_.$ at the collective level, and εij and μij are the error terms at the individual level and the collective level respectively.

In this study, the explanatory variables for Attraction, (Att for short), Resistance (Res for short) and individual nostalgia (I-Nos) were added at the individual level, and urban nostalgia (C-Nos) was added at the collective level. See formula (9)~(16). The model is:

Individual level (Level 1):

$$CIC_{ij} = \beta_{0j} + \beta_{1j}ATT_{ij} + \beta_{2j}RES_{ij} + \beta_{3j}I-NOS_{ij} + \beta_{4j}ATT_{ij}I-NOS_{ij} + \beta_{5j}RES_{ij}I-NOS_{ij} + \varepsilon_{ij}$$ (9)

Collective level (Level 2):

$\beta_{0j} = \gamma_{00} + \gamma_{01}C-NOS_{.j} + \mu_{0j}$ (10)

$\beta_{1j} = \gamma_{10} + \gamma_{11}C-NOS_{.j}$ (11)

$\beta_{2j} = \gamma_{20} + \gamma_{21}C-NOS_{.j}$ (12)

$\beta_{3j} = \gamma_{30}$ (13)

$\beta_{4j} = \gamma_{40}$ (14)

$\beta_{5j} = \gamma_{50}$ (15)

General model:

$$\begin{aligned}CIC_{ij} = &\gamma_{00} + \gamma_{01}C-Nos_{.j} + \gamma_{10}Att_{ij} + \gamma_{11}Att_{ij}C-Nos_{.j} + \gamma_{20}Res_{ij} + \gamma_{21}Res_{ij}C-Nos_{.j} + \gamma_{30}I-Nos_{ij}\\ &+ \gamma_{40}Att_{ij}I-Nos_{ij} + \gamma_{50}Res_{ij}I-Nos_{ij} + (\mu_{0j} + \varepsilon_{ij})\end{aligned}$$ (16)

Among them, CICij is customers' intention to choose, Attij is perceptual attractiveness, Resij is resistance, I-Nosij is individual nostalgia, C-Nosij is urban nostalgia, γ.0 is parameter, μ·j and εij are error terms.

EMPIRICAL ANALYSIS

Descriptive Analysis

Table 3 is descriptive statistics of perceived attractiveness, resistance, nostalgia tendency and urban nostalgia variables. First of all, customers in Shanghai gave higher scores on the perceived attractiveness of old restaurants than those in Beijing and Guangzhou. Secondly, customers in Beijing gave higher scores than those in Guangzhou and Shanghai on the resistance to visiting time-honored restaurants. Thirdly, the nostalgic tendency scores of consumers in Shanghai are higher than those in Guangzhou and Beijing. Finally, the urban nostalgia score of Shanghai (5.939) is higher than that of Guangzhou (5.761) and Beijing (5.500).

Table 3. Descriptive statistics of variables

Variable	Beijing			Guangzhou			Shanghai			Total mean value
	Mean(sd)	Max	Min	Mean(sd)	Max	Min	Mean(sd)	Max	Min	Mean(sd)
Perceived attractiveness	5.551(0.621)	7.000	3.792	5.915(0.544)	7.000	2.146	6.017(0.538)	7.000	4.400	5.819 (0.603)
Resistance	2.509(0.884)	4.800	1.000	2.228(0.810)	4.800	1.000	2.144(0.831)	4.800	1.000	2.300 (0.857)
Individual nostalgia	5.500(0.768)	7.000	2.333	5.761(0.484)	7.000	4.333	5.939(0.507)	7.000	4.333	5.726 (0.631)

Regression Results of Customers' Intention to Choose

Introducing urban nostalgic situation variables, this paper constructs a multi-level situation effect model. Firstly, it explores the influence mechanism of variables at various levels on customers' intention to choose, and secondly reveals the influence relationship between cross-level variables. Therefore, through the multi-level situational effect model, the variation between different levels can be considered, so as to reveal the relationship between variables more reasonably and correctly. The independent variables in the above model are centralized by the total average, and the regression results are shown in Table 4.

Model 1 is an empty model result, intra-group variance σ^2=0.0635, the variance between groups τ_{00}=0.6452, which is significant at 5% level, the correlation coefficient within the group shows that 9% of the total variation of consumers' psychological tendency to choose Chinese time-honored restaurants comes from regional differences, and there is inter-group heterogeneity. There are enough reasons to think that there are differences in customers' psychological tendency to choose different cities, which can be estimated by multi-layer linear model. And it was greater than 0.75, indicating that it is reliable to choose the average value of individual nostalgia groups in each city as urban nostalgia.

Table 4. Regression results of multi-level situation effect

Variable	Model 1 Regression coefficient	Model 2 Regression coefficient	Model 3 Regression coefficient	Model 4 Regression coefficient	Model 5 Regression coefficient	Model 6 Regression coefficient	Model 7 Regression coefficient
CIC							
Intercept (γ_{00})	1.154** (0.150)	6.144*** (0.049)	6.169*** (0.044)	6.181*** (0.038)	6.173*** (0.033)	6.158*** (0.034)	6.208*** (0.029)
C-Nos (γ_{01})	0.240 (0.276)	0.188 (0.243)	0.185 (0.215)	0.206 (0.184)	0.219 (0.228)	0.157 (0.155)	0.240 (0.276)
Att							
Intercept (γ_{10})		0.612*** (0.058)	0.611*** (0.058)	0.615*** (0.057)	0.597*** (0.058)	0.615*** (0.058)	0.608*** (0.057)
C-Nos (γ_{11})					-0.829*** (0.250)		-0.529* (0.284)
Res							
Intercept (γ_{20})		-0.214*** (0.037)	-0.233*** (0.037)	-0.226*** (0.036)	-0.220*** (0.037)	-0.210*** (0.037)	-0.226*** (0.036)
C-Nos (γ_{21})						0.523*** (0.170)	0.387** (0.192)
I-Nos							
Intercept (γ_{30})		0.142*** (0.050)	0.110** (0.051)	0.120** (0.049)	0.124*** (0.050)	0.134*** (0.049)	0.109*** (0.051)
Att ×I-Nos							
Intercept (γ_{40})			-0.156** (0.067)				0.041 (0.081)
Res×I-Nos							
Intercept (γ_{50})				0.233*** (0.053)			0.255*** (0.065)

Note: *, **and***represent significant at level 10%, 5% and 1% respectively. The standard deviation is in parentheses.

Model 2 validates the relationship between perceived attractiveness, resistance and individual nostalgia variables. From the regression analysis results, we can get that perceived attractiveness has a positive impact on the choice tendency of time-honored brands. The higher perceived attractiveness, the stronger consumers' cultural identity with time-honored brands, the happier and satisfied they will be in the process of consumption, the higher the choice tendency of time-honored brands (β=0.612, Sig. < 0.01), hypothesis that H1 holds true. Resistance has a negative impact on the choice tendency of time-honored brands. The higher the resistance, by influencing consumers' psychology, depression, anxiety and other emotions are generated, the lower the choice tendency of time-honored brands (β=-0.214, Sig. < 0.01), hypothesis H2 holds true. Individual nostalgia has a positive influence on the choice of time-honored brands. The higher the individual nostalgia, the stronger the choice of time-honored brands

(β=0.142, Sig. 0.01), hypothesis H3 holds true. Urban nostalgia has no significant influence on the psychological tendency of choosing time-honored brands, and hypothesis H6 is not valid. In addition, by comparing the whole model (model 7), the significance and sign direction of variable coefficients obtained by regression are consistent with those of model 2, so H1, H2 and H3 are further strengthened.

Model 3 validates the main effect of individual nostalgia, and explores the moderating effect of individual nostalgia on the relationship between perceived attractiveness and customers' intention to choose. The interaction coefficient between individual nostalgia and perceived attractiveness was negative and significant (β=-0.156, Sig. < 0.05). However, compared with the whole model (model 7), nostalgia has no significant moderating effect on the relationship between perceived attractiveness and customers' intention to choose (β=0.041, Sig > 0.01). It indicates that the relationship between individual nostalgia and perceived attractiveness and customers' intention to choose is unstable, so we don't make a moderating effect diagram to explain it here.

Model 4 firstly validates the main effect of individual nostalgia, and secondly validates the moderating effect of individual nostalgia on the relationship between resistance and customers' intention to choose. Individual nostalgia weakens the relationship between resistance and choosing psychological tendency (β=0.233, Sig. < 0.01), so H5 holds true. By comparing the whole model (model 7), the significance and sign direction of the variable coefficients are consistent with those in model 4, so H5 is further strengthened. According to Figure. 2, compared with weak individual nostalgic individuals, strong individual nostalgic individuals have a higher psychological tendency to choose under the condition of high resistance. It shows that individual nostalgia strengthens customers' visiting motivation, and weakens the influence of resistance factors such as distance.
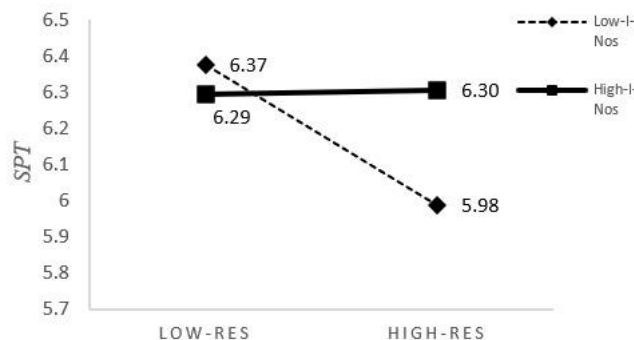

Figure 2. The moderating effect of individual nostalgia on the relationship between resistance and customers' intention to choose

Model 5 explores the main effect of urban nostalgia, verifies the moderating effect of urban nostalgia on the relationship between perceived attractiveness and customers' intention to choose, and weakens the moderating effect of urban nostalgia on the relationship between perceived attractiveness and customers' intention to choose (β=-0.829, Sig. < 0.01). Therefore, H7 was valid. The coefficient significance and symbolic direction of the interaction between urban nostalgia and perceived attractiveness in Model 7 are consistent with those in Model 5, so H7 is further strengthened. According to Figure 3, compared with those with weak urban nostalgia, those with strong urban nostalgia have a lower psychological tendency to choose under the condition of high perceived attractiveness. Therefore, urban nostalgia plays a weakening role in the relationship between perceived attractiveness and customers' intention to choose.
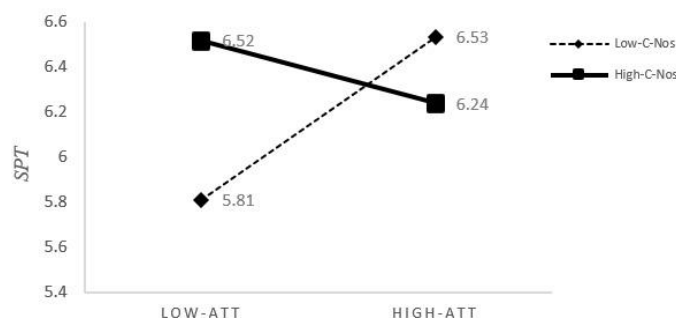

Figure 3. The moderating effect of urban nostalgia on the relationship between perceived attractiveness and customers' intention to choose

Model 6 firstly validates the main effect of urban nostalgia, secondly validates the moderating effect of urban nostalgia on the relationship between resistance and choosing psychological tendency, and the relationship between resistance and choosing psychological tendency is inhibited by urban nostalgia (β=0.523, Sig. 0.01), so the hypothesis H8 was valid. Compared with Model 7, it shows that the coefficient significance and symbol direction are consistent with Model 6, so H8 is further strengthened. According to Figure 4, compared with nostalgia in weak cities, the strong urban nostalgia group has a higher psychological tendency to choose under the condition of high resistance. Therefore, urban nostalgia plays a weakening role in the influence of resistance on customers' intention to choose.
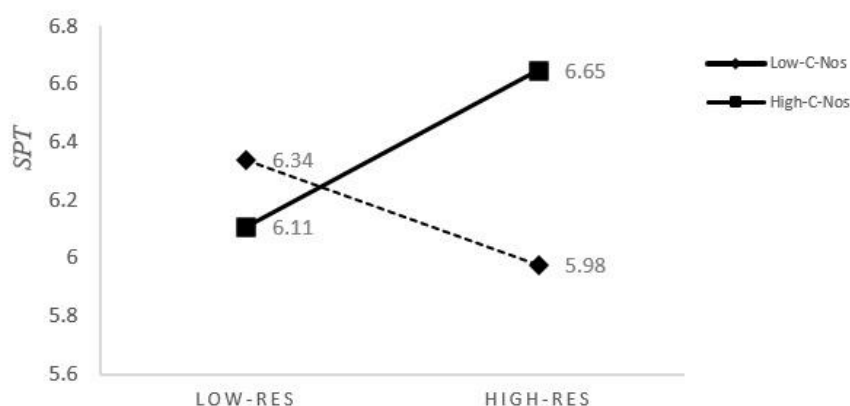

Figure 4. The moderating effect of urban nostalgia on the relationship between resistance and customers' intention to choose

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

In order to explore the influencing factors of consumers' psychological tendency to choose Chinese time-honored restaurants, this study uses the questionnaire data of 9 famous Chinese time-honored restaurants in Beijing, Shanghai and Guangzhou, and introduces urban nostalgia situation variables on the basis of individual nostalgia. On the one hand, the main effects influencing mechanism of perceived attractiveness, resistance, individual nostalgia and urban nostalgia variables were explored. On the other hand, it explores the influence mechanism of the interaction between various variables on the psychological tendency of time-honored brands. It confirms the importance of urban nostalgia, a situational variable, in explaining individual variation. The following conclusions are reached:

(1) This study constructs a multi-level situational effect model. Firstly, the perceived attractiveness positively affects the choice psychological tendency of time-honored brands, that is, the stronger the perceived attractiveness, the stronger consumers' cultural identity with time-honored brands, the happier and satisfied they will be in the process of consumption, the more it can stimulate consumption and promote consumers to have a higher choice psychological tendency. Secondly, the resistance negatively affects the choice psychological tendency of time-honored brands, that is, when customers have a higher perception of "resistance" of time-honored brands, it will reduce customers' choice psychological tendency of time-honored restaurants by influencing consumers' psychology, depression, anxiety and other emotions are generated

(2) In the analysis of individual nostalgia tendency, it is found that individual nostalgia positively affects the psychological tendency of choosing time-honored restaurants. In addition, the moderating effect of individual nostalgia on the relationship between the perceived attractiveness and the choice psychological tendency of the customers of Chinese time-honored restaurants is not stable. However, individual nostalgia has a significant moderating effect on the relationship between customer resistance and customers' intention to choose in Chinese time-honored restaurants.

(3) At the collective level, the main effect is not significant when the urban nostalgia situation variable is introduced. However, urban nostalgia weakens the relationship between perceived attractiveness and customers' intention to choose. Compared with weak urban nostalgia, people with strong urban nostalgia have a higher customers' intention to choose under the condition of high resistance. Urban nostalgia weakens and moderates the relationship between the resistance and the psychological tendency to choose, which indicates that when the nostalgia level of the whole city is high, customers tend to ignore the obstacles such as distance, time and cost, and have a stronger psychological tendency to choose time-honored restaurants.

Recommendations

Most of the more than 1,000 "China Time-honored Brand" enterprises identified by the Ministry of Commerce are in poor operating condition. Time-honored enterprises are not only the profit-making market players, but also an important carrier of Chinese culture, and their revitalization has dual significance of economic and cultural. To find out the reasons that restrict the development of Chinese time-honored restaurants lag behind, and adopt practical and reliable strategies to make them grow and develop, which is of obvious positive significance. The following recommendations are given:

First, the application of multi-level situational effect model can answer the question about the importance of urban nostalgia in explaining individual variation, which can enhance the accuracy and scientificity of the conclusion. In the face of difficult quantization and measurement of collective level variables data, through the use of situational effect analysis is a good method, this study provides a new perspective for the measurement of collective level variables by introducing situation variables.

Second, the time-honored brand inherits the traditional skills and cultural connotation, and carries forward the classic history and craftsman spirit of the time-honored brand. Therefore, carrying forward the inheritance of time-honored brands is the foundation of the development of time-honored enterprises; Time-honored brands need to integrate modern elements, combine their own brand characteristics, carry out diversified marketing, enhance the brand marketing power and improve the publicity; Guide the development of characteristic products and service agglomeration of time-honored brands, and encourage the development of time-honored brands.

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REFRENCES

[1] Jiaxun He, Xiyan Qin, Qingyun Yang, Ying Wang. Innovation or nostalgia? "Paradox" of long-term brand management and market segmentation orientation of old brands: an empirical study from three Chinese cities. Management World, 2007(11):96-107+149.

[2] Yanfeng Xu, Xiucheng Fan, Qianlin Zhu. Research on the influence of brand extension of old brands on brand loyalty based on cultural fit. Journal of Beijing Technology and Business University (Social Science Edition), 2018, 33(02):62-72.

[3] Jianing Ke, Liangyan Wang. Study on the influence of cross-category extension on old brands and emerging brands. Nankai Management Review, 2021, 24(02):4-14.

[4] Keller K L. Brand synthesis: The multidimensionality of brand knowledge. Journal of Consumer Research, 2003, 29(4):595-600.

[5] Binbin Ma, Xingpeng Chen, Fangting Chen, Yanbi Chen, Bowenpeng Ding. Spatial differentiation and influencing factors of China time-honored brand. Geographical Research, 2020, 39(10):2313-2329.

[6] Yaoyan Jia, Jing Hu, Dajun Liu, Yiran Liu. Study on spatial distribution pattern and influencing factors of Chinese time-honored brands. Journal of Arid Land Resources and Environment, 2020, 34(03):85-93.

[7] Wei Xu, Xiaoxiao Tang. Research on the influence mechanism of the authenticity of time-honored brands on brand extension evaluation. Finance and Trade Research, 2020, 31(03):72-80.

[8] Yan Lei, Peiwei Xu. The Classification, Spatial Pattern and Consumer's Network Evaluation of Time-honored Catering Brands in Beijing. Modern Urban Research, 2017(02):68-75.

[9] Masao Nakanishi. Theory and Measurement of Retail Attraction. Beijing: Science Press, 2012.

[10] Thang D, Tan B. Linking consumer perception to preference of retail stores: An empirical assessment of the multi-attributes of store image. Journal of Retailing & Consumer Services, 2003, 10(4):193-200.

[11] Yoo S J, Chang Y J. An exploratory research on the store image attributes affecting its store loyalty. Seoul Journal of Business, 2005, 11(1):19-41.

[12] Xiaoding Wu, Sheng Wei, Yue Wang. The Effect of Catering Function on Retail Agglomerations Attractiveness. Journal of Applied Statistics and Management, 2014, 33(06): 973-982.

[13] Taihong Lu, Hui Gao. A Review of Research on Brand Aging and Brand Activation. Foreign Economics and Management, 2007(02):17-23.

[14] Coase R H. The nature of the firm. Economica,1937, 16(4):386-405.

[15] Rui Zhao. Research on the strategy of dual channel supply chain based on transaction cost theory. Tianjin: Nankai University, 2011.

[16] Brown S, Kozinets R V, Sherry J F. Teaching Old Brands New Tricks: Retro Branding and the Revival of Brand Meaning.Journal of Marketing. 2003, 67(3):19-33.

[17] Zhiguang Zhang, Fan Cao, Wei Wei. Influencing mechanism on consumer behavior of time-honored restaurants in social media age——a model of nostalgia-innovation dual drive. Journal of Researches on Dietetic Science and Culture, 2022, 39(03):26-34.

[18] Fan Li, Wei Huang. The Phenomena of Urban Nostalgia under the Background of Globalization and its Geographical Perspective. Human Geography, 2012, 27(03):28-33.

[19] Boym S. The future of nostalgia. New York: Basic Books, 2001.

[20] Hungbin Chen, Shihshuo Yeh, Tzungcheng Huan. Nostalgic emotion, experiential value, brand image, and consumption intentions of customers of nostalgic-themed restaurants. Journal of Business Research, 2014, 67(3):354-360.

[21] Hwang J, Hyun S S. The impact of nostalgia triggers on emotional responses and revisit intentions in luxury restaurants:The moderating role of hiatus. International Journal of Hospitality Management,2013, 33(3):250-262.

[22] Aibao Zhou, Qiong Li, Zhan Shi, Peiru Liu, Pengying Zhang, Huifen Wu. Verification of group reference effect. Psychological Exploration, 2012, 32(01):91-96.

[23] Bin Liu. Relationship of memorable tourism experiences, place attachment and tourist loyalty in tourists' food consumption - An empirical study based on Chengdu. Journal of Researches on Dietetic Science and Culture, 2021, 38(04):23-30.

[24] Jiaxun He. How do we miss the past? Development and comparative verification of consumer nostalgia Scale under Chinese cultural background. Journal of Marketing Science, 2010, 6(3):30-50.

[25] Minggui Sun. Emotional cognition of time-honored brands and measurement of consumers' nostalgic tendency. Enterprise Economy, 2014(09):5-8.

[26] Cohen J. Statistical power analysis for the social sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, 1988.

[27] Raudenbush S W, Bryk A S. Hierarchical linear models: Applications and data analysis methods. Los Angeles: Sage, 2002.

[28] Haozheng Qiu, Fuxing Wen. Hierarchical linear model analysis of contextual Effect: Taking school organizational innovation climate and teachers' creative performance as examples. Education and Psychology Research (Taiwan), 2007, 30(1):1-35.

[29] Kreft I G G, De Leeuw J. Introducing multilevel modeling. Los Angeles: Sage, 1998.