

China's Consumers Have Different Purchase Motivations for International Enterprises and Chinese Enterprises

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ABSTRACT

Many Chinese consumers believe the service attitude of salespeople is very important for consumers to buy a product. However, compare with many local China enterprises, many international enterprises do not seem to realise it. Which generalises the question: are consumers' motivations for purchasing from these two types of enterprises different? The paper describes using an international shopping mall (A) and a Chinese shopping mall (B) as examples. The researchers randomly distributed a questionnaire survey to 110 consumers and analysis questionnaire result via the stepwise regression model. The researchers found consumers purchase goods from international enterprises (A) because of gender, and consumers buy goods from Chinese enterprise (B) as their age and the service attitude of salespeople. This paper confirms that the service attitude of salespeople may not be the advantage of international enterprises, but the drawback of the research does not consider consumers to have different purchase motives for different enterprises. In the conclusion, the researchers posit that future research should examine whether consumers' purchase motivations affect international companies to make profit in the Chinese market.

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Introduction

Many Chinese consumers believe the service attitude of salespeople is the most important motivation for customers to buy products, and the second important motivation is price. For many Chinese consumers, international enterprises offer a wider range of products, but local enterprises have a better service attitude and more reasonable prices.

We examined whether Chinese consumers have different purchase motivations for international enterprises and Chinese enterprises. Researchers distributed a questionnaire survey on purchase motivation to customers of international enterprise A and Chinese enterprise B and analysed these data with stepwise regression, ultimately finding that consumers' purchase motivations are different for a Chinese company (B) and an international company (A) in the same industry. The reason for consumers to buy an international company (A) is the gender of consumers, and the reasons of consumers to buy a Chinese company (B) are the service attitude of salespeople and the age of consumers.

Method

We assume that consumers' gender, age and monthly income, the geographical location of malls, the type, quality and price of goods and the levels of service offered at the malls will affect the number of purchases made by consumers. In addition, the service attitudes of sales staff should affect enterprises very significantly.

Researchers have suggested that the analysis of consumer behaviour is inherently subjective. Researchers have traditionally

collected data via scientific experiments, questionnaires and access to second-hand data. Many studies have predicted consumer behaviour using questionnaires, a very direct and fast method for knowing the attitude of customers.

To confirm our hypothesis, we used an international enterprise (A) and Chinese enterprise (B) as examples and collected classified and quantitative data with a randomly distributed questionnaire for stepwise regression analysis.

Enterprise A is a famous international chain of shopping centres. Enterprise A has built many shopping centres in China that integrate cinemas, restaurants, supermarkets and department stores. In our survey, 53.7% of the respondents stated that their main reason for visiting Enterprise A was that these shopping malls offer high-quality goods and a wide range of products.

Enterprise B is a famous local chain of shopping centres in China; it has also built integrated shopping malls. In our questionnaire, 62.07% of the participants responded that their main reason for shopping at Enterprise B was the high level of service and good attitude of the sales staff.

The researchers designed essentially the same 20 multiple-choice questions to ask consumers about their purchase motivations regarding each of the two companies on a questionnaire website that promotes quizzes to random users for them to fill out. We received 53 completed questionnaires about Enterprise A and 58 questionnaires about Enterprise B.

Statistically, women accounted for 83.33% and men for 16.67% of the respondents who took part in the Enterprise A survey. In addition, the respondents to the Enterprise B questionnaire consisted of 60.34% women and 39.66% men. The average age of respondents to both questionnaires was between 18 and 30 years old. The average income of the respondents was between 3,500 and 5,000 Chinese yuan monthly.

Finally, researchers used the stepwise regression model to analyse the data from the completed questionnaires using the SPSSAU software [1, 2].

The first step was to establish an inferred regression model.

$$Y = B_0 + B_i X_i + E, i = 1 \dots, p \quad (1)$$

In the second step, the system performs an F-test on the selected data, which automatically selects the maximum value:

$$F(1)_{i1} = \max \{F_1(1) \dots, F_p(1)\} \quad (2)$$

In the third step, the system automatically recognises the significant independent variable (X) and removes variables that are not significant.

$$F(2)_{i2} = \max \{F(2)_1, \dots, F(2)_{i1-1}, F(2)_{i1+1}, \dots, F(2)_p\} \quad (3)$$

To judge multicollinearity, the SPSSAU software automatically analyses the R-square and VIF values. The system can also analyse the significance of variable Y, showing the influence of X on Y and judging whether the relationship is positive or negative.

Furthermore, the stepwise analysis method automatically carries out T-testing on the significant X to ensure that there is no correlation with the influential X. In addition, researchers use the normal map of the SPSSAU software to observe the normality of the residual value. If the residual has nothing to do with the scatter of X, it means that the model has no heteroscedasticity [3-5].

Finally, because the data in this study came from an anonymous questionnaire randomly distributed online, it would be possible for an individual to fill out the survey with the same answers multiple times. Such data would affect the credibility of the questionnaire and the analysis of the results.

By manually screening the data, researchers deleted the records of participants who shared the same IP address and chose very similar responses in the questionnaire. There are such 9 participants in the questionnaire for an enterprise (A) and 13 participants in the questionnaire for an enterprise (B).

In addition, the researchers also used box diagrams to determine whether the samples for the two surveys produced abnormal data. The researchers then used the outlier function of the SPSSAU software to set the data record < 0 to null, which means that the SPSSAU software deleted outlier data.

Results

The researchers divided whether consumers had different motivations for international and Chinese companies into several sub-questions, and we aimed to answer the main problem by solving those sub-questions. Firstly, what factors affect consumers' spending at international enterprises and what factors affect consumers' spending at local Chinese enterprises? Secondly, which of these factors mainly affect the amount of consumer spending at different enterprises? Finally, if any such main factors can be identified, is there a correlation between them?

Table 1

Results of stepwise regression analysis of an international shopping mall (A) (n=49)									
		Unstandardized Coefficients	Standardisation Coefficients	T	P	VIF	R ²	Adjusted R ²	F
	B	Standard error	Beta						
Constant	2.451	0.284	-	8.646	0.000**	-	0.082	0.062	F(1,47) =4.192 p=0.046
Gender	-0.476	0.232	-0.286	-2.048	0.046*	1.000			

Dependent Variable: Customers' monthly level of consumption at Shopping Centre A

D-W value: 2.271

* p<0.05 ** p<0.01, The t values are in parentheses.

Table 2

The stepwise regression analysis results of an international shopping mall (A) -simplified format			
	Regression coefficient	95% CI	VIF
Constant	2.451** (8.646)	1.896 ~ 3.007	-
Gender	-0.476* (-2.048)	-0.931 ~ -0.020	1.000
Sample capacity	49		
R^2	0.082		
Adjusted R^2	0.062		
F value	$F(1,47)=4.192, p=0.046$		
Dependent Variable: Customers' monthly level of consumption at Shopping Centre A			

D-W value: 2.271

* $p < 0.05$ ** $p < 0.01$ The t values are in parentheses.

The researchers used scatterplots to observe the distribution of each dataset and identify the main factors that affected consumption at the international enterprise (A) and Chinese enterprise (B). The researchers then used stepwise regression to calculate the impact of these factors. Finally, the stepwise regression model automatically tested for correlations among these factors and found no correlation among the main factors.

In the Enterprise A questionnaire, independent variables included respondents' gender, age, monthly income and method of transportation for getting to the shopping mall as well as customer satisfaction with the variety of goods in the shopping mall, the quality of the goods in the shopping mall, the prices of the goods in the shopping mall and the service attitudes of the salespeople in the shopping centre while the amount of monthly consumption at shopping centre A served as a dependent variable in stepwise regression analysis. After automatic identification by the stepwise regression model, only the factor of gender was left in the model.

The resulting formula for the model is:

$$\text{Customers' monthly level of consumption at Shopping Centre A} = 2.451 - 0.476 * 1, \text{gender} \quad (4)$$

According to its R-value of 0.082, gender can explain 8.2% of the variance in customers' monthly spending at Shopping Centre A. The model passed the F-test ($F = 4.192, p = 0.046 < 0.05$) and can thus be considered valid.

In addition, from the automatic multicollinearity test run on the model by the SPASS software, all the VIF-values in this model were found to be less than 5, which means that there is no collinearity problem. The D-W value in the model is near 2, which means that there is no autocorrelation in the model; there is no correlation among the sample data.

After running the semantic formula test, we found that the regression coefficient of gender is -0.476 ($t = -2.048, p = 0.046 < 0.05$). This means that in Shopping Centre A, gender will have a significant negative impact on customers' levels of monthly consumption.

Table 3

Results of stepwise regression analysis of a China shopping mall (B) (n=45)									
	Unstandardized Coefficients		Standardisation Coefficients	t	P	VIF	R^2	Adjusted R^2	F
	B	Standard error	Beta						
Constant	2.401	0.547	-	4.388	0.000**	-	0.211	0.173	F(2,42) =5.614, p=0.007
Age	-0.474	0.231	-0.283	-2.049	0.047*	1.017			
Customer satisfaction with the service attitude of the sales staff	0.305	0.129	0.327	2.362	0.023*	1.017			
Dependent Variable: Customers' monthly level of consumption at Shopping Centre A									

D-W value: 1.731

* $p < 0.05$ ** $p < 0.01$ The t values are in parentheses.

Table 4

Results of stepwise regression analysis of a China shopping mall (B) -simplified format			
	Regression Coefficient	95% CI	VIF
Constant	2.401** (4.388)	1.329 ~ 3.474	-
Ages	-0.474* (-2.049)	-0.928 ~ -0.021	1.017
Customer satisfaction with the service attitude of the sales staff	0.305* (2.362)	0.052 ~ 0.558	1.017
Sample capacity	45		
R ²	0.211		
Adjust R ²	0.173		
F value	F (2,42) =5.614, p=0.007		
Dependent Variable: Customers' monthly level of consumption at Shopping Centre B			

D-W value: 1.731

* p<0.05 ** p<0.01 The t values are in parentheses.

The questionnaire for Shopping Centre B was handled in the same way as above. The potential independent variables and dependent variable were the same as with Questionnaire A, but 2 valid independent variables were identified, age and customer satisfaction with the service attitudes of the shopping mall salespeople.

The formula of the model is:

$$\text{Consumers' monthly level of consumption at Shopping Centre B} = 2.401 - 0.474 \cdot \text{age} + 0.305 \cdot \text{customer satisfaction with the service attitude of the sales staff} \quad (5)$$

The R-value is 0.211, which means that age and customer satisfaction with the service attitudes of the mall salespeople can explain the 21.1% of the variance in customers' monthly levels of consumption at Shopping Centre B. The model passed the F-test (F = 5.614, p = 0.007 < 0.05), which means that the model is valid.

In addition, the SPSSAU software checked the multicollinearity of the model and found that the VIF-values are all less than 5 and there are no collinearity problems in the model. In addition, the D-W value in the model is near 2, so there is no autocorrelation in the model and no correlation among the sample data.

The regression coefficient of age in the Shopping Centre B dataset is -0.474 (t = -2.049, p = 0.047 < 0.05), meaning that age has a significant negative effect on consumers' level of monthly consumption at Shopping Centre B.

In addition, for the factor of customer satisfaction with the service attitudes of the sales staff, the regression coefficient is 0.305 (t = 2.362, p = 0.023 < 0.05), which means it has a significant positive impact on consumers' levels of monthly consumption at Shopping Centre B.

Discussion

The main question to be discussed is whether Chinese customers' motivations differ in purchasing from international enterprises versus Chinese enterprises. Our answer is 'Yes'. Using the data from 88 valid questionnaires completed by consumers regarding an international enterprise (A) and Chinese enterprise (B), the step-by-step analysis method allowed us to verify some predictions.

We find that Chinese consumers' reasons for shopping at international and local shopping malls are indeed different. For the international shopping centre (A), consumers' gender was the main factor that determined their choice to shop at Enterprise A. To be specific, men were more likely to shop at A-brand international shopping centre. Although age, income, the location of the mall, the type, quality and price of the goods and the service attitudes of the salespeople are all important to consumers, these factors are not the main reasons for their consumption at the international shopping centre (A).

Age and the service attitudes of salespeople are the main factors behind consumers' decision to shop at the Chinese shopping centre (B). Specifically, in B-brand Chinese shopping malls, younger consumers spend more and older consumers spend less. In addition, the better the service attitudes of the mall sales staff, the more people make purchases at the B-brand shopping mall.

However, consumers believe that gender, income, the location of shopping malls and the type, quality and price of goods are not the main factors that affect their consumption at the Chinese shopping mall (B). Moreover, consumers believe that the service attitudes of Enterprise A's salespeople do not affect their levels of consumption at Shopping Centre A and that the quality of goods is not the main reason consumers choose Enterprise A. Some of our predictions have not been proven.

Many previous studies have posited that culture, lifestyle, income levels and values affect consumers' purchasing behaviour [6-8]. The significance of this paper confirms the service attitude of sales staff in international enterprises is not the reason Chinese consumers buy their products. However, the drawback of this study is that all enterprises have different effects on consumers' purchase motivation. These differences exist not only between international enterprises and Chinese enterprises but also among Chinese enterprises.

During the period of the COVID-19 pandemic, some Chinese enterprises were able to maintain stable profits while some international enterprises eventually withdraw from the Chinese market. However, international companies should have better resources and more cooperative suppliers than many local Chinese companies. Whether consumers' purchase motivation affects the profits of international enterprises should be explored in further research.

Conclusion

Whether consumers in China have different motivations for buying from international shopping malls and local shopping malls is a question that researchers have long studied closely. Taking the international enterprise (A) and Chinese enterprise (B) as examples, we randomly distributed a questionnaire survey among 50 consumers. We used the method of stepwise regression analysis to perform empirical research. The results show that consumers have different motivations for shopping at multinational shopping malls and local Chinese shopping malls; specifically, age and gender help determine consumers' preferences and the service attitudes of salespeople at Chinese shopping malls attract many customers. The significance of this paper is that it confirms the service attitude of the sales staff is not the reason consumers spend in the international shopping centres. Future research can further focus on does China's consumers' purchase motivation affect the profits of international enterprises in the Chinese market.

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