

# Consumer Ethnocentrism, Product Attitudes and Purchase Intentions of Domestic Products in China

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**Abstract:** The globalization of market has brought considerable foreign goods to Chinese consumers. The competition between domestic and foreign corporations became more and more intense during last decades. This study focuses on how consumer ethnocentrism influences the preference for domestic goods among Chinese consumers. The data were collected through questionnaire from 501 middle school students. The results show that there is significant correlation between the consumers' purchase intention of domestic goods and consumer ethnocentrism. Mediating regression analysis indicated that consumer ethnocentrism has significant effect on consumers' purchase intentions of domestic products, while product attitude has mediator effect between them.

**Keywords:** consumer ethnocentrism; product attitudes; purchase intentions

## 1 Introduction

Today, the Chinese consumers have abundant choices in many kinds of products. There are a lot of foreign brand products produced in China by joint ventures or imported from overseas. Consequently, domestic manufacturers have to face intensive competition in many markets such as appliances, cars, computers and cosmetics. However, although the markets continue to globalize, it does not mean that the consumers are also globalizing at the same time. In fact, among theorists, there is widespread disagreement on this topic<sup>[1]</sup>. The consumer behavior is influenced by global and local culture simultaneously. Indeed, globalization may also leads to increasing entrenchment of local cultures, motivating people to resist global forces<sup>[2]</sup>.

Previous researches show that in developing countries, consumers tend to believe that products made by local producers are not as good as imported producers<sup>[3][4]</sup>. However, the Chinese traditional culture still has strong impact on consumers. Sometimes consumers prefer to purchase local products even though their quality is poorer comparing to foreign brands products. Understanding this phenomenon will be helpful for manufacturers to improve their competence strategy. To investigate this phenomenon, 'consumer ethnocentrism' (CET) is adapted in this research to describe the beliefs held by consumers about the appropriateness of purchasing foreign products which was first established by Shimp and Sharma<sup>[5]</sup>. The goal of this research is to explore the relationship between consumer ethnocentrism and purchase intentions of domestic prod-

ucts.

## 2 Literature Review and Hypotheses

### 2.1 Consumer ethnocentrism

Ethnocentrism was originally a sociological concept. Sumner defined ethnocentrism as 'view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it ... Each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders'<sup>[6]</sup>. This phenomenon could be observed in most social groups. According to Levine and Campbell, ethnocentrism was originally a sociological concept, which then became a psychosocial construct with relevance to individual-level personality systems, as well as to the more general cultural- and social-analytic frameworks<sup>[7]</sup>. Shimp and Sharma expanded this concept to consumer behavior and created the CETSCALE (Consumer Ethnocentrism Tendencies Scale). Consumer ethnocentrism is defined as the beliefs (knowledge structures and thought processes) held by consumers about the appropriateness, indeed morality, of purchasing foreign-made products in place of domestic ones<sup>[5]</sup>.

After that, a number of researches have been done in cross-cultural or multi-national context to investigate the applicability of the CETSCALE. Result from the US, West Germany, France and Japan supports the uni-dimensionality and validity of the scale<sup>[8]</sup>. The same result is reported in Spain<sup>[9]</sup>. Wang verified the CET-

SCALE and found it is also a reliable construct in China<sup>[10]</sup>.

## 2.2 Ajzen and Fishbein's attitudes model

In consumer behavior area, Ajzen and Fishbein's attitude's model has been widely accepted. Their model proposed two main factors which influence purchase intention, attitude and subjective norm. Attitude is defined as 'overall evaluations that can be measured by a procedure which locates respondents on a bipolar evaluative dimension'. Subjective norm would be 'the subject's perception that most people who are important to him think he should or should not perform that behavior in question'<sup>[11]</sup>. In Ajzen and Fishbein's model, only attitude and subjective norm have direct impact on purchase intention, all the other factors (including culture) have indirect impact on purchase intention through these two factors.

## 2.3 Hypotheses

Chinese consumers are influenced by traditional culture deeply. The existence of buying bias on domestic products was already proved in former studies<sup>[4][10]</sup>. But few studies clarify the affecting mechanism between consumer ethnocentrism and purchase intention. Since consumer ethnocentrism is a variable relating with culture, it is appropriate to take into Ajzen and Fishbein's model when exploring the relationship between consumer ethnocentrism and purchase intentions on domestic products.

The consumers with higher consumer ethnocentrism have better attitude toward domestic products. When consumers have positive product attitude, it means that they judge the products better and have stronger purchase intention. On the other hand, the subjective norm is a personal internal trait which reflect one's nature, while consumer ethnocentrism only represent one's attitude toward purchasing foreign products. Hence consumer ethnocentrism has no direct impact on subjective norm. Based on the above discussion, Fig. 1 shows the relationship among four variables. Attitude and subjective norm have direct influence on purchase intention, while consumer ethnocentrism has indirect impact on purchase intention through product attitude.

According to the model represented by Figure 1, we propose that:

**H1:** There is a positive correlation between con-

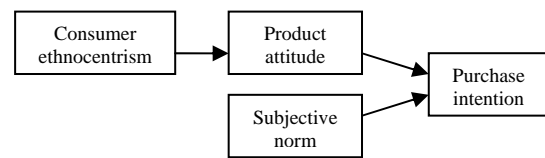


Figure 1. Consumer ethnocentrism research model

sumer ethnocentrism and product attitude.

**H2:** There is a positive correlation between product attitude and purchase intention.

**H3:** There is a significant correlation between subjective norm and purchase intention.

**H4:** Product attitude has significant mediating effect between ethnocentrism and purchase intention.

## 3 Methodology

### 3.1 Measurement

A questionnaire was designed to collect the data for this study, which consisted of five sections. In the first section, the subjective norm was measured by interpersonal influence scale<sup>[12]</sup>. In the second section, 17 items from CETSCALE were adapted to measure consumer ethnocentrism<sup>[5]</sup>. In the third section, the purchase intentions to domestic products were measured<sup>[13]</sup>. The three sections above used Likert 7 point scales. In the fourth section, the attitudes toward domestic products were measured separately using semantic differential scale<sup>[14]</sup>. The last section included the individual information such as gender and grade.

The computer product was selected as the representation of the domestic products because the quality and price of domestic computers are nearly the same as foreign products. So the product attitude and purchase intention of computers would reflect the personal traits better.

### 3.2 Data collection

The data for this study were collected in Hefei city which locates in middle area of China. As the middle school students are future leading consuming force, their consuming tendency is important in near future. Two middle schools were selected and 600 questionnaires were delivered. All the six grades students were included in this sample, from junior high school grade 1 to 3 and

senior high school grade 1 to 3. The students fulfilled the questionnaire in the classroom. 563 questionnaires were collected on the spot and 504 of the questionnaires were finally considered to be valid for this research. The sample consisted of 271 female (53.8%) and 233 male (46.2%). From junior high grade 1 to senior high school grade 3, the quantities are 86 (17.6%), 63 (12.5%), 93 (18.4%), 108 (21.42%), 72 (14.3%) and 82 (16.3%).

## 4 Analysis and Results

### 4.1 Reliability Assessment

For each variable, the Cronbach's  $\alpha$  was calculated for reliability. Table 1 shows the reliability and descriptive analysis results.

**Table 1. Reliability and descriptive analysis results**

Variable	Items	Mean	SD	Cronbach's $\alpha$
Consumer ethnocentrism	17	3.16	0.90	0.88
Subjective norm	14	4.09	0.73	0.73
Product attitude(domestic)	6	4.66	1.03	0.87
Purchase intention(domestic)	4	4.67	1.16	0.83

Cronbach's  $\alpha$  of each variable is above 0.70, so the data passed the reliability test.

### 4.2 Hypotheses testing

To test H1, product attitude was regressed on consumer ethnocentrism using the linear regression model. The results are shown in Table 2.

From the result, consumer ethnocentrism has a positive impact on the attitude toward domestic products. So H1 was supported (Beta = 0.15,  $t = 3.32$ ).

**Table 2. Regression on domestic product attitude**

Variable	Adjusted $R^2$	F	Beta
Consumer ethnocentrism	0.02	11.04**	0.15**

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

To Test H2 and H3, purchase intention was regressed on product attitude and subjective norm using the linear regression model. The results are shown in Table 3.

As the results shown above, Product attitude and

**Table 3. Regression on purchase intention**

Variable	Adjusted $R^2$	F	Beta	VIF
Product attitude	0.12	33.86***	0.30***	1.01
Subjective norm			0.15***	

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

subjective norm have positive correlations with purchase intention for domestic products. H2 and H3 were also supported.

The method of Baron and Kenny was used to test H4 for mediating effect<sup>[15]</sup>. Table 4 shows the results.

**Table 4. Mediating effect tests**

	Standardized regression equation	Adjusted $R^2$	F	t	VIF
Step 1	PI = 0.39 CET	0.15	91.94***	9.60***	
Step 2	PA = 0.15 CET	0.02	11.04**	3.32**	
Step 3	PI = 0.36 CET +0.26 PA	0.22	70.99***	8.91*** 6.51***	1.02

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

CET (consumer ethnocentrism), PI (Purchase intention), PA (Product attitude)

The standardized coefficients of the three equations above are all significant. Comparing step 3 and step 1's results, the standardized coefficient of consumer ethnocentrism decreased from 0.39 to 0.36, and still be significant.

For testing the change of standardized coefficients' significance,  $a * b / \sqrt{b^2 sa^2 + a^2 sb^2 + sa^2 sb^2}$  is calculated by using the method proposed by Baron and Kenny<sup>[15]</sup>. In the formula,  $a$  is unstandardized coefficient,  $sa$  is standard error of consumer ethnocentrism in step 1. And  $b$  is unstandardized coefficient,  $sb$  is standard error of product attitude in step 3. Taking the value  $a(0.17)$ ,  $b(0.30)$ ,  $sa(0.051)$  and  $sb(0.045)$  into the formula, the calculating result is 2.95 which is greater than 1.96, so the change of the standardized coefficients is significant at 0.05 level. Hence the product attitude has significant partial mediating effect between consumer ethnocentrism and purchase intention. The proportion of mediating effect to total effect is  $0.15 \times 0.26 / 0.39 = 25.49\%$ . H4 was supported partially.

## 5 Conclusions

The objective of this study was to examine the effect of ethnocentrism on purchase intention to domestic products of Chinese consumers. The Ajzen and Fishbein's attitudes model was cited to explain the internal influencing mechanism. Four hypotheses were tested. Hypothesis 1 was supported. Consumer ethnocentrism has significant positive impact on domestic product attitude. Hypotheses 2 and 3 were also supported. Product attitude and subjective norm have positive impact on purchase intention. Hence the Ajzen and Fishbein's attitude model can significantly explain the purchase intentions of Chinese consumers. Hypothesis 4 was partially supported.

As Ajzen and Fishbein believed that the rest of the variables which could be considered are reflected in the two factors<sup>[11]</sup>, H4 assumed that consumer ethnocentrism has impact on purchase intention entirely through the mediating effect of product attitude. The results show that only 25.49% of total effect was mediated by product attitude while a majority of the effect acted on purchase intention directly. Chinese consumers were affected by traditional profoundly. When they choose the products between domestic and foreign products, consumers with higher consumer ethnocentrism often select domestic products emotionally without considering the products carefully. So the impact effect was only partly mediated by product attitude.

The implications of this research for marketers operating in China are significant. For domestic manufacturers, their marketing could be more successful by nationalism advertising strategy. And domestic products will be in a favorable place compare to foreign products among consumers with high consumer ethnocentrism.

As this study is only based on the computer market in which the difference of quality and reputation is slim between domestic and foreign products. It is not clear if the same relationship still exists in other product markets

such as cosmetic and car in which the foreign products are recognized superior than domestic products. Further research which examines the relationship in other products markets of Chinese consumers is needed.

## References

- [1] Mark Cleveland, Michel Laroche, and Nicolas Papadopoulos. Cosmopolitanism, Consumer Ethnocentrism, and Materialism: An Eight-Country Study of Antecedents and Outcomes[J], *Journal of International Marketing*, 2009, 17(1), P116-147.
- [2] De Mooij, Marieke. Consumer Behavior and Culture: Consequences for Global Marketing and Advertising[M]. Thousand Oaks, CA: Sage Publications, 2004.
- [3] Batra R., Ramaswamy V, Alden DL, Steenkamp J-BEM, Ramachander S. Effects of brand local and nonlocal origin on consumer attitudes in developing countries[J]. *Journal of Consumer Psychology*, 2000, 9(2), P83-95.
- [4] Wang CL, Chen ZX. Consumer ethnocentrism and willingness to buy domestic products in a developing country setting testing moderating effects[J]. *Journal of Consumer Marketing*, 2004, 21(6), P391-400.
- [5] Shimp, T.A., Sharma, S. Consumer Ethnocentrism: Construction and Validation of the CETSCALE[J]. *Journal of Marketing Research*, 1987, 24, P280-289.
- [6] Sumner, W.G. Folkways[M]. New York: Ginn and Company, 2004, P13.
- [7] Levine RA, Campbell DT. Ethnocentrism: theories of conflict, ethnic attitudes and group behavior[M]. New York, NY: Wiley, 1972.
- [8] Netemeyer, Richard G, Durvasula, Srinivas and Lichtenstein Donald R. A Cross-national Assessment of the Reliability and Validity of the CETSCALE[J]. *Journal of Marketing Theory and Practice*, 1991, 5(4), P68-76.
- [9] Luque-Martinez, Teodoro, Ibanez-Zapata, Jose-Angel and Barrio-Garcia, Salvador del. Consumer Ethnocentrism Measurement: An Assessment of the Reliability and Validity of the CETSCALE in Spain[J]. *European Journal of Marketing*, 2000, 34(11/12), P1353-1373.
- [10] Wang Haizhong. Consumer Ethnocentrism: An Empirical Test in China and its Marketing Managerial Implications[J]. *Nankai Business Review*, 2003, No. 4, P31-36 (Ch).  
王海忠, 消费者民族中心主义的中国本土化研究[J]. 南开管理评论, 2003, 第4期, P31-36.
- [11] Ajzen I, Fishbein M. Understanding Attitudes and Predicting Social Behaviour[M]. U.S.A.: Prentice-Hall, 1980.
- [12] Bearden, William O, Richard G and Jesse E.T. Measurement of Consumer Susceptibility to Interpersonal Influence[J]. *Journal of Consumer Research*, 1989, 15, P473-481.
- [13] Goldsmith RE, Lafferty, BA; Newell, J. The Influence of Corporate Credibility on Consumer Attitudes and Purchase Intent [J]. *Corporate Reputation Review*, 2000, 3(4), P304-318.
- [14] Berger IE, Mitchell AA. The effect of advertising on attitude accessibility, attitude confidence, and the attitude-behavior relationship[J]. *The Journal of Consumer Research*, 1989, 16(3), P269-279.
- [15] Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations[J]. *Journal of Personality and Social Psychology*, 1986, 51 (6), P1173-1182.