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## Effects of Media Information Disclosure on Brand COO Perception of Chinese Consumers: Product Attributes-based Regulating Effect

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**Abstract:** A large body of evidence has demonstrated that COO stereotype is a typical cognitive bias of Chinese consumers, how to inhibit the stereotype is an important research proposition. This study tends to choose information of two product-related attributes and information of two non-product-related attributes through reports materials of negative information of foreign brands in media in recent years to constitute four experimental groups. It finds that the negative information involving quality and price profiteering is of significant inhibition on quality evaluation, attitude preference and purchase intention of subjects on specific foreign brands while the negative information involving commercial bribery is not of significant inhibition, which shows that the inhibition on specific foreign brand preference by negative information of foreign brands is related to differences of product attributes. The inhibition on subject's quality evaluation, attitude preference and purchase intention of abstract foreign brands by negative information involving food quality is significantly higher than by information of notebook quality, price profiteering and commercial bribery, which shows food safety is of the highest accessibility. Meanwhile, the quality evaluation, attitude preference and purchase intention of specific foreign brands by subjects are lower than those of specific local brands, which shows a significant inhibition on foreign brand preference and local brand bias by negative information of foreign brands.

**Key words:** Country of origin, stereotype/bias, media information disclosure, product attribute, Chinese consumer

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### INTRODUCTION

At present, there are some researches on the effect of the brand country of origin, consumer ethnocentrism and local brand recognition, which provide the sufficient evidences for the local brand stereotype (Wang, 2006; Sin *et al.*, 2000). The over-generalization of the COO stereotype has brought very important impact on consumers' brand attitude and behavior. The local brand stereotype has become a typical social cognitive bias. This is not only a great deal of harm to the growth of local brands but will hinder the revitalization of the national industry as well as threaten national economic security. Therefore how to reduce or inhibit the local brand bias has been a proposition for further research.

Domestic and foreign scholars has put forth marketing strategies to adapt to or inhibit the stereotype of the country of origin from the corporate perspective

(Wang and Zhao, 2004; Zhuang *et al.*, 2006; Hu and Dickerson, 1997; Li *et al.*, 1997; Song and Shui, 2004; Yi and Guo, 2009) but they have rarely explored on the inhibitory effect and tactics of the local brand stereotype from the perspective of anti-stereotypical mimicry environment. Fewness researches found out that food safety reports do have a significant negative effect which causes psychological fear and pessimistic attitude of the audience towards Chinese food industry or even the entire local products (Cui and Liu, 2001; An, 2008; Zhu *et al.*, 2003; Zhang, 2009). The local brand bias of media is mainly due to the frequent exposure of local brands crises by Chinese media (such as tainted milk, dyed buns) and the detailed description and negative comments on topics of poor quality and irresponsibility. The audience will evaluate the representativeness according to the degree of similarity between description and bias. This way of reporting influences the audience in

promoting representativeness and accessibility deviation (Xue and Liang, 2009) and further confirms the local brand bias of audience. In this regard, melamine incident was proved to have significant negative impact on national image perceptions and local brand preferences of Chinese consumers (Wang *et al.*, 2010).

At present, little scholar pay close attention to the perception change of consumer's brand country of origin or ethnocentrism change under the specific condition. For example, Yu and Albaum (2000) studied the changes of Hong Kong residents' CET before and after the reunification to find out the significant increase of CET after the reunification. Lee *et al.* (2003) studied the related influence factors of American consumers' CET after 911 events. Smyczek and Glowik (2011) explored on ethnocentrism of Polish consumers as a result of the global economic crisis. Therefore, this study tends to explore the impacts and regulating effects of different product attributes-based negative foreign brands information disclosure on the perception of brand country of origin of Chinese consumers.

## RESEARCH HYPOTHESIS

Frame theory is the important basic of medium content analysis (Xue and Liang, 2009). Scheufele (1999) divided the frame into media frame and individual frame. Media frame is the central idea to organize the news material or the narrative approach to represent the news. It provides the meaning for the unprocessed fact and shows the story conflict and the event essence (Entman, 1993). Media frame is the decisive factor for people to catch some information, to understand and remember the information, to evaluate this world and to take the frame as their behavior reference. Media frame is the influence factor for people to find the problem, to explain it, to do the moral judgment and to propose the solution (D'Angelo, 2002). The core of the frame is the highlights. It magnifies some information and ignores other aspects, catches and maintains the audience's attention, and makes the predictable judgment on the audience's cognition. Frame analysis is the study on the highlights and dismissed information (Entman, 1993). The audience's construct on the reality, rather than be influenced by their inherent cognitive frame passively, is an interaction process between the text and the audience, which means the audience constructs the meaning in the rich pseudo-environment.

According to the accurate motivation theory of Kunda (1999), due to the damage of negative events, people tend to lay emphasis on negative information, which is treated as of more diagnostic value and is a basis

for judgment decision. Meanwhile, according to the relative deprivation theory of bias psychology, when the individual expectation is not fulfilled, a sense of deprivation will develop so, that people driven by the negative emotions will find a reasonable explanation or scapegoat for their dissatisfaction. When people meet with the negative information of foreign brands, they feel that their high expectations are relatively deprived and increase dissatisfaction on foreign brands and relatively increase local brands preferences. This degree of change was regulated by the attributes of negative information. Product attributes include product-related attributes and non-product-related attributes (Kotler, 1988). Product-related attributes refer to the intrinsic properties of product features necessary to consumers, such as quality, safety and function while non-product-related attributes mainly include extrinsic properties of price, characteristics and symbol. Consumer interests are more closely connected to product-related attributes than to non-product-related attributes. Therefore, there is difference of accessibility-diagnostic of negative information of foreign brands of different product attributes. Therefore, the following hypotheses can be derived:

- H1:** There is significant accessibility (credibility, noteworthiness and problem severity degree) in negative information of foreign brands from different attributes of products
- H2:** There is diagnosticity (quality evaluation, attitude change and purchase intention) in specific foreign brands involved in the negative information of foreign brands from different attributes of products and there are differences in product attributes: The diagnosticity of negative information increases with product attributes of closer relation with consumer interests

Due to the antinomy relation between negative stereotype of local brands and positive stereotype of foreign brands, the increase of local brand bias will strengthen or increase preferences for foreign brands (Liu *et al.*, 2013). On the contrary, the suppression of foreign brand preference leads to the increase of local brand preferences or suppression of local brand bias. Thus, negative information of foreign brands suppresses to a certain degree stereotype of local brands. But due to the strong local brand bias of Chinese consumers, it is not of obvious representativeness for abstract foreign brands by the negative information of an individual foreign brand. Therefore the stereotype of abstract local brands is unlikely to change. Thus, the following hypotheses can be derived.

**H3:** There is no obvious significance in the diagnosticity of abstract foreign brands by negative information of foreign brands from different product attributes

**H4:** There is significant inhibition on correspondent specific foreign brand preferences and specific local brand bias by negative information of foreign brands from different product attributes

**H5:** Abstract foreign brand preferences and abstract local brand bias are unlikely to change by negative information of foreign brands from different product attributes

## RESEARCH VARIABLES AND EXPERIMENT DESIGN

### Research variables

**Variables between groups:** Real negative information of foreign brands is collected from mass media as variables among groups. Information types are divided according to product-related attributes and non-product-related attributes. Four experimental groups of food quality defect, notebook quality defect, commercial bribery and price profiteering are chosen, wherein the former two groups are product-related attributes and the latter two are non-product-related attributes.

**Variables in group:** It includes four cognitive brands, namely, specific local/foreign brands and abstract local/foreign brands. Specific local/foreign brands refer to those consistent with experimental materials. Specific foreign brand of food quality group is Macdonald and the corresponding local brand is CSC (Country Style Cooking). Specific foreign brand of notebook quality group is HP and the corresponding local brand is Lenovo. Specific foreign brand of commercial bribery is Johnson and Johnson and the corresponding local brands are Pechoin and Liushen. Specific foreign brand of price profiteering group is KFC and the corresponding local brand is CSC. Abstract foreign brands and abstract local brands are general designations for foreign brands and local brands respectively.

**Dependent variables:** Namely cognitive control variables of brand attitudes, including cognitive acceptance degree, emotional change degree and behavioral involvement degree. Variable measurement refers to and modifies Audience Reaction Scale what was put forth by Defleur and Sandra (1989). Investigation items of cognitive acceptance degree (accessibility) are extremely unreliable-extremely reliable, extremely worthless of attention-extremely noteworthy, extremely serious-extremely normal. Investigation items of

emotional change degree (diagnosticity) are product of poor quality-product of good quality, disliked attitude-liked attitude. Investigation items of behavioral involvement degree (diagnosticity) are absolutely no longer purchase-definite purchase. Likert 7-point scale is adopted in all the investigation items.

**Experiment design:** In this study, experimental design of 4×4 groups is adopted. The former “4” refers to four variables among groups, namely two information groups of product-related attributes and two information groups of non-product-related attributes. The latter “4” refers to four variables in groups, namely four kinds of cognitive brands (including specific local/foreign brands and abstract local/foreign brands). The dependent variables are *ibid*. There are four experimental groups in the experiment, namely, Macdonald group, HP group, Johnson and Johnson group and KFC group and a control group, including all the specific and abstract foreign/local brands involved in the four experimental groups. There are no less than 30 undergraduates in each group. For experimental convenience, experiments are carried out in units of natural classes.

## DATA COLLECTION AND RESULT ANALYSIS

### Experimental data collection

**Experimental procedure:** Before the start of experiment, the subjects are informed of the study purposes and requirements for filling the questionnaire and are aware of the small gift afterwards. Then they are told to do reading, look through experimental materials, and then fill in the questionnaire, finally receive small gift.

**Subject selection:** In order to improve experimental efficiency and reduce experimental costs, each natural class is treated as an experimental group with at least 30 undergraduates, regardless of majors and grades. The coordination shall be carried out in advance with relevant teachers and the questionnaire filling is expected to take no more than 15 min during part of break and class time. There are five classes selected for the experiment, of which, four classes are involved in the four experimental groups, one is the control group.

**Questionnaire collection:** Experiments were carried out among five classes from Chongqing University of Arts and Sciences during October 22-November 9, 2011. There are 220 questionnaires collected from experimental groups at the recovery rate of 100% and efficiency rate of 100%, in which the questionnaires from Macdonald group are 65, HP group 57, Johnson and Johnson group 58, KFC

Table 1: List of accessibility medians of negative information of foreign brands

Dependent variables	Food quality group (65 persons)	Notebook quality group (57 persons)	Commercial bribery group (58 persons)	Price profiteering group (45 persons)
Cognitive change degree (accessibility) degree				
Information credibility	5.05	5.60	4.79	5.58
Information noteworthy	6.06	6.28	5.36	6.07
Problem severity	2.83	3.07	3.67	3.36

Table 2: Mean list of suppression on specific foreign brand preferences by negative information of foreign brands

Dependent variables		Emotional change degree		Behavioral involvement degree
		Quality of specific foreign brands	Attitude of specific foreign brands	Purchase intention of specific foreign brands
Food quality group	Experimental group (65 persons)	3.72	3.35	4.08
	Control group (34 persons)	4.24	4.26	4.68
Notebook quality group	Experimental group (57 persons)	3.09	2.95	2.72
	Control group (34 persons)	4.39	4.12	3.95
Commercial bribery group	Experimental group (58 persons)	4.45	4.48	4.48
	Control group (34 persons)	4.73	4.65	5.20
Price profiteering group	Experimental group (45 persons)	3.67	3.91	4.38
	Control group (34 persons)	4.32	4.50	5.07

group 45. There are 38 questionnaires collected from control group at recovery rate of 100% and efficiency rate of 100%.

**Mean comparison: Accessibility analysis of negative information of foreign brands:** Descriptive statistics of SPSS and One-Sample Test are adopted to process data by accessibility assessment of negative information of foreign brands in four groups (Table 1).

**Credibility analysis of negative information of foreign brands:** Table 1 shows that the credibilities of the information by subjects from each group are 5.05 (t = 6.653 p = 0.000), 5.60 (t = 12.306 p = 0.000), 4.79 (t = 5.248 p = 0.000), 5.58 (t = 9.142 p = 0.000), which is significant at 99% when conducted One-Sample Test with mean 4. The result shows that the negative information of foreign brands is regarded credible by subjects.

**Noteworthy degree analysis of negative information of foreign brands:** Table 1 shows that the noteworthy degree by subjects from each group are 6.06 (t = 14.889 p = 0.000) 6.28 (t = 20.500 p = 0.000) 5.36 (t = 8.104 p = 0.000) 6.07 (t = 11.993 p = 0.000), which is significant at 99% when conducted One-Sample Test with mean 4. The result shows that the negative information of foreign brands is regarded noteworthy by subjects.

**Problem severity analysis of negative information of foreign brands:** Table 1 shows that the problem severity by subjects from each group are 2.83 (t = -6.636 p = 0.000), 3.07 (t = -4.685 p = 0.000), 3.67 (t = -2.070 p = 0.043), 3.36 (t = -2.474 p = 0.017), which is significant at 99% when conducted One-Sample Test with

mean 4. The result shows that the problems reflected by negative information of foreign brands are regarded serious by subjects.

The above analysis shows that the credibility, noteworthy degree and problem severity of negative information of foreign brands, regardless of product-related attributes or non-product-attributes, are regarded significant by subjects, which shows significant accessibility of negative information of foreign brands. Therefore, the hypothesis H1 is established.

**Comparison between experimental groups and the control group: Impact on foreign brand preferences by negative information of foreign brands**

**Impact on specific foreign brand preferences by negative information of foreign brands:** Descriptive Statistics of SPSS and Paired-Samples T Test are adopted to calculate the means of preference evaluation of specific foreign brands in experimental groups and the control group (Table 2) and test the significance of mean difference.

**Impact of negative information of foreign brands on quality evaluation of specific foreign brands:** As shown in Table 2, the quality evaluation of specific foreign brands in each experimental group is lower than that of the control group. Wherein food quality group is 3.72 < 4.24 (t = -1.930, p = 0.061); notebook quality group is 3.09 < 4.39 (t = -3.488, p = 0.001); commercial bribery group is 4.45 < 4.73 (t = -0.897, p = 0.375); price profiteering group is 3.67 < 4.32 (t = -1.942, p = 0.059). Notebook quality group is significant at 99%, food quality group and price profiteering group are significant at 90% while commercial bribery group is not significant. The experimental results show the significant inhibition on quality evaluation of

Table 3: Mean list of inhibition on abstract foreign brand preferences by negative information of foreign brands

Dependent variables		Emotional change degree		Behavioral involvement degree
		Quality of specific foreign brands	Attitude of specific foreign brands	Purchase intention of specific foreign brands
Food quality group	Experimental group (65 persons)	4.06	4.00	4.37
	Control group (34 persons)	4.93	4.62	4.98
Notebook quality group	Experimental group (57 persons)	4.86	4.77	4.84
	Control group (34 persons)	4.93	4.62	4.98
Commercial bribery group	Experimental group (58 persons)	4.95	4.81	4.78
	Control group (34 persons)	4.93	4.62	4.98
Price profiteering group	Experimental group (45 persons)	4.33	4.44	4.67
	Control group (34 persons)	4.93	4.62	4.98

specific foreign brands by negative information of quality (product-related attribute) and price profiteering (non-product-related attribute) while the weak inhibition by negative information of commercial bribery.

**Impact of negative information of foreign brands on attitude preferences of specific foreign brand:** Table 2 shows that the attitude preferences of specific foreign brands in each experimental group are significantly lower than those of the control group. Wherein food quality group is  $3.35 < 4.26$  ( $t = -2.653$ ,  $p = 0.012$ ); notebook quality group is  $2.95 < 4.12$  ( $t = -3.150$ ,  $p = 0.003$ ); commercial bribery group is  $4.48 < 4.65$  ( $t = 0.314$ ,  $p = 0.756$ ); price profiteering group is  $3.91 < 4.50$  ( $t = -1.988$ ,  $p = 0.055$ ). Food quality group and notebook quality group are significant at 95%, price profiteering group is significant at 90%, while commercial bribery group is not significant. The experimental results show the significant inhibition on attitude preferences of specific foreign brands by negative information of quality (product-related attribute) and price profiteering (non-product-related attribute) while the weak inhibition by negative information of commercial bribery.

**Impact of negative information of foreign brands on purchase intentions of specific foreign brands:** As shown in Table 2, the purchase intentions of specific foreign brands in each experimental group are lower than those of the control group. Wherein food quality group is  $4.08 < 4.68$  ( $t = -1.520$ ,  $p = 0.096$ ); notebook quality group is  $2.72 < 3.95$  ( $t = -3.275$ ,  $p = 0.002$ ); commercial bribery group is  $4.48 < 5.20$  ( $t = -2.682$ ,  $p = 0.011$ ); price profiteering group is  $4.38 < 5.07$  ( $t = -2.825$ ,  $p = 0.007$ ). Notebook quality group, price profiteering group and commercial bribery group are significant at 99% while food quality group is significant at 90%. The experimental results show that negative information of foreign brands is of significant inhibition on purchase intentions of specific foreign brands.

Experimental results confirm that quality negative information of product-related attributes and price profiteering negative information of non-product-related attributes have significant inhibition on quality evaluation, attitude preference and purchase intention of specific foreign brands. While commercial bribery negative information of non-product-related attributes has insignificant inhibition on quality evaluation, attitude preference of specific foreign brands, but has significant inhibition on purchase intention. The experimental results show the inhibitory effect of foreign brand negative information on specific foreign brands is correlative with product attribute differences, so, H2 is established.

**Impact on abstract foreign brand preferences by negative information of foreign brands:** Descriptive Statistics of SPSS and Paired-Samples T Test are adopted to get preference evaluation means of abstract foreign brands in experimental groups and the control group (Table 3) and test the significance of mean differences.

**Impact of negative information of foreign brands on quality evaluation of abstract foreign brands:** As shown in Table 3, the means in experimental groups and control group are as follows: food quality group is  $4.06 < 4.93$  ( $t = -4.422$ ,  $p = 0.000$ ), notebook quality group  $4.86 < 4.93$  ( $t = 0.113$ ,  $p = 0.911$ ), commercial bribery group  $4.95 > 4.93$  ( $t = -0.311$ ,  $p = 0.757$ ) and price profiteering group  $4.33 < 4.93$  ( $t = -2.448$ ,  $p = 0.019$ ). The experimental results show the significant inhibition on quality evaluation of abstract foreign brands by negative information of food quality group and price profiteering group ( $p < 0.05$ ), insignificant inhibition by negative information of notebook quality and reversed but insignificant inhibition by negative information of commercial bribery.

**Impact of negative information of foreign brands on attitude preference of abstract foreign brands:** As shown

in Table 3, the means in experimental groups and control group are as follows: Food quality group is  $4.00 < 4.62$  ( $t = -2.128, p = 0.041$ ), notebook quality group  $4.77 > 4.62$  ( $t = 0.314, p = 0.756$ ), commercial bribery group  $4.81 > 4.62$  ( $t = -0.098, p = 0.922$ ) and price profiteering group  $4.44 < 4.62$  ( $t = -0.351, p = 0.728$ ). The experimental results show the significant inhibition on attitude preference of abstract foreign brands in food quality group ( $p < 0.05$ ); insignificant inhibition in price profiteering group. Although attitude preference of abstract foreign brands is reversed in notebook quality group and commercial bribery group but is insignificant.

**Impact of negative information of foreign brands on purchase intention of abstract foreign brands:** As shown in Table 3, the means in experimental groups and control group are as follows: food quality group is  $4.37 < 4.98$  ( $t = -2.506, p = 0.016$ ), notebook quality group  $4.84 < 4.98$  ( $t = -0.759, p = 0.452$ ), commercial bribery group  $4.78 < 4.98$  ( $t = -1.040, p = 0.304$ ) and price profiteering group  $4.67 < 4.98$  ( $t = -1.442, p = 0.157$ ). The experimental results show the significant inhibition on purchase intention of abstract foreign brands by negative information of food quality group ( $p < 0.05$ ) while insignificant inhibition by negative information of other experimental groups.

The above analysis shows negative information about food quality has significant inhibition on quality evaluation, attitude preference and purchase intention of abstract foreign brands. While negative information about notebook quality, commercial bribery and price profiteering has insignificant awareness inhibition on abstract foreign brand preference. Which stems from two reasons: Firstly, health is the most important intrinsic attribute of food; secondly, most Chinese consumers still prefer local food and beverage products due to taste and food habits since China is a country with profound diet culture. Thirdly, negative information of individual foreign brand in experiment lacks of representativeness, coupled with the inherent strong positive stereotype of foreign brands by Chinese consumers. Therefore, this study confirmed that the awareness inhibition of subjects on abstract foreign brand

preference and local brand bias are connected with product attributes of negative information of foreign brands, so, H3 is established.

**Comparison among groups: Inhibition on foreign brand preferences and local brand bias by negative information of foreign brands**

**Inhibition on specific foreign brand preferences and specific local brand bias by negative information of foreign brands:** Paired-Samples T Test of SPSS is adopted to calculate preference means of specific foreign /local brands and the significance of relative changes in each experimental group (Table 4).

**Comparison of awareness inhibition on quality evaluations of specific local/foreign brands:** As shown in Table 4, when presented negative information of foreign brands, the quality evaluations of specific foreign brands made by subjects in each experimental group are significantly lower than those of specific local brands, wherein food quality group is  $3.72 < 4.31$  ( $t = -2.477, p = 0.016$ ), notebook quality group  $3.09 < 4.75$  ( $t = -6.967, p = 0.000$ ), commercial bribery group  $4.45 < 5.16$  ( $t = -3.911, p = 0.000$ ), price profiteering group  $3.67 < 4.33$  ( $t = -2.909, p = 0.006$ ). The significance of food quality group is 95% while the significance of other experimental groups is 99%. The experimental results show a significant inhibition on quality evaluations of specific foreign brands. Furthermore quality evaluations of specific local brands are significantly greater than those of specific foreign brands.

**Comparison of awareness inhibition on attitude preferences of specific local/foreign brands:** As shown in Table 4, when presented negative information of foreign brands, the attitude preferences of specific foreign brands made by subjects in each experimental group are significantly lower than those of specific local brands, wherein food quality group is  $3.35 < 4.31$  ( $t = -4.085, p = 0.000$ ), notebook quality group  $2.95 < 4.65$  ( $t = -7.603, p = 0.000$ ), commercial bribery group  $4.48 < 4.81$  ( $t = -1.858, p = 0.068$ ), price profiteering group  $3.91 < 4.62$  ( $t = -3.000, p = 0.004$ ). The significance of commercial bribery group is 90% while the significance of

Table 4: Mean list of inhibition on specific foreign brand preferences and specific local brand bias by negative information of foreign brands

Dependent variables		Food quality group	Notebook quality group	Commercial bribery group	Price profiteering group
Emotional change degree (diagnosticity)	Quality of specific foreign brands	3.72	3.09	4.45	3.67
	Quality of specific local brands	4.31	4.75	5.16	4.33
	Attitude of specific foreign brands	3.35	2.95	4.48	3.91
	Attitude of specific local brands	4.31	4.65	4.81	4.62
Behavioral involvement degree (diagnosticity)	Purchase intention of specific foreign brands	4.08	2.72	4.48	4.38
	Purchase intention of specific local brands	4.72	4.49	4.83	5.09

Table 5: Mean list of inhibition on abstract foreign brand preferences/ local brand bias by negative information of foreign brands

Dependent variables		Food quality group	Notebook quality group	Commercial bribery group	Price profiteering group
Emotional change degree (diagnosticity)	Quality of abstract foreign brands	4.06	4.86	4.95	4.33
	Quality of abstract local brands	4.40	4.19	4.57	4.18
	Attitude of abstract foreign brands	4.00	4.77	4.81	4.44
	Attitude of abstract local brands	4.83	4.32	4.83	4.71
Behavioral involvement degree (diagnosticity)	Purchase intention of abstract foreign brands	4.37	4.84	4.78	4.67
	Purchase intention of abstract local brands	5.14	4.67	5.09	5.16

other experimental groups is 99%. The experimental results show that the presentation of negative information of foreign brands leads to a significant inhibition on attitude preferences of specific foreign brands. Furthermore a dramatic improvement of attitude preferences of specific local brands which are significantly greater than those of specific foreign brands.

**Comparison of awareness inhibition on purchase intentions of specific local/foreign brands:** As shown in Table 4, the purchase intentions of specific foreign brands in each experimental group are significantly lower than those of specific local brands. Wherein food quality group is  $4.08 < 4.72$  ( $t = -2.898$ ,  $p = 0.005$ ); notebook quality group is  $2.72 < 4.49$  ( $t = -7.677$ ,  $p = 0.000$ ); commercial bribery group is  $4.48 < 4.83$  ( $t = -2.420$ ,  $p = 0.019$ ); price profiteering group is  $4.38 < 5.09$  ( $t = -3.511$ ,  $p = 0.001$ ). The experimental results show that the presentation of negative information of foreign brands leads to a significant inhibition on purchase intentions of specific foreign brands. Furthermore a dramatic improvement of purchase intentions of specific local brands which are significantly greater than those of specific foreign brands.

The above analysis shows that there will be inhibition on preferences for specific foreign brands and improvement of preferences for specific local brands. Furthermore preferences for specific local brands are significantly greater than preferences for specific foreign brands. The conclusions prove the significant inhibition on preferences for specific foreign brands and specific local brand bias by foreign brand negative information of different product attributes. Thus H4 is established.

**Inhibition analysis on abstract foreign brand preferences and abstract local brand bias by negative information of foreign brands:** Paired-samples T test of SPSS is adopted to calculate preference mean of abstract foreign/local brands in each experimental group (Table 5) and the significance of its relative change.

**Inhibitory effect comparison on quality evaluation of abstract local/foreign brands:** Table 5 shows food quality group is  $4.06 < 4.40$  ( $t = -1.692$ ,  $p = 0.096$ ); notebook quality

group is  $4.86 > 4.19$  ( $t = 3.153$ ,  $p = 0.003$ ); commercial bribery group is  $4.95 > 4.57$  ( $t = 2.185$ ,  $p = 0.033$ ); price profiteering group is  $4.33 > 4.18$  ( $t = 0.627$ ,  $p = 0.534$ ). Mean comparison and significance test show: the quality evaluation of abstract local brands is significantly higher than that of abstract foreign brands in food quality group and there is reverse of local brand stereo type. The quality evaluation of abstract foreign brands is higher than that of abstract local brands in other experimental groups while there is no reverse. It confirms to some extent that the quality evaluation change of abstract local/foreign brands by subjects is related to product attribute differences of foreign brand negative information.

**Inhibitory effect comparison on attitude preference of abstract local/foreign brands:** Table 5 shows food quality group is  $4.00 < 4.83$  ( $t = -3.540$ ,  $p = 0.001$ ); notebook quality group is  $4.77 > 4.32$  ( $t = 2.313$ ,  $p = 0.024$ ); commercial bribery group is  $4.81 < 4.83$  ( $t = -0.087$ ,  $p = 0.931$ ); price profiteering group is  $4.44 < 4.71$  ( $t = -1.391$ ,  $p = 0.171$ ). The result shows: although the attitude preference of abstract local brands is higher than that of abstract foreign brands in food quality group, commercial bribery group and price profiteering group, but only food quality group is significant. There is no reverse of local brand stereotype in notebook quality group. It confirms to some extent that the attitude preference change of abstract local/foreign brands by subjects is related to product attribute differences of foreign brand negative information.

**Inhibitory effect comparison on purchase intention of abstract local/foreign brands:** Table 5 shows food quality group is  $4.37 < 5.14$  ( $t = -3.978$ ,  $p = 0.000$ ); notebook quality group is  $4.84 > 4.67$  ( $t = 1.010$ ,  $p = 0.317$ ); commercial bribery group is  $4.78 < 5.09$  ( $t = -2.296$ ,  $p = 0.025$ ); price profiteering group is  $4.67 < 5.16$  ( $t = -2.614$ ,  $p = 0.012$ ). Mean comparison and significance test show: the purchase intention of abstract local brands is significantly higher than that of abstract foreign brands in food quality group, commercial bribery group and price profiteering group. But there is no purchase intention reverse of abstract local/foreign brands in notebook quality group.

The above analysis shows that the quality evaluation, attitude preference and purchase intention of



abstract local brands are significantly greater than those of abstract foreign brands only in food quality group. While there is no significant inhibition or reverse in notebook quality group, commercial bribery group and price profiteering group. It indicates that the diagnosticity of food quality related negative information of foreign brands is significantly higher than negative information of other product attributes. This stems from three reasons: firstly, health is the most important intrinsic attribute of food; secondly, most Chinese consumers still prefer local food and beverage products due to taste and food habits since China is a country with profound diet culture; thirdly, negative information of individual foreign brand in experiment lacks of representativeness, coupled with the inherent strong positive stereotype of foreign brands by Chinese consumers. Therefore, this study confirmed that foreign brand negative information of most product attributes can hardly reverse abstract foreign brand preferences and local brand bias, so H5 is established. An interesting finding is that the outbreak of foreign brand quality crisis helps to reverse consumer stereotype cognition of local/foreign brands in industries where local brands are more popular by consumers (such as food industry). It provides direction and focus for inhibiting and reversing COO stereotype by using negative information of foreign brands.

### **CONCLUSION**

In this study, experimental studies confirm that foreign brand negative information of different product attributes is of significant credibility, noteworthy degree and problem severity, which shows a significant accessibility of foreign brand negative information. The negative information about quality and price profiteering is of significant inhibition on quality evaluation, attitude preference and purchase intention of specific foreign brands while the negative information about commercial bribery is of no significant inhibition, which shows the inhibitory effect on specific foreign brand preference by foreign brand negative information is related to product attributes. The inhibitory effect on quality evaluation, attitude preference and purchase intention of abstract foreign brands by negative information about food quality is greater than that about notebook quality, price profiteering and commercial bribery, which shows food safety is of the highest diagnosticity. Meanwhile, subjects' quality evaluation, attitude preference and purchase intention of specific foreign brands are lower than those of specific local brands due to negative information, which shows a significant inhibition on specific foreign brand preference and specific local brand bias by negative information of foreign brands.

The study confirms the exact motivation theory (Kunda, 1999). In this study, the defects and inadequacies manifest is as following: (1) Only a small amount of samples are extracted from the real life as clue source. According to Theory of Persuasion, there is a gap between the information intensity and clue quantity in experiments and the real life. If combined with other bias suppression strategy, the experimental environment will be closer to the real information environment. (2) For research purpose, information of clues is properly refined that it is not a complete presentation of the quality problems of foreign brands in media, the causes of quality problems of foreign brands, how to guide the audience to handle with the value judgment of foreign brands, how to solve the quality problems of foreign brands. Therefore, there must be certain influence on the effect due to the relatively insufficient information of clues on influencing the cognitive framework (what to think about) of subjects (Entman, 1993; Scheufele, 1999). (3) In real life, due to the coverage range of information channels, restriction of information intake sources of consumers as well as the sinking of information, etc., negatively clues of foreign products may not be accessible to some consumers. Therefore, the awareness inhibition on native brand bias is not fulfilled. (4) The variety of reasons for local brand bias, such as the level of industrial development, the social and cultural background and socio-economic structure, explains the difficulty in forming awareness inhibition on native brand bias in the short term by mere presentation of negative clues of foreign products (Xue and Liang, 2009).

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### **REFERENCES**

- An, D.M., 2008. Penetrating on Chinese consumers choice: Local or foreign brand. *Fortune Mag.*, 129: 5-12.
- Cui, G. and Q. Liu, 2001. Executive insights: Emerging market segments in a transitional economy: A study of urban consumers in China. *J. Int. Market.*, 9: 84-106.

- D'Angelo, P., 2002. News framing as a multi paradigmatic research program: A response to entman. *J. Commun.*, 52: 870-888.
- Defleur, M.L. and B.R. Sandra, 1989. *Theories of Mass Communication*, Pearson Press, USA.
- Entman, R.M., 1993. Framing: Toward clarification of a fractured paradigm. *J. Commun.*, 43: 51-58.
- Hu, K.Q. and K.G. Dickerson, 1997. Country-of-origin effect on chinese consumers apparent perceptions of foreign-brand and chinese-brand apparel: An experimental study. *J. Text. Inst.*, 88: 104-114.
- Kotler, P., 1988. *Marketing Management: Analysis, Planning and Control*. Prentice Hall, Eaglewood Cliff New Jersey.
- Kunda, Z., 1999. *Social Cognition: Making Sense of People*. The MIT Press, New York.
- Lee, W.N., J.Y. Hong and S.J. Lee, 2003. Communicating with American consumers in the post 9/11 climate: An empirical investigation of consumer ethnocentrism in the United States. *Int. J. Advertising*, 22: 487-510.
- Li, Z.G., S. Fu and L.W. Murray, 1997. Country and product images: The perceptions of consumers in the people's republic of China. *J. Int. Consum. Market.*, 10: 115-139.
- Liu, J., Y. Zhang, L. Lan, R. Zhang and F. Liu, 2013. Content, typical characteristics and strength of local brand stereotype in Chinese consumers. *Int. J. Digit. Cont. Technol. Appl.*, 7: 412-421.
- Scheufele, D.A., 1999. Framing as a theory of media effects. *J. Commun.*, 49: 103-124.
- Sin, L.Y.M., S.C. Ho and S.L.M. So, 2000. Research on advertising in mainland China: A review and assessment. *Asia Pac. J. Market. Logist.*, 12: 37-65.
- Smyczek, S. and M. Glowik, 2011. Ethnocentrism of Polish consumers as a result of the global economic crisis. *J. Customer Behav.*, 10: 99-118.
- Song, Y. and C. Shui, 2004. Current attitude of Chinese consumers to and how to alter it. *Nankai Bus. Rev.*, 2: 41-45.
- Wang, H.Z. and P. Zhao, 2004. Country of brand effect: An empirical study in China and its marketing managerial implications. *China Ind. Econ.*, 1: 75-82.
- Wang, H.Z., 2006. Consumer ethnocentrism and consumer ethno-apathetic tendency: An empirical test in China. *Nankai Bus. Rev.*, 5: 248-265.
- Wang, P., G.J. Zhuang and Q. Peng, 2010. The impact of the melamine event on national-brand consciousness and local brand attitude of Chinese consumers. *East China Econ. Manage.*, 1: 28-33.
- Xue, K. and H. Liang, 2009. The stereotypes on country image symbol recognition: Taking the Tibet News by New York Times as Example. *J. Commun.*, 1: 13-18.
- Yi, M. and J. Guo, 2009. Research on influence of country-of-brand toward Chinese automobile Buyer's brand attitude. *Econ. Manage. J.*, 12: 94-102.
- Yu, J.H. and G. Albaum, 2000. Sovereignty change influences on consumer ethnocentrism and product preferences: Hong Kong revisited one year later. *J. Bus. Res.*, 55: 891-899.
- Zhang, Z., 2009. Media response of food industry crisis: Case study of sanlu milk powder incident. *J. Commun.*, 3: 32-32.
- Zhu, L., S. Wang and X.W. Lu, 2003. An empirical study on consumers preference for Chinese and foreign brands. *Manage. World*, 9: 122-128.
- Zhuang, G., N. Zhou and L. Zhou, 2006. National-brand consciousness, brand characteristics and consumers preference for indigenous brands. *Manage. World*, 7: 85-94.