Research on the Mechanism of Consumer Responses to Corporate Social Responsibility under Multi-Industry Context in China[*]

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Abstract: This research examines the mechanism of consumer responses to CSR under multi-industry context in China. Data is collected by a three-industry comparative survey. The empirical results show that: 1) Two positive influences of consumers' perceiving CSR performance on their corporate associations and product associations are respectively partially and fully mediated by consumers' CSR trust; 2) Product category is a moderator of the relationship between consumers' CSR trust and product association, and the positive path from product association to purchase intention. This study could help managers to understand how consumers think about CSR, and provides them strategic guidance to implement CSR programme in China.

Key words CSR; Consumers responses; Mechanism; Product category; China

1 Introduction

A large number of researches suggest that corporations of the twenty-first century can derive enormous benefits when they are perceived as being socially responsible by their stakeholders [10]. In all stakeholders, one important stakeholder group that appears to be particularly susceptible to a company's CSR initiatives is its consumers [4]. A growing body of academic research attest that CSR has positive influence-across a range of product categories-on consumers' company/product evaluations and purchase intentions, but these relationships are only established within a range of product categories. However, few researches explore the mechanism of consumer responses to CSR under multi-industrial context, and make a further comparison.

On the other hand, current studies are mainly conducted in western countries. China, as the world's largest emerging market, is still in the beginning stage in terms of CSR research and practice. Therefore, exploring how Chinese consumers respond to CSR actions is very important to multi-national corporations operating in China. The rest of this paper is structured as follows. Relevant literatures are reviewed in the next section, followed by research method. Later section is research results, and the final section is conclusion and implications.

2 Literature Review and Hypotheses
2.1 Conceptual definitions of CSR

A major question for business historically has been whether corporate decision makers should be concerned with issues other than profitability . For this reason, there is a growing body of research attempting to define what it means for a company to be socially responsible, and many definitions about CSR are adopted. Perhaps the most oft-cited definition of CSR is Carroll's model which designed a four-part conceptualization of CSR included economic, legal, ethical and discretionary (philanthropic) responsibilities. Ethical responsibilities embody those standards, norms, or expectations that reflect a concern for stakeholders like the environmental, civil rights, and many other forms; Philanthropic responsibilities encompass those corporate actions that are in response to society's expectation including business contributions to the arts, education, or the community. Economic and legal responsibilities are the basic level of CSR which must be carried out by corporations with no doubt. Therefore, the existing studies mainly discuss CSR practices in higher levels (ethical and philanthropic

responsibilities) which are also the primary concern of our study.

2.2 Consumer responses to CSR

Information Processing Theory (IPT) points out that human information processing at least includes the following stages that are personal focus of attention, encoding and judging in short-term memory, recoding and reasoning through retrieving long-term memory, and finally make a behavioral response. Based on this theory, we believe that consumers' processing of CSR information also contains the following steps: First, consumers must be aware of CSR information, next they judge the sincerity of CSR actions, then reason or associate CSR information with companies and their products, and finally make a behavioral reaction on purchasing. The above steps corresponding to four important constructs in existing literatures, which are: 1) consumers' trust or attribution on CSR; 2) consumers' corporate and product association under CSR stimulus; 3) purchase intention. In the sections that follow, we look back the above constructs in the literatures and describe their expected effects.

2.2.1 CSR trust

CSR trust is generally defined as consumers' expectation that the company, as a sponsor of CSR programmed, is willing to keep promise and to fulfill obligations with honesty, goodwill and non-opportunistic motives. Drumwright found that even though managers described firm's motives as mixed-serving both economic as well as social objectives, these same managers believed that consumers are simplistic in their judgments about CSR initiatives and view them as either serving economic ends or reflecting sincere social concerns. A number of researches suggest that consumers' trust or attribution on firm's CSR practices significantly affect their subsequent attitudes and actions. Moreover, in some conditions CSR could hurt company's image when the motive of engaging in CSR is perceived as insincere. Therefore, we believe that consumers' CSR trust is a mediator in the relationship between CSR and corporate/product associations. This theorizing is summarized in the following hypothesis:

H_1: A higher perceived level of CSR leads to a higher trust on CSR;

H_2: A higher trust on CSR leads to a more positive corporate association;

H_3: A higher trust on CSR leads to a more positive product association.

However, some scholars didn't care about the impact of CSR trust on consumers' attitude and behaviors, they believe that CSR has a direct influence on consumers' corporate associations (Brown and Dacin, 1997). Therefore, in order to examine whether CSR could directly affect consumers' corporate and product associations, we formulate the following:

H_4: A higher perceived level of CSR leads to a more positive corporate association;

H_5: A higher perceived level of CSR leads to a more positive product association.

2.2.2 Corporate and product associations

Corporate association includes perceptions, inferences and beliefs about a company. Corporate associations differ in their focus from product associations. The former deal broadly with the company, whereas the latter deal with a specific product or service. The existing studies argue that a positive consumer attitude towards an organization (i.e. corporate association) contributes significantly to reward behavior via favorable purchase intent. Recently, some qualitative studies infer that CSR may have a positive impact on consumers' product attitudes, and whether CSR can become an effective tool for product differentiation to promote purchasing behavior is a interesting topic await of being tested Derived from these discussions, we investigate the following:

H_6: A more positive corporate association leads to a higher level of purchase intention;

H_7: A more positive product association leads to a higher level of purchase intention.

2.3 Product category

Existing empirical results that firms selling durable experience or credence goods are

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more likely to be socially responsible than firms selling search goods. Search products' qualities can be determined by inspection prior purchase, and the qualities of experience products cannot be. While the value of credence products can not be evaluated even after use. Clothing, appliance and insurance service are respectively typical example of search, experience and credence product.

Why firms selling durable experience or credence goods are more likely to be socially responsible? Recent theories of the strategic use of CSR emphasize the role of information asymmetry and how CSR is likely to be incorporated into a firm's product differentiation strategy. When consumers cannot inspect the true quality or value of product before or even after purchasing (i.e., information asymmetry), CSR could be used as a signal of product quality. The notion of a consumer demand for CSR is based on the idea that buyers believe that a reliable and honest firm will produce better products, and CSR is viewed as a signal of such honesty and reliability. That is the reason why durable experience or credence goods are more likely to be associated with CSR. Therefore, we believe that when consumers buy durable experience or credence products, they are more likely to associate CSR with product quality or values if they believe firm's CSR actions are derived from sincere motivation, and a more positive product association could probably leads to a higher level of purchase intentions. Therefore, we suggest the following:

H_8: A higher level of CSR trust leads to a more positive product association when consumers buy durable experience or credence (vs. search) product;

H_9: A more positive product association leads to a higher level of purchase intention when consumers buy durable experience or credence (vs. search) product;
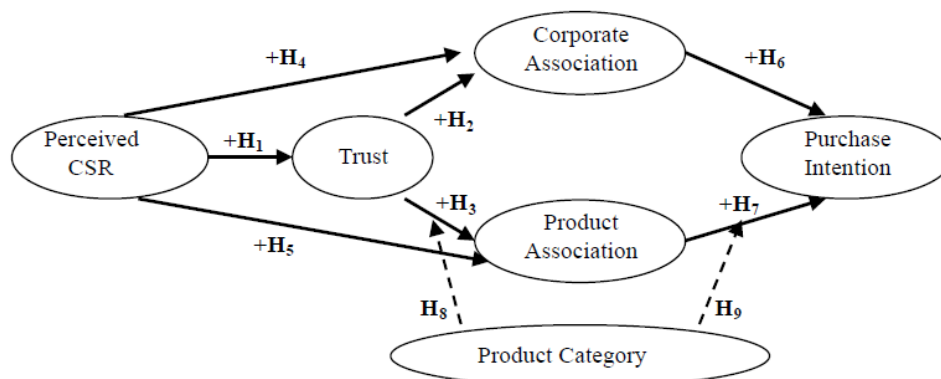

Figure 1 - Hypothesized Model

3 Data and Methodology
3.1 Multi-industry setting

We obtain data through a survey which conducted in Wuhan and Shanghai of China. Three types of questionnaires are designed respectively in the context of buying clothing, home appliance and insurance service. In the beginning of each questionnaire, we describe a fictitious firm's (called X company) CSR performance in the last ten years. In order to control the influence of other corporate factors, we suppose X company is a large firm and its product or service is a well-known brand in the market. Moreover, the social issue we described in the questionnaires is mainly ethical and philanthropic programmes, and they are not directly unrelated to the specific product.

3.2 Measures

For all dependent measures, we used multiple-item scales consisted of seven-Likert scales (1-strongly disagree; 7-strongly agree). With respect to trust, corporate associations, product associations and purchase intention, we first factor-analyzed the multi-item scales for each construct separately. Across all samples, a single factor emerged in each case. As

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Cronbach's alpha values ranged between 0.70 and 0.89, reliability was uniformly high in all samples for all constructs. Then we assessed the second-order factor model with the first-order factors (trust, company association, product association and purchase intention) that originated from the higher-order factor consumers' CSR responses① These measurement results were acceptable in each sample (comparative fit index [CFI] and nonnormed fit index [NNFI] ranged from .92 to .96 for CFI and from .89 to .95 for NNFI). All first-order and second-order factor loadings were significant, demonstrating convergent validity. This provided us with enough confidence to calculate averages for trust, company association, product association and purchase intention based on the multi-items of each construct and use these averages as indicators of the construct consumers' CSR responses.

3.3 Samples

Information was collected from real consumers----shopping mall and railway station visitors in Wuhan (a major city in central China) and Shanghai (a major city in coastal area of China). Across our samples, an average of 69% of the visitors we approached participated and a total of 520 questionnaires (92.6 % of the total) were found to be usable. The sub sample size of three industry respectively are 173(clothing), 179 (appliance), 168 (insurance). The demographic characteristics of the sample are summarized in Table 1. We also sought even coverage over interviewing time of day and interviewing day of week to reduce possible shopping pattern biases.

① On request, the authors can report the detailed results on the factor analysis, reliability scores, and the second-order factor model.

Table 1 - Demographic Characteristics of Total Sample

Demographics	Percentage (%)	Demographics	Percentage (%)
Gender		Age	
Male	49.1	18 - 51 years	34.8
Female	50.9	25 - 39 years	38.2
Education		40 - 55 years	14.7
High School	30.4	Above 55 years	13.3
Undergraduate	58.1	Monthly income	
Graduate	11.5	Below 2000 yuan	47.2
City		2000 - 3000 yuan	23.5
Wuhan	51.8	3000 - 5000 yuan	19.0
Shanghai	48.2	above 5000 yuan	10.3

Notes: 1) Elder people were less willing to participate in the survey. 2) In China, the sum of a person's monthly incomes in a year usually consists of 1/3 to 2/3 of his/her total yearly income. The monthly income is fixed but the year-end performance income is fluctuating and not guaranteed. Thus people tend to tell you their monthly income when asked about it.

4 Results

4.1 Examination of data pooling

We assessed the hypothesized structural model with gross sample (Figure 1). we report the values of the fit statistics. The chi-squares are mostly significant (P< .05). The ratio of chi-square to degrees of freedom (d.f.) is between 2.01 and 2.59. The values of GFI (0.95), AGFI (0.92), NFI (0.91), CFI (0.95), RMSEA (0.05) and RMR (0.09) are acceptably close to the standards. To decide whether we needed to estimate separate models for each industrial sample, we investigated the pooling data across industries by multi-group analyses. Table 2 reports the overall model fits in each industrial sample and the equal sample (all structural paths were set equal). The model in each industrial sample obtained a significantly better fit

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than the equal model, which indicates that not all of the paths were equal across clothing, appliance and insurance. Therefore, we decided not to pool the data across industries.
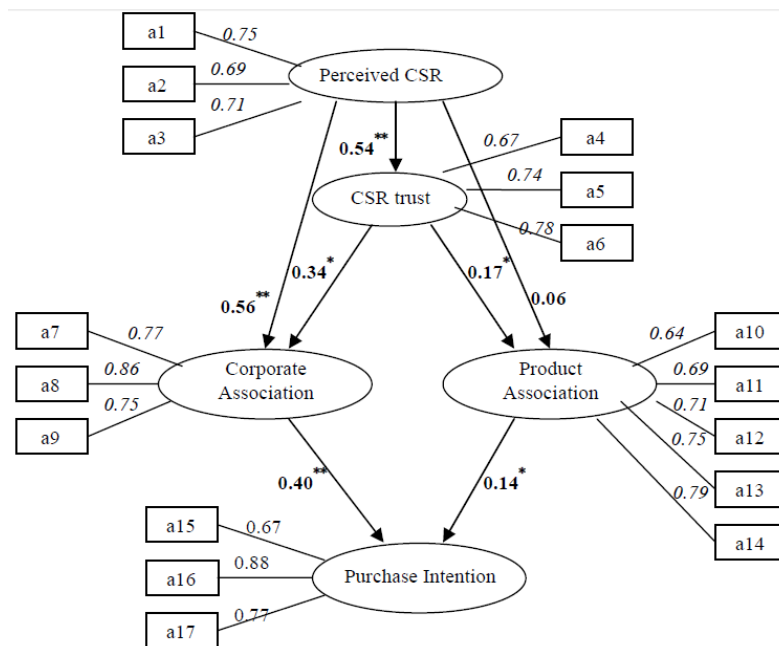

Figure 2 - Structural Model of Gross Sample

Note: $X^2/d.f.=2.349$; GFI=0.95; AGFI=0.92; NFI=0.91; CFI=0.95; RMSEA=0.05; RMR=0.09; * P< .05; ** P< .01.

Table 2 - Overall Model Fits

Fit Statistics	Clothing	Appliance	Insurance	Equal model
X^2	124.771	123.70	154.74	522.77
$X^2/d.f.$	1.27	1.26	1.57	1.60
GFI	0.92	0.90	0.90	0.78
AGFI	0.89	0.86	0.86	0.77
RMSEA	0.04	0.03	0.04	0.06
RMR	0.11	0.11	0.11	0.17
NFI	0.87	0.86	0.84	0.71
CFI	0.97	0.94	0.96	0.84

4.2 Measurement model evaluation

In table 3, we report the results of the measurement models. We assessed reliability jointly for all items of a construct by computing the composite reliability and average variance extracted. For a construct to possess good reliability, composite reliability should be between 0.60 and 0.80, and the average variance extracted should at least be .50. All scales demonstrate good reliabilities. Second, Convergent validity was supported by all loadings being significant and nearly all R^2 exceeding .50. Third, we tested the discriminate validity as follows: we checked whether correlations among the latent constructs were significantly less than 1. In all samples, construct correlations indeed met this criterion. Besides, the average variance extracted by the underlying construct is larger than the shared variance in all samples. In summary, the measurement models are clean, with evidence for reliability, convergent validity and discriminate validity, which enabled us to proceed to the structural model evaluation.

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Table 3 - Measurement Models

Construct	Composite Reliability			Percentage of Variance Explainded		
	Clothing	Appliance	Insurance	Clothing	Appliance	Insurance
Perceived CSR	0.789	0.785	0.804	0.556	0.549	0.579
CSR trust	0.788	0.778	0.791	0.553	0.540	0.558
Corporate associations	0.810	0.834	0.858	0.591	0.626	0.669
Product associations	0.873	0.845	0.870	0.579	0.521	0.573
Purchase intention	0.825	0.848	0.812	0.613	0.655	0.592

4.3 Structural model evaluation

Table 4 indicates that in each industrial sample, all significant relationships between latent constructs are in the hypothesized direction, which provides initial evidence for our conceptual model and supports the nomological validity of the constructs. Empirical results show that CSR trust indeed mediate the influence of perceived CSR on corporate association. In addition, the relationship between perceived CSR and corporate association and the positive path from corporate association to purchase intention are confirmed across all industrial samples. Consequently, there were strong and uniform supports for H_1, H_2, H_4 and H_6.

Table 4 - Structural Models

Hypothesized Path	Standard Estimates		
	Clothing	Appliance	Insurance
H_1: Perceived CSR → CSR trust (+)	0.56**	0.49**	0.52**
H_2: CSR trust → Corporate association (+)	0.37**	0.45**	0.31**
H_3: CSR trust → Product association (+)	0.13	0.36**	0.43**
H_4: Perceived CSR → Corporate association (+)	0.41**	0.34**	0.40**
H_5: Perceived CSR → Product association (+)	0.11	0.13	0.16
H_6: Corporate association → Purchase intention (+)	0.39**	0.46**	0.28**
H_7: Product association → Purchase intention (+)	0.14	0.24*	0.07

Note: * $P < .05$; ** $P < .01$.

Second, the relationship between perceived CSR and product association is not confirmed across all samples, which indicates that the impact of perceived CSR on product association cannot be directly occurred. Therefore, H_5 is not supported.

Third, the data support a positive path from CSR trust to product association in appliance and insurance samples but not in clothing samples. In addition, the positive path from product association to purchase intention is confirmed in clothing and appliance samples but not in insurance sample. Therefore, H_3 and H_7 are partially supported.

4.4 Moderating influences

We tested moderating effects through multi-group analyses. Clothing, appliance and insurance respectively represent different product category of search, experience and credence product. Table 5 displays the results for structural model estimations in terms of chi-square and degrees of freedom. The results show that when consumers buy experience (appliance) and credence (insurance) product, the impact of CSR trust on product association is significantly confirmed. While positive product association under CSR stimulus could leads to a higher level of purchase intention only in the condition of buying experience product. These findings tentatively support H_8 and partially support H_9.

Table 5 - Moderating Influences

Moderator：Product Category	X^2	d. f.	$\triangle X^2$
Equal Model	522.77	327	
H_8: CSR trust→Product association: free	518.46	326	4.31*
H_9: Product association→Purchase intention: free	510.31	326	12.46**

Note: * $P< .05$; ** $P< .01$.

5 Conclusions

This research examined the mechanism of consumer responses to CSR under multi-industry context in China, and this process complies with information processing theory, which went through steps of attention (artificial), judging the sincerity of CSR actions, then associating CSR information with corporate and its products, and finally giving rise to purchase intention. We examined this mechanism with a conceptual model under three-industry context, and results indicate that there is some difference among industries selling clothing, appliance and insurance which respectively represented search, experience and credence product. Two important findings are as followings: 1) Basically, consumers' trust on firm's CSR actions mediated the influence of perceived CSR performance on corporate and product associations, although consumers' perceived CSR performance can also directly affect their corporate associations. This finding indicates that consumers' CSR trust has a stronger mediating effect on the relationship between CSR and product than the relationship between CSR and corporate. 2) Product category is a moderator of the relationship between CSR trust and product association, and the positive path from product association to purchase intention. Specifically, when consumers buy a durable experience or credence (vs. search) product, they are more likely to associate CSR with product qualities or values given they trust CSR actions are derived from sincere motivation. More importantly, a more positive product association could lead to a higher level of purchase intention, but this relationship is established only in the condition of buying durable experience (vs. search and credence) product. These results prove that consumer responses is not homogeneous when they associate CSR with different product category, and positive CSR information of durable experience or credence product are indeed more likely to evoke positive product attitude than search ones. It provides an important reason to explain why firms selling durable experience or credence goods are more likely to be socially responsible than firms selling search goods.

The findings of this research imply that firms selling durable experience goods or services are more likely to please consumers through CSR activities. These firms can try to adopt CSR strategy to differentiate products and promote consumers' consumptions. However, an important issue needs to be careful considered by mangers is that how to communicate CSR information to consumers not only catch their attentions but win their trust.

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