

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

Wang Rui, Tian Zhilong, Ma Yutao

School of Management, Huazhong University of Science and Technology, Wuhan, P.R.China, 430074
(E-mail: wangrui307307@126.com, zltian@mail.hust.edu.cn, courser_myt@yahoo.com.cn)

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

* This paper is funded by National Natural Science Foundation of China (70672038 and 70972015).

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:

H₁: A higher perceived level of CSR leads to a higher trust on CSR;

H₂: A higher trust on CSR leads to a more positive corporate association;

H₃: 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:

H₄: A higher perceived level of CSR leads to a more positive corporate association;

H₅: 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 an interesting topic await of being tested. Derived from these discussions, we investigate the following:

H₆: A more positive corporate association leads to a higher level of purchase intention;

H₇: 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 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:

H₈: A higher level of CSR trust leads to a more positive product association when consumers buy durable experience or credence (vs. search) product;

H₉: A more positive product association leads to a higher level of purchase intention when

consumers buy durable experience or credence (vs. search) product;

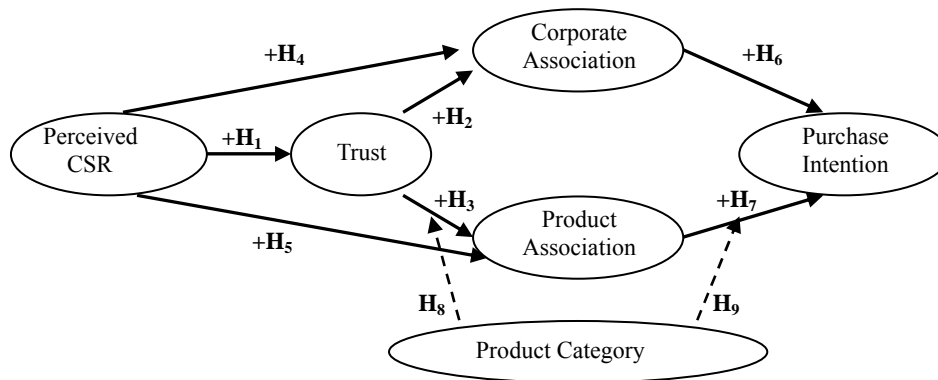


Figure 1 Hypothesized Model

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 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 responses^① 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 | 18-24 years | 34.8 |
| Female | 50.9 | 25-39 years | 38.2 |
| Education | | 40-55 years | 14.7 |
| high school | 30.4 | Above55 years | 13.3 |
| undergraduate | 58.1 | Monthly income | |
| graduate | 11.5 | Below2000yuan | 47.2 |
| City | | 2000-3000yuan | 23.5 |
| Wuhan | 51.8 | 3000-5000yuan | 19.0 |
| Shanghai | 48.2 | above5000yuan | 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 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.

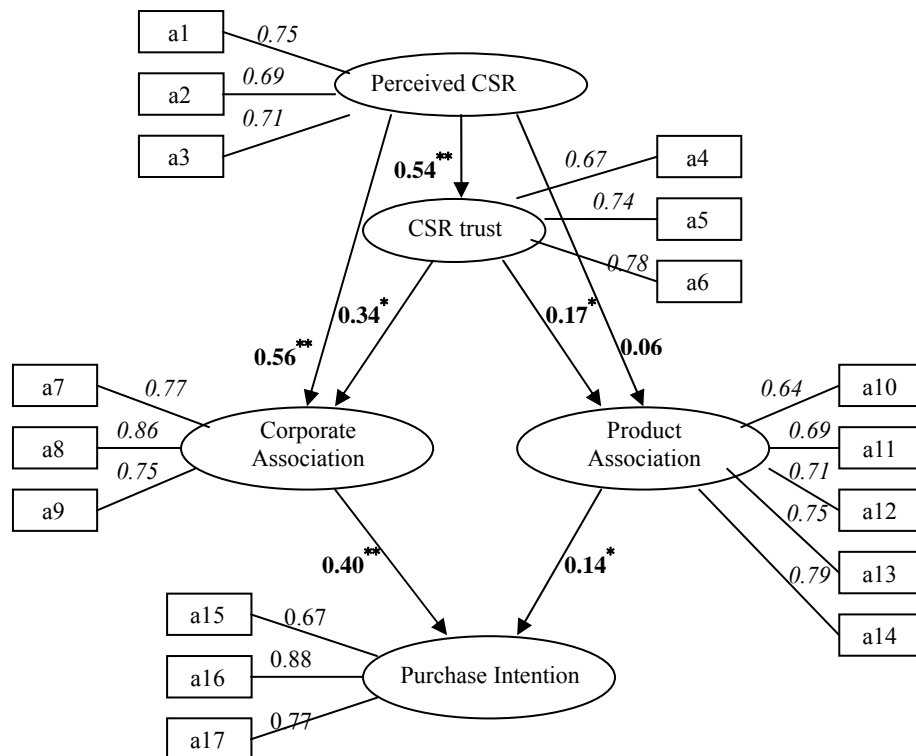


Figure 2 Structural Model of Gross Sample

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 R² 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.

Table 3 Measurement Models

| Construct | Composite Reliability | | | Percentage of Variance Explained | | |
|------------------------|-----------------------|-----------|-----------|----------------------------------|-----------|-----------|
| | 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 H₁, H₂, H₄ and H₆.

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, H₅ 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, H₃ and H₇ 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 H₈ and partially support H₉.

Table 5 Moderating Influences

| Moderator: Product Category | X ² | d. f. | ΔX 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 managers is that how to communicate CSR information to consumers not only catch their attentions but win their trust.

References

- [1] Aqueveque, C. Marketing and Market Development Signaling Corporate Values: Consumers' Suspicious Minds[J]. Corporate Governance, 2005, 5(3): 70-81
- [2] Bagnoli, M. and Watts, S. Selling to Socially Responsible Consumers: Competition and the Private Provision of Public Goods[J]. Journal of Economics and Management Strategy, 2003, 12(3): 419-445

- [3] Becker-Olsen, K. L., Cudmore, B. A. and Hill, R.P. The Impact of Perceived Corporate Social Responsibility on Consumer Behavior[J]. *Journal of Business Research*, 2006, 59(1): 46-53
- [4] Bhattacharya, C. B. and Sen, S. Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives[J]. *California Management Review*, 2004, 47(1): 9-24
- [5] Blomqvist, K. The Many Faces of Trust[J]. *Scandinavian Journal of Management*, 1997, 13(3): 271-286
- [6] Brown, T. J. and Dacin, P. A. The Company and The Product: Corporate Associations and Consumer Product Responses[J]. *Journal of Marketing*, 1997, 61(1): 68-84
- [7] Carrigan, M. and Attalla, A. The Myth of The Ethical Consumer - Do Ethics Matter in Purchase Behaviour? [J]. *The Journal of Consumer Marketing*, 2001, 18(7): 560-577
- [8] Carroll, A. B. A Three-dimensional Conceptual Model of Corporate Performance[J]. *Academy of Management Review*, 1979, 4(4): 497-505
- [9] Carroll, A. B. The Pyramid of Corporate Social Responsibility: Toward The Moral Management of Organizational Stakeholders[J]. *Business Horizons*, 1991, 34(4): 39-48
- [10] Crowther, D. Perspectives on Corporate Social Responsibility[M]. Ashgate Aldershot, 2003
- [11] Cui, Y., Trent, E. S., Sullivan, P. M. and Matiru, G. N. Cause-related Marketing: How Generation Y Responds[J]. *International Journal of Retail & Distribution Management*, 2003, 31(6): 310-320
- [12] Darby, M. R. and Karni, E. Free Competition and The Optimal Amount of Fraud[J]. *The Journal of Law and Economics*, 1973, 16(4): 67-75
- [13] Drumwright, M. E. Company Advertising with A Social Dimension: The Role of Noneconomic Criteria[J]. *Journal of Marketing*, 1996, 60 (4): 71-87
- [14] Ellen, P. S., Webb, D. J. and Mohr, L. A. Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs[J]. *Academy of Marketing Science*, 2006, 34(2): 147-157
- [15] Gao, Y. Corporate Social Performance in China: Evidence From Large Companies[J]. *Journal of Business Ethics*, 2009, 89(1): 23-35
- [16] Hagen, J. M. and Choe, S. Trust in Japanese Interfirm Relations: Institutional Sanctions Matter[J]. *Academy of Management Review*, 1998, 23(3): 589-600
- [17] Lichtenstein, D. R., Drumwright, M. E. and Braig, B. M. The Effect of Corporate Social Responsibility on Customer Donations to Corporate-supported Nonprofits[J]. *Journal of Marketing*, 2004, 68(4): 16-32
- [18] McWilliams, A. and Siegel, D. Corporate Social Responsibility: A Theory of The Firm Perspective[J]. *Academy of Management Review*, 2001, 26(1): 117-127
- [19] McWilliams, A., Siegel, D. & Wright, P. M. Corporate social responsibility: Strategic Implications[J]. *Journal of Management Studies*, 2006, 43(1): 1-18
- [20] Miller, G. A. The Magical Number Seven, Plus or Minus Two Some Limits on Our Capacity for Processing Information[J]. *Psychological Review*, 1956, 101(2): 343-352
- [21] Mohr, L. A. and Webb, D. J. The Effect of Corporate Social Responsibility and Price on Consumer Responses[J]. *Journal of Consumer Affairs*, 2005, 39(1): 121-147
- [22] Mohr, L.A., Webb, D. J. and Harris, K. E. Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior[J]. *Journal of Consumer Affairs*, 2001, 35(1): 45-72
- [23] Nelson, P. Information and Consumer Behavior[J]. *Journal of Political Economy*, 1970, 78(3): 311-329
- [24] Osterhus, T. L. Pro-social Consumer Influence Strategies: When and How Do They Work? [J]. *Journal of Marketing*, 1997, 61(4): 16-29
- [25] Ricks Jr, J. M. An Assessment of Strategic Corporate Philanthropy on Perceptions of Brand Equity Variables[J]. *The Journal of Consumer Marketing*, 2005, 22(3): 121-134
- [26] Rifon, N. J., Choi, S. M., Trimble, C. S. and Li, H. Congruence Effects in Sponsorship: The Mediating Role of Sponsor Credibility and Consumer Attributions of Sponsor Motive[J]. *Journal of Advertising*, 2004, 33(1): 29-42
- [27] Sen, S. and Bhattacharya, C. B. Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility[J]. *Journal of Marketing Research*, 2001, 38(2): 225-243
- [28] Siegel, D. S. and Vitaliano, D. F. An Empirical Analysis of The Strategic Use of Corporate Social Responsibility[J]. *Journal of Economics & Management Strategy*, 2007, 16(3): 773-792
- [29] Xie, P. and Zhou, Z. Empirical Study on The Relationship Between Corporate Social

- Responsibility and Consumer Purchase Intention in China[J]. *Nankai Business Review*, 2009, 12(1): 71-83 (In Chinese)
- [30] Yoon, Y., Gürhan-Canli, Z. and Schwarz, N. The Effect of Corporate Social Responsibility (CSR) Activities on Companies with Bad Reputations[J]. *Journal of Consumer Psychology*, 2006, 16(4): 377-390