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The Impact of Corporate Strategies for Image Restoration on Consumer Trust in Crisis Events: The Moderating Role of Prosocial Motivation

Jintao LU¹, Naiding YANG², Jinfu YE³, Linfeng ZOU⁴, Nasir MAHMOOD⁵

Abstract

The existing theoretical studies and practical observations indicate that, after the crisis events, although corporations implement different types of coping strategies to repair the damaged corporate image and consumer trust, the intervention effectiveness varies extremely. Unfortunately the present research still hasn’t given a systemic explanation that, which strategy used by corporations is eventually effective in resolving the crisis, reshaping the corporate image and restoring consumer trust? From the perspective of prosocial motivation, the influence mechanism of corporate strategies for image restoration on consumer trust in crisis events was explored by employing the scenario experiments. Results show that the strategies of denial & defense, reticence & evasion, apology & communication as well as correction & compensation have differential effects on consumer trust. In terms of the restoration effectiveness of consumer trust, prosocial motivation plays a moderating role in selecting image restoration strategies. The priority rankings of corporate strategies for image restoration demonstrate a difference under different prosocial motivation levels, however this difference disappears from the view of positive-negative coping strategies.

Keywords: crisis events, image restoration strategies, consumer trust, prosocial motivation, crisis intervention.

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Introduction

In recent years, crisis events caused by problems of product quality, operation management and social responsibility have occurred frequently all over the world, such as the refurbished workshop event of LG in 2007, the Milk Deluxe OMP event of Mengniu in 2009, the lean-meat powder event of Shuanghui in 2011, the scandal of Nikon’s black spots in 2013 and the WeiZexi event of Baidu promotion in 2016(China Public Relation Net, 2015). The occurrence of these crises, on the one hand, has adversely affected the normal operation of those enterprises involved in events to varying degrees, such as the damage of corporate brand image & reputation, the weakening of consumer trust towards corporations. On the other hand, crisis events evolve with the features of paroxysm, uncertainty, the uncertain development (the pros and cons), the urgent handling time and the destructive consequences, etc. (Lu, Yang, Ye, & Wu, 2014; Lu, Yang, Ye, Liu, & Mahmood, 2015), which requests the decision makers to promptly respond to the events and propose effective coping strategies within the shortest time, so that the further spread of the crisis can be prevented to the utmost and the consumer trust towards corporations can be restored as well as the damaged corporate image can eventually be repaired. Through reviewing and analyzing the previous typically corporate crises events and the corresponding image restoration process (China Public Relation Net, 2015), we find that, after the occurrence of crisis events, the coping effectiveness illustrates a great difference although the enterprises involved in events usually take active measures such as clarification, apology, compensation, rectification and accountability under the dual pressure of the regulations and the public opinion. For instance, after Bawang Shampoo’s cancer scandal occurred in 2010, Bawang International Group Holding Limited positively conducted a series of coping measures, including issuing an official statement to deny the problems of the product quality and giving interpretations of false reports from the social media. Nevertheless, a survey indicated that, over 70% of the respondents said they wouldn’t trust Bawang anymore and they were not willing to use Bawang’s products even the test report from China National Food and Drug Administration (CFDA) showed the dioxane content in Bawang shampoo wouldn’t harm consumers’ health. This indicates that the “brand toxicity” effect of Bawang has not been eliminated in the minds of the consumers (Xinhua Net, 2011). On the contrary, after the Haidilao Hot Pot Scandal occurred in 2011, the official site & Weibo of Haidilao immediately made an official clarification of the media coverage of the crisis event and took the initiative to admit the facts of blending bone broth and other related problems. Then the chairman of Haidilao voluntarily took responsibility for the event on his personal Weibo and invited consumers as well as the social media to visit and supervise the operation process of Haidilao. A series of coping strategies from Haidilao calmed things down very soon, which resulted in regaining consumer and reshaping the corporate image (Dou, 2015).
Therefore we cannot help thinking that, after the crisis, which strategy used by corporations is eventually effective in resolving the crisis, reshaping the corporate image and restoring consumer trust? For this problem, most of the current studies believe that image restoration strategies adopted by corporations in the crisis event can enhance corporate reputation and reduce the product/service risk perceived by consumers, which can eventually lead to an increase in consumer recognition, consumer trust and purchase behavior (Xu, 2013), but this influence path is also affected by many other factors (Xie & Peng, 2009), such as corporate reputation and crisis type (Fang, Jiang, Yang, & Li, 2010), altruistic attribution (Yu & Zhao, 2015), etc. Recent studies also show that implementing some kinds of corporate social responsibility strategies is more likely to make consumers have doubts about the decision motive hiding behind the actions and distrust corporate image restoration strategies (Wang & Tian, 2016; Baronea, Normanb, & Miyazaki, 2016), assuming that crisis-repair behaviors of corporations are only to maintain its reputation and interest. Hence as can be seen from the above analysis, we cannot simply infer that the corporate coping strategies in the crisis events can successfully repair the consumer trust towards corporate product & service, more empirical evidences, especially specific analysis in combination with the decision motive hiding behind the image restoration strategies adopted by corporations, are needed to answer the proposed question.

In view of this, from the perspective of prosocial motivation, the present study tries to explore the influence mechanism of corporate strategies for image restoration on consumer trust in crisis events using the scenario experiments, hoping the obtained conclusions can provide theoretical references for enterprise managers to enhance the quality of crisis decision-making, develop more effective intervention strategies and formulate corresponding emergency management mechanisms for crisis prevention and mitigation.

**Literature Review and Research Hypothesis**

**Corporate Strategies for Image Restoration**

As an invisible sign of enterprises, the corporate image refers to the whole cognition established by the social public through the comprehensive evaluation of enterprises (such as corporate culture, business strategy, service quality, etc.). A good corporate image can create consumer trust for corporate products & services. Therefore, in order to avoid the possible adverse situations, corporations need to take actions to repair the damaged images to keep the loss caused by the events to a minimum when facing the image crisis. In recent years, the corporate strategy for image restoration has become a hot topic in academia and industrial circles. With regard to the classification criteria for repairing strategies,
McLaughun, Cody and O’Hair (1983) proposed “mitigation-aggravation” classification criterion, and then investigated the difference of crisis-response strategies adopted by individuals in response to different situations they are facing. In the context of multiple crisis events, Marcus and Goodman put forward the classification criterion of “accommodative -defensive” to analyze the dilemma problem of balancing the interests of stakeholders and victims. Namely, the accommodative strategy means that the corporations take responsibility for the events and adopt corrective actions, while under the defensive strategy, corporations deny the existed problems and refuse to assume corresponding responsibility (Marcus & Goodman, 1991). What’s more, the following studies successively proposed the classification criteria of “denial-corrective” (Siomkos & Shrivastava, 1993), “denial-reticence-apology” (Griffin, Babin, & Attaway, 1991), and “accommodative -reticence- defensive” (Fang et al., 2010). From the aspect of the specific types of repair strategies, based on the basic assumption that “both corporate image and corporate reputation are important intangible assets”, W. L. Benoit (1996) proposed a series of corporate image restoration strategies for reducing the risk of crisis communication, which includes five types: denial, evading responsibility, reducing offensiveness, corrective action and mortification. By analyzing image-oriented maintenance strategy taken by corporations after the occurrence of food safety incidents, Xu Heqing summarized five kinds of image-oriented maintenance strategies: fact-finding strategy, strategy of improving management system, interactive communication strategy, loss compensation strategy and accountability strategy (Xu, 2013). In addition, some scholars put forward two kinds of repairing strategies with assertive tactics and defensive tactics from the perspective of organizational impression management (Lopes & Fletcher, 2004), and then they were applied to the crisis management of public opinion on the internet (Kang, 2014). Meanwhile, from the perspective of the concept of Chinese face, some studies proposed two types of face- maintenance strategies: preventive measures (like declarative behavior, ego-defense, etc.) and remedial measures (such as compensatory behavior, retaliation behavior, etc.) (Zhai, 2011). In order to thoroughly explore the influence mechanism of corporate strategies for image restoration on consumer trust in crisis events, combined with the theory of corporate image restoration and the crisis management practice in Chinese enterprises, the corporate image restoration strategies were divided into two categories with four specific types from the view of positive-negative coping modes, i.e., denial & defense, reticence & evasion, apology & communication as well as correction & compensation.
The Influence of Corporate Image Restoration Strategies on Consumer Trust

Numerous studies have indicated that after crisis events, the positive perception of social public, especially corporate product & service’s consuming objects towards corporate image and reputation was reduced, which then caused consumers to lose confidence in corporate products & services (Chen, 2008). For example, when the lean-meat powder scandal of Shuanghui in 2011 was exposed, Shuanghui Development stock (Shenzhen Stock Exchange Code: 000895) fell sharply below the minimum (s) level on the same day, which meanwhile triggered the crisis of consumer trust towards Shuanghui’s products, some consumers even said that they wouldn’t consider/buy the products from Shuanghui anymore (China Public Relation Net, 2015). Therefore, corporations involved in the events should urgently take the crisis intervention actions to repair their damaged images, reduce the external doubt arising from the crisis and enhance the consumer recognition and the consumer trust towards corporate products & services. Through experiment and statistical analysis methods, Hua Haiyan and Li Wei (2011) argued the changes in brand trust and risk perception of consumers caused by the different coping actions of enterprises (i.e., reticence, responsibility and defensive) after the occurrence of a product-harm crisis. As a result they found that, either in the financial crisis or the personal injury case, both undertaking the due responsibilities and apologizing are the best ways to repair the damaged corporate image and conduct the trust-oriented crisis intervention, and consumer trust level is the highest under this situation. Li Haiting (2013) discussed the relationship between the crisis response mode and consumer trust, examined the moderating effect of corporate social responsibility on the relationship mentioned above. The result illustrated that “explicitly assuming responsibility” strategy is not a bad choice in repairing consumer trust, it is even a mutually beneficial one. On the contrary “ambiguity” strategy is the worst choice. Actively response strategy and actively compensation strategy of corporations can positively change the perception and attitude of consumers towards product crisis, which can also have a significant positive impact on the subsequent behaviors of consumers (such as, consumers’ repeat purchasing behaviors and word-of-mouth communication intentions) (Wang & Wang, 2014). Through the study on product recall crisis management, Souiden and Pons (2009) pointed out that, coping strategies as active recall, proactive compensation and correction have a significant positive impact on corporate image, consumer loyalty and purchasing intention. Positively coping actions are the best solution to avoid decreasing consumer loyalty towards manufacturers’ products, damaging the corporate image and affecting the market share of the corporations. Aiming towards consumer groups in South Korea, the study by Park, Lee and Kim (2014) believed that corporate social responsibility behavior could establish and cultivate consumer trust, which in turn positively strengthened
consumer recognition towards corporations. As we can see, no matter what sort of crisis event it is and no matter what the true cause, effects of coping strategies for image restoration can be transmitted to corporate consumers through their production and operation networks, while consumers can feel the enterprise’s credibility and responsibility from its attitude towards crisis-repair which has “positive energy” and a great sense of social responsibility, and then consumers generate strong loyalty towards the enterprise. Based on the analysis above, we infer that, after the occurrence of corporate product & service crisis, compared with the negative response actions and the strategies of no action taken by corporations, enhance the consumer recognition and the consumer trust towards corporate products & services, finally resulting in improving the corporate image. Accordingly, in order to deeply analyze the impact mechanism of corporate strategies for image restoration on consumer trust, the hypotheses of this study are put forward:

**Hypothesis 1:** After the crisis event, the strategies of denial & defense, reticence & evasion, apology & communication as well as correction & compensation adopted by corporations have a differential effect on consumer trust.

**Hypothesis 1a:** After the crisis event, compared with the strategy of no action taken by corporations, denial & defense strategy is negatively related to consumer trust.

**Hypothesis 1b:** After the crisis event, compared with the strategy of no action taken by corporations, reticence & evasion strategy is negatively related to consumer trust.

**Hypothesis 1c:** After the crisis event, compared with the strategy of no action taken by corporations, apology & communication strategy is positively related to consumer trust.

**Hypothesis 1d:** After the crisis event, compared with the strategy of no action taken by corporations, correction & compensation strategy is positively related to consumer trust.

**The Moderating Effect of Prosocial Motivation**

The study, published in *Future and Development*, found that though different corporations involved in the events adopted the same coping strategies when facing the same type of crisis, the subsequent behaviors of consumers (i.e., product trust, consumption intention, corporate recognition, etc.) still show great differences (Wang & Wang, 2014). Taking the “Shanghai Fuxi food” event in 2014 as an example, the event triggered a crisis of confidence in the media and public opinion towards food safety issues. McDonald’s, Yum Group (KFC, Pizza Hut) and other international fast-food brands, as the downstream customers of Shanghai Fuxi Food Co., Ltd., were soon involved in this event. However, though facing
the same food safety issue, the crisis coping actions of McDonald’s and Yum Group achieved the opposite effects. The emotionally public relations activity of McDonald’s was regarded as a publicity stunt lacking the clear-cut stand and responsibility, which eventually caused a continuously questioning attitude from the consumers against McDonald’s coping actions. While the public relations activity of Yum Group with assuming responsibility response successfully transformed the crisis status from “anxious” to “relieved”. Yum Group’s stand on the event attribution and its attitude towards coping the event soon regained consumer trust. Thus it can be seen that, during the process of corporate strategies for image restoration differentially effects consumer trust, there should be other factors existing as the moderating variables except the known factors such as crisis type (Fang et al., 2010), responsibility for the scandal (Yu & Zhao, 2015) and corporate reputation (Helm & Tolsdorf, 2013) and so on. According to attribution theory (Lei, Dawar, & Gürhan-Canli, 2012), after the crisis event, consumers usually conduct an attribution analysis of behavior on corporate strategies for image restoration (i.e., the crisis coping strategies) (Lu, Samart, & Kow, 2010), and then further determine the actual decision motive of corporations: Are decisions of enterprises made to protect the interests of consumers, and are corporations willing to take actions to implement it? That is to say, whether the corporate image repair strategy is taken based on prosocial motivation considering the benefit of consumers (Grant, 2008)? It is the difference of corporate motivational intensity perceived by consumers further affects the cognitive judgment of consumers on the corporate coping behavior towards the crisis, which finally moderates the consumer recognition and the consumer trust towards corporate products & services. Consequently, it can be further speculated that, when perceiving that if the image restoration strategies adopted by the enterprises are merely a certain kind of narrowly self-interested behaviors (i.e., lower prosocial motivation) under the pressure of the public opinion, avoiding punishment and commercial benefits, the consumers can generate a sense of exclusion and questioning on the enterprises. As a result, no matter what coping strategy the corporation adopts, the consumers don’t trust the corporations involved anymore. On the contrary, when consumers perceive that if the image restoration strategies adopted by the enterprises are a certain type of altruistic behaviors (i.e., stronger prosocial motivation) purely based on the consideration of consumer benefit or social morality, the psychological distance between consumers and corporations is firstly narrowed, then consumer hostility to corporations is emotionally eliminated, moreover the formation of consumers’ distrust intention is prevented. Obviously, the restoration effectiveness is influenced by the consumer’s perceived sincerity of corporations which is embedded in the specific crisis coping strategies. In view of the above, taking the consumer trust as the moderating variable, we propose the following hypotheses:
Hypothesis 2: In terms of the restoration effectiveness of consumer trust, prosocial motivation has a moderating effect on the selection of image restoration strategies.

Hypothesis 2a: Under stronger prosocial motivation, with regard to the restoration effectiveness of consumer trust, the best strategy is apology & communication, corrective & compensation is the second-best strategy, the third-best is reticence & evasion, and the worst strategy is denial & defense.

Hypothesis 2b: Under lower prosocial motivation, there is no statistically significant difference when comparing the restoration effectiveness of consumer trust among the strategies of denial & defense, reticence & evasion, apology & communication and correction & compensation.

Methodology

In the present study, the scenario experiments were employed to explore the influence mechanism of image restoration strategies adopted by corporations on consumer trust under different levels of prosocial motivation. Referring to the existing research designs (Fang et al., 2010; Yu & Zhao, 2015), a 2×4 (stronger vs lower prosocial motivation × image restoration strategies of denial & defend vs avoid & silence vs apologize & communication vs corrective & compensation) between-group experiment was designed, meanwhile in order to verify whether the different types of strategies have differential effects on consumer trust, two control groups with the strategies of no action taken by corporations were set up. Therefore, there are totally 10 sets of experimental situations.

Stimulus Design

Drug Quality and Security is directly related to public health, life safety and social stability. In view of the “poison capsule” event frequently occurred in China in recent years has aroused widespread concern in society. Thereby the medication called M produced by a fictitious pharmaceutical company called M was used as the experimental stimulus.

Corporate Background: The previous study demonstrates that the selective attention effect and halo effect of corporate reputation moderate the effect of corporate coping strategies during crisis events on consumer loyalty (Fang et al., 2010). So in order to avoid the impact of individual brand preference towards certain pharmaceutical firms in reality and the possibility that some participants may know the background of experimental situations on the experimental results, we collected the profiles of 10 pharmaceutical firms in China through network and tried to maintain the corporate reputation at a moderate level by recombining the words.
Prosocial motivation: Taking “the scandal of Xiuzheng Pharmaceutical Group with excessive chromium found in tainted capsules in 2012” and “Tylenol poisoning incident of Johnson in 1982” as the prototype events, combined with plenty of media reports on the two incidents, we reconstructed the event expression and designed two kinds of experimental stimulus materials considering stronger/lower prosocial motivation. Among which, under stronger prosocial motivation, we claimed that “After the event, M pharmaceutical company firstly considered the interests of the public and consumers, and then recalled all the medications with problems quality which had been flown into the market in the shortest time, also issued warning information to the relevant medical doctors, departments of pharmaceutical sales, medical institutions and pharmaceutical management agencies. The coping attitudes and strategies show that M pharmaceutical firm has been seen as a company exhibiting a high degree of corporate social responsibility.” In the case of lower prosocial motivation, we claim that “After the event, under the pressure of the drug regulatory authority and the public opinion, M pharmaceutical company conducted a series of coping measures to reduce the negative impact of the event on the corporate image and the marketing.”

Corporate strategies for image restoration: we collected more than 20 representative materials of corporate crisis, in which the corporations involved adopted the strategies of denial & defense, reticence & evasion, apology & communication as well as correction & compensation, such as PPA event of Sino-US GSK, Tylenol poisoning incident of Johnson, and the capsule scandal of Xiuzheng Pharmaceutical Group with excessive chromium etc. Then we modified the language expression of these selected 20 events, so that the integrated material can be used for the description of the crisis event of M pharmaceutical company. At the same time we also divided the whole fictitious stimulus material of image restoration strategies of M pharmaceutical company into four types as below. In terms of denial & defense strategy, we claimed that “After the occurrence of the crisis event, through official channels and social media, M pharmaceutical company asserted that the production of medication M had been strictly complying with the relevant regulations and standards, the raw materials procurement, quality control, marketing and other aspects of medication M had the corresponding quality monitoring and detection systems, It was absolutely forbidden to sell unqualified medication M. So the media reports on medication M were not in conformity with the facts.” With regard to reticence & evasion strategy, we claimed that “M pharmaceutical company and its relevant directors refused to officially respond to the event with various reasons.” As for apology & communication strategy, we claimed that “After the crisis, M pharmaceutical company and its relevant directors apologized to the public and its consumers through various channels, carried out multiple forums with the participation of social media, drug regulatory authorities, consumers and dealers at the same time, tried
their best to proactively communicate with the stakeholders to eliminate misunderstandings and gave a timely explanation of the questions and requests that arose from other individuals or organizations, hoping the stakeholders can understand and forgive M pharmaceutical company.” As for correction & compensation strategy, we claimed that “M pharmaceutical company attached great importance to the event, set up a special team to investigate the event, rectified the existing problems and developed a series of compensation policies. At the same time M pharmaceutical company promised to further increase the supervision degree of its production & operation to ensure that the problem like the crisis event of medication M does not occur again.”

**Experimental Procedure**

The samples of this study are from the MBA students and teachers of school of economics & management, Taiyuan University of Science & Technology (TYUST), China. The experiment was conducted in the case room of TYUST MBA on 16 March 2016. In order to prevent the participants from guessing the intention of the present research and giving a preference response, we claimed that we were making a feedback survey of drug sales commissioned by M pharmaceutical company. The ethical principles for research with human participants have been completely observed by us during the whole process of experiment. Participants were randomly assigned to 8 experimental groups and 2 control groups, the experimental procedure was shown as follows: Firstly, the instruction section of the questionnaire we informed the participants that the experiment was conducted in an anonymous way, the participants should fill out the questionnaire based on their real feelings; Secondly, the participants in each group carefully read descriptions of different scenarios in the questionnaire, and then selected the following items respectively: corporate reputation (used to control the test), prosocial motivation (used to control the test), corporate strategies for image restoration (used to control the test). In the 2 control groups with the strategies of no action taken by corporations, we only provided the participants with the coercive measures taken by the higher supervisory authority of M pharmaceutical company, without mentioning any information about coping actions of M pharmaceutical company. The rest experimental procedures are the same as the experimental groups; finally, the demographic characteristics of participants were investigated (gender, age, health status, working seniority).
Measurement of Variables

The first is the measurement of corporate reputation. By referring to the scales used in the studies by Fombrun and Van Riel (1997), Fang et al. (2010), we designed one survey item that “what do you think of the reputation of M pharmaceutical company in the minds of consumers?” The second is the judgement of the intensity of prosocial motivation, based on the studies by Grant (31), Grant and Berry (2011), we distinguished it via the certainty degree of prosocial motivation perceived by participants: “to what extent do you confirm that the decision motive of M pharmaceutical company when selecting image restoration strategies is oriented towards the public/consumer interests and to assume the corporate social responsibility?” If the stimulus in the experiment is effective, the score of the stronger prosocial motivation given by the participants is higher and the score of the lower prosocial motivation is lower, also a significant difference should exist between the two scores; The third is the measurement of corporate strategies for image restoration, we asked the participants to make judgments about the types of image restoration strategies taken by M pharmaceutical company: denial & defense, reticence & evasion, apology & communication or correction & compensation? The fourth is to measure consumer trust. We performed this work by the self-reporting method. By referring to the scales used in the studies by Kim, Ferrin, Cooper and Dirks (2004), and Tao Rui (2011), from the perspectives of trust belief and trust intention, we designed a survey of 6-item and 4-item respectively to measure consumer trust. As to the measurement of all variables above, except that corporate strategy for image restoration was defined as a categorical variable, the rest items were measured using a 7-point Likert-type scale ranged from 1: “very disagree” to 7: “strongly agree”, and 4 represents “neutral”. At the last part of the experiment, the participants were asked to fill out a survey about their own personal characteristics (gender, age, health status, working seniority).

Results Analysis

Sample Summary

The total sample in this study consisted of 280 participants. Subsequently the participants were randomly divided into 8 experimental groups and 2 control groups by convenience sampling method and each group had 28 participants. A total of 280 questionnaires were distributed, in which, 249 questionnaires were deemed effective after eliminating the 31 invalid questionnaires caused by omitted selection, misjudgment and other reasons. Since there are 95 male samples and 154 female samples in our experiment, there is a higher proportion of females
(61.8%) than males (38.2%). Through ANOVA we find that (Note: before performing ANOVA, we tested the homogeneity of variance and all the conditions for ANOVA were met. Given the length limitation, we will not repeat them in the following sections), there is no significant difference in the participant’s assessment towards consumer trust between genders ($F_{\text{gender}}(1, 247)=0.977, P=0.324$). Meanwhile, considering the fact that participants who are in sub-health or illness status are possibly more sensitive to drug scandals, we also conducted an ANOVA on the participant’s assessment of consumer trust who are in different health conditions (excellent, good, weak and disease), the result suggests that the impact of health status can also be eliminated from our consideration ($F_{\text{health status}}(3, 245)=1.493, P=0.217$).

**Control Test**

The ANOVA test on corporate reputation demonstrates that, there is no significant difference in the participant’s reports on corporate reputation among the 10 groups (The mean value varies from 4.82 to 5.18, $F(9, 239)=0.629, P=0.772$), which indicates that corporate reputation is successfully manipulated. In the aspect of prosocial motivation, in the stimulus situations considering stronger and lower prosocial motivations, a significant difference is observed in the judgment of participants on the intensity of prosocial motivation ($M_{\text{stronger}}=5.83, M_{\text{lower}}=3.97, F(1, 247)=112.601, P=0.000$). We don’t notice a significant difference in the participants’ determination of the certainty degree of prosocial motivation between the 4 experimental groups and 1 control groups under the stimulus situation of stronger prosocial motivation(The mean value varies from 5.59 to 6.04, $F(4, 116)=0.891, P=0.472$), and we also find no significant difference in the participants’ determination of the certainty degree of prosocial motivation between the 4 experimental groups and 1 control group under the stimulus situation of lower prosocial motivation (The mean value ranges from 3.62 to 4.25, $F(4, 123)=1.246, P=0.295$), which illustrate that prosocial motivation is also successfully manipulated. The last is the test of corporate strategies for image restoration. Each group corresponding to denial & defense strategy, reticence & evasion strategy, apology & communication strategy and correction & compensation strategy, has 56 original samples respectively, after excluding the invalid samples due to omitted selection, misjudgment and other reasons, the remaining valid samples are 46, 52, 49 and 51, respectively. The details are shown in Table 1.
Tests of Reliability and Validity

To the measure consumer trust as the dependent variable, the best known and most widely used scale was employed in the present study to guarantee the content validity. On the other hand, the Cronbach’s α coefficient for the 10-item consumer trust scale is 0.827, which means the consumer trust scale adopted in our experiment has good reliability.

Hypothesis Testing

The Influence of Corporate Strategies for Image Restoration on Consumer Trust. In order to verify the main-effect proposed in H1, namely, the image restoration strategies adopted by corporations have a differential effect on consumer trust, firstly the 249 samples in the 10 groups under the stimulus situation of lower and stronger prosocial motivations were divided into 5 new groups without considering the factor of prosocial motivation, i.e., denial & defense strategy group, reticence & evasion strategy group, apology & communication strategy group, correction & compensation strategy group and the control group (strategy of no action taken by corporations). Then the one-way ANOVA was used to analyze the difference in consumer trust among the “mixed” 5 groups. Result indicates that there is a statistically significant difference in consumer trust among the 5 groups (F(4, 244) = 67.832, P = 0.000). Therefore, a significant main effect of corporate strategies for image restoration is found, H1 is supported. Afterwards, to further verify H1a, H1b, H1c and H1d, a least significant difference (LSD) test for post-hoc comparison was employed, the result is shown in Table 2.

Table 1. Distribution of the Valid Sample

<table>
<thead>
<tr>
<th>Corporate Strategies for Image Restoration</th>
<th>Prosocial Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stronger</td>
</tr>
<tr>
<td>Denial &amp; Defense</td>
<td>22</td>
</tr>
<tr>
<td>Reticence &amp; Evasion</td>
<td>25</td>
</tr>
<tr>
<td>Apology &amp; Communication</td>
<td>24</td>
</tr>
<tr>
<td>Correction &amp; Compensation</td>
<td>24</td>
</tr>
</tbody>
</table>
Table 2. Post-Hoc Comparison of Corporate Strategies for Image Restoration Using LSD Test

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Control Group (I)</th>
<th>Experimental Group (J)</th>
<th>Mean Difference (I-J)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Trust</td>
<td>Strategy of No Action Taken by Corporations (N=51, M=3.87)</td>
<td>Denial &amp; Defense Strategy (N=46, M=2.41)</td>
<td>1.46</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reticence &amp; Evasion Strategy (N=52, M=2.67)</td>
<td>1.20</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apology &amp; Communication Strategy (N=49, M=5.34)</td>
<td>-1.47</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correction &amp; Compensation Strategy (N=51, M=4.98)</td>
<td>-1.11</td>
<td>0.00</td>
</tr>
</tbody>
</table>

As can be seen, the levels of consumer trust in both denial & defense strategy group and reticence & evasion strategy group are significantly lower than that in the control group (strategy of no action taken by corporations). On the contrary, the levels of consumer trust in both apology & communication strategy group and correction & compensation strategy group are significantly higher than that in the control group. On the basis of these results, we can conclude that, after the occurrence of crisis events, the strategies of apology & communication and correction & compensation positively adopted by corporations can significantly increase the level of consumer trust, while the level of consumer trust is significantly decreased when corporations take the negative strategies of denial & defense and reticence & evasion. Hence, H1a, H1b, H1c and H1d are supported by the data.

The Moderating Effect of Prosocial Motivation on the Selection of Corporate Strategies for Image Restoration. Firstly, we removed all the 51 samples of the 2 control groups, only the 198 valid samples of the 8 experimental groups were left to examine the moderating effect of the prosocial motivation on the selection of corporate strategies for image restoration. The ANOVA results demonstrate that, in the case of stronger prosocial motivation, there exists a significant difference in the repair of consumer trust among the four types of corporate strategies for image restoration ($F(3, 91)=21.916, P=0.000$). From Table 3, we further find that, in terms of the restoration effectiveness of consumer trust, the best strategy is apology & communication ($M=5.97$), corrective & compensation is the second-best strategy ($M=5.51$), the third-best is reticence & evasion ($M=2.99$), and the worst strategy is denial & defense ($M=2.68$). So H2a is verified. In the situation of lower prosocial motivation, a significant difference is still observed in the repair of consumer trust among the four types of corporate strategies for image restoration ($F(3, 99)=5.716, P=0.001$), which is compatible with H2b. However, as
can be seen from Table 3, the positive strategies of apology & communication ($M=4.74$) and corrective & compensation($M=4.51$) are significantly better than the negative strategies of denial & defense($M=2.16$) and reticence & evasion ($M=2.37$). Nevertheless, we find no significant difference between apology & communication strategy and correction & compensation strategy($P=0.157>0.05$), as well as no significant difference is noted between apology & communication strategy and correction & compensation strategy($P=0.171>0.05$). Secondly, taking the 8 experimental groups in Table 3 as a whole without considering intensity of prosocial motivation, the one-way ANOVA was employed to further explore the moderating effect of the prosocial motivation on the selection of corporate strategies for image restoration.

Table 3. Analysis of the Moderating Role of Prosocial Motivation

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<tr>
<td>Consumer Trust</td>
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<td>Denial &amp; Defense ($M=2.68$)</td>
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<tr>
<td></td>
<td></td>
<td>Correction &amp; Compensation ($M=5.51$)</td>
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<tr>
<td></td>
<td></td>
<td>Reticence &amp; Evasion ($M=2.99$)</td>
<td>Apology &amp; Communication ($M=5.97$)</td>
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<tr>
<td></td>
<td></td>
<td>Correction &amp; Compensation ($M=5.51$)</td>
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<td></td>
<td>Apology &amp; Communication ($M=5.97$)</td>
<td>Correction &amp; Compensation ($M=5.51$)</td>
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<tr>
<td></td>
<td>Prosocial Motivation (Lower)</td>
<td>Denial &amp; Defense ($M=2.16$)</td>
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<td>Reticence &amp; Evasion ($M=2.37$)</td>
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<td></td>
<td></td>
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<td></td>
<td>Reticence &amp; Evasion ($M=2.37$)</td>
<td>Apology &amp; Communication ($M=4.74$)</td>
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<td>Correction &amp; Compensation ($M=4.51$)</td>
<td>0.23</td>
<td>0.157</td>
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</table>

The result suggests that the interaction term between prosocial motivation and corporate strategies for image restoration is statistically significant($F(7, 241)=17.298, P=0.000$), H2 is supported. Additionally, taking the prosocial motivation as the independent variable, the consumer trust as the dependent variable, we
divided the 198 samples in the 8 experimental groups into 2 new groups considering the intensity of prosocial motivation, namely, stronger prosocial motivation group and lower prosocial motivation group, to examine the difference in consumer trust between the 2 new groups using one-way ANOVA. As a result, we find that, a significant difference exists between the two prosocial motivation groups in consumer trust ($F_{\text{prosocial motivation}}(1, 247) = 8.317, P = 0.004$). Combined with Table 3, we can also conclude that, no matter what image restoration strategy the corporation adopts, the level of consumer trust under stronger prosocial motivation is significantly higher than that under lower prosocial motivation, which indicates that, compared with the lower prosocial motivation, a stronger prosocial motivation can lead to a higher level of consumer trust.

**Discussion**

Plenty of studies show that, after the occurrence of crisis events, image restoration strategies adopted by corporations can enhance corporate reputation and reduce the product/service risk perceived by consumers, which can eventually lead to an increase in consumer recognition, consumer trust and purchase behavior (Xu, 2013). Nevertheless, according to the practical case of enterprise crisis management, the effect of the implementation of repair strategies varies from case to case, aimless repair strategies can negatively impress the public with corporate hypocrisy instead of effectively resolving the crisis (Wagner, Lutz, & Weitz, 2009), plunging enterprises into a deeper crisis. The results in this study demonstrate that, compared with the situation that no action is taken by the corporations in response to the crisis, the adopted strategies of denial & defense, reticence & evasion, apology & communication as well as correction & compensation have differential effects on consumer trust, which is consistent with the previous findings (Yu & Zhao, 2015; Shen & Fan, 2016). Furthermore, while our study points out that, once a crisis occurs, consumer trust towards corporate product & service is affected (the strategy of no action taken by corporations, $M = 3.87$). At this time, the strategies of denial & defense and reticence & evasion adopted by corporations have a significant reducing impact on consumer trust, while the adopted strategies of apology & communication and correction & compensation significantly increase consumer trust. Accordingly, when facing the crisis, corporations shouldn’t blindly imitate the successfully coping strategies of other enterprises, the best solution is to proactively respond to the questions that arise from other individuals or organizations instead of negatively evading the question and even conducting attacks against the public using denial & defense and reticence & evasion strategies. The reason, in our view, is that as the “terminal user” of enterprise products or services, consumers are actually embedded in the network of the corporate production/operation, thus no matter what sort of crisis
event it is and no matter what the true cause, all of them can harm consumers and their benefits, as a result, consumer trust towards corporations is objectively damaged to some extent. Obviously in the following steps to deal with crisis, the urgent thing for corporations is to appease the consumer by employing positive actions rather than to decrease the adverse effects caused by the crisis with a negatively stonewalling strategy or counterattack action, the important thing, of course, is that corporations should avoid causing negative perception of consumers.

What’s more, as can be seen from the results in this study, with regard to the restoration effectiveness of consumer trust, the priority rankings of corporate strategies for image restoration illustrate a difference under different prosocial motivation levels, while this difference disappears from the view of positive-negative coping strategies. And no matter what image restoration strategy the corporation adopts, the level of consumer trust under stronger prosocial motivation is higher than that under lower prosocial motivation, which is not in accordance with the study by Fang et al. (2010). One possible reason is that, as the benefit victims of crisis, both the corporation and consumer have the motivation to safeguard their own interests. The study by Fang et al. (2010) focuses on exploring the optimal strategy of the enterprise in crisis without considering the influence of decision motive. While in this study, through introducing the prosocial motivation factor, our research theme is that when selecting coping strategies, we should place special emphasis on public/consumer interests or corporate benefits? As a result, different types of motivational orientations generate different levels of restoration effectiveness of consumer trust. So obviously, this study argues that, from the view of the effectiveness of crisis intervention, corporations should insist on the proactive mode-oriented strategy type and the benefits of consumer & public-oriented decision motive when selecting coping strategies.

Conclusion

After the occurrence of crisis events, improper coping strategies can plunge enterprises into a deeper crisis, resulting in more severe losses. Hence we wonder which strategy used by corporations is eventually effective in resolving the crisis, reshaping the corporate image and restoring consumer trust? On the basis of this problem situation, from the perspective of prosocial motivation, the influence mechanism of corporate strategies for image restoration on consumer trust in crisis events was explored using the scenario experiments. The following conclusions can be drawn: (1) After the crisis, the strategies of denial & defense, reticence & evasion, apology & communication as well as correction & compensation have differential effects on consumer trust. The strategies of denial & defense and reticence & evasion adopted by corporations have a significant
reducing impact on consumer trust, while the adopted strategies of apology & communication and correction & compensation can significantly increase consumer trust; (2) In terms of the restoration effectiveness of consumer trust, prosocial motivation plays a moderating role in selecting image restoration strategies. Namely, the priority rankings of corporate strategies for image restoration demonstrate a difference under different levels of prosocial motivation. Under stronger prosocial motivation, the best strategy is apology & communication, corrective & compensation is the second-best strategy, the third-best is reticence & evasion, and the worst strategy is denial & defense. Under lower prosocial motivation, the optimal strategies are apology & communication and correction & compensation, reticence & evasion and denial & defense are suboptimal strategies; (3) From the view of positive-negative coping strategies, there is no difference among the priority rankings of corporate strategies for image restoration under different levels of prosocial motivation. In the case that prosocial motivation is strong or weak, apology & communication, corrective & compensation are the best strategies, the second-best ones are reticence & evasion and denial & defense; (4) One interesting finding is that no matter what image restoration strategy the corporation adopts, the level of consumer trust under stronger prosocial motivation is significantly higher than that under weaker prosocial motivation, prosocial motivation has a positive effect on consumer trust; (5) Actively adopting public benefits-oriented strategies of apology & communication and corrective & compensation is not a bad choice of losing face for corporations, on the contrary it is even a mutually beneficial choice.

Nonetheless, the present study also suffers some limitations. For one thing, the scenario experiments were carried out by recruiting students and teachers from universities as the research samples (participants) and using the product-harm crisis of a fictitious pharmaceutical company as stimulus events, thus the representativeness of research samples and the universality of the obtained conclusions show certain limitations. In fact, regarding the problems proposed in the present work, by combing the empirical analysis and case study, the work on comparative analysis of crisis events occurred in other industries can enhance the reliability and validity of findings in the present study, which is also the direction of our future research. For another thing, we only investigated the effect mechanism of corporate strategies for image restoration on consumer trust from the perspective of prosocial motivation, while the difference of the effectiveness of crisis intervention is not merely caused by the above two factors. Therefore, how to better solve the problems in corporate crisis management, optimize crisis management systems and enhance the quality of crisis decision-making through scientifically combining more valuable variables to detailedly describe the influence of corporate strategies for image restoration on consumer trust in crisis events, is still worthy of further exploration by enterprise managers and researchers.
Acknowledgements

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References


