

The Impact of Corporate Repair Strategies on Consumers' Negative Behavioral Responses in the Context of Food Safety Crises

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Abstract: In recent years, the frequent occurrence of product safety incidents indicates that food enterprises face immense pressure regarding quality control. When a crisis occurs, consumers typically resort to market exit behaviors and negative information dissemination to seek compensation for their interests, directly damaging corporate operational performance and brand image. As consumers are the direct victims of the crisis, their subjective perceptions and behavioral responses are key indicators for evaluating repair effectiveness. Based on the Stimulus-Organism-Response (S-O-R) theory, this paper analyzes the mechanisms of three typical repair strategies—information dissemination, emotional interaction, and corrective measures—and explores their synergistic effects. The findings reveal that these interventions can significantly improve corporate image and mitigate potential losses. Furthermore, perceived risk plays a mediating and moderating role, strengthening positive intervention effects while also deepening negative consequences. This conclusion provides important empirical support for establishing a modern crisis management system. Specifically, it necessitates improving recall systems and compensation measures to eliminate potential safety hazards, while simultaneously strengthening brand building and engaging in transparent communication to rebuild public trust, thereby fostering a long-term, sustainable development strategy.

Keywords: SOR Theory; Product Harm Crisis; Repair Strategy; Consumer Retaliatory Behavior; Perceived Risk.

1. Introduction

Against the backdrop of deepening globalization, product harm crises occur frequently and have become a major issue constraining corporate operational efficiency. Such incidents, often triggered by product quality defects or the spread of negative public opinion, significantly impact corporate brand value and market reputation, gradually leading to systemic distrust. In this context, the quality of the interactive brand relationship between food enterprises and consumers becomes a crucial factor determining retaliatory consumption behavior. Research indicates that good brand relationships can partially mitigate the adverse effects of negative public opinion on consumer psychology, thereby reducing the probability of extreme market reactions caused by brand image damage. Given the profound and lasting impact of such events on corporate reputation, analyzing the effectiveness of strategies adopted during product safety crises holds significant practical importance. Therefore, this study, based on the Stimulus-Organism-Response (S-O-R) theory, analyzes consumer decision-making processes, conducting in-depth theoretical and empirical research from three perspectives: information supplementation, emotional regulation, and behavioral adjustment. This approach enriches existing theoretical understanding in the field and provides practical guidance for corporate scientific crisis management, particularly concerning crisis response, brand rebuilding, and consumer relationship maintenance in the food industry.

2. Research Hypotheses

Following a product safety crisis, enterprises must rely on concrete actions to rebuild trust with consumers. Focusing on

the food safety domain, this study categorizes corporate crisis management strategies into three types: informational repair, emotional repair, and corrective repair. Informational repair uses timely and transparent information disclosure to significantly reduce consumer information uncertainty. Emotional repair builds or strengthens emotional connections between the brand and the public. Corrective repair focuses more on meeting consumers' practical needs through material compensation or other problem-solving methods. These three approaches complement and support each other, forming a complete crisis management system.

Li Qianqian and Fan Ningcheng (2025) [9] argue that timely repair reduces consumers' cognitive load, facilitating trust rebuilding. Consequently, risk perception is considered a crucial mediating variable in consumer choices. During a food harm crisis, if corporate response measures are not accepted by consumers, it becomes difficult to guarantee that the event did not substantially damage product quality.

Based on this theoretical perspective, the following hypotheses are proposed:

H1: In a product harm crisis context, the three types of repair strategies adopted by food enterprises have significantly different effects on consumer perceived risk.

H1a: Informational repair by food enterprises has a significant positive impact on consumer perceived risk.

H1b: Emotional repair by food enterprises has a significant positive impact on consumer perceived risk.

H1c: Corrective repair by food enterprises has a significant positive impact on consumer perceived risk.

During a food crisis, consumers' risk perception is influenced by the nature of the event, leading to subjective estimates of potential losses. Existing research shows such risk perception significantly affects consumer behavior. Ma

Yanli and Xu Dewu (2025) [10] found that when consumers believe food could affect their own or their family's health, a series of emotional reactions occur, negatively impacting corporate image and reducing brand loyalty.

Based on the preceding theoretical analysis, the following hypotheses are proposed:

H2: Perceived risk has a significant positive impact on consumer retaliatory behavior.

H2a: Perceived risk has a significant positive impact on negative word-of-mouth (NWOM) dissemination.

H2b: Perceived risk has a significant positive impact on consumer switching purchase behavior.

Repair strategies are typical stimulus variables, playing a crucial role in consumers' cognitive evaluation of crisis management measures and the generation of retaliatory tendencies. Zhang Hong and Wang Yuting (2022) [11] argue that standardized legal procedures, clear compensation commitments, and transparent apologies accelerate trust recovery and reduce retaliation risks arising from negative events.

Based on the above analysis, the following hypotheses are proposed:

H3: Repair strategies adopted by enterprises after a crisis can reduce consumer retaliatory behavior.

H3a: Informational repair adopted after a crisis can reduce consumer retaliatory behavior.

H3a1: Informational repair can reduce negative word-of-mouth dissemination.

H3a2: Informational repair can reduce consumer switching purchase behavior.

H3b: Emotional repair adopted after a crisis can reduce consumer retaliatory behavior.

H3b1: Emotional repair can reduce negative word-of-mouth dissemination.

H3b2: Emotional repair can reduce consumer switching purchase behavior.

H3c: Corrective repair adopted after a crisis can reduce consumer retaliatory behavior.

H3c1: Corrective repair can reduce negative word-of-mouth dissemination.

H3c2: Corrective repair can reduce consumer switching purchase behavior.

Following a product safety incident, consumer response behaviors can be broadly categorized into retaliatory and adaptive forms. Switching to a competitor's brand is generally viewed as a retaliatory behavior. Ma Yanli and Xu Dewu (2025) [10] suggest that higher risk perception strengthens the intention to switch brands. In such cases, consumers adopt self-protective behaviors like reducing purchase frequency, choosing alternative products, or discontinuing use to enhance product safety expectations.

Based on the above analysis, the following hypothesis is proposed:

H4: Consumer perceived risk mediates the relationship between corporate repair strategies and consumer retaliatory behavior.

3. Research Model

Based on the theoretical framework constructed in this study, the main variables are divided into three key levels. The independent variables are the three repair strategies (informational, emotional, corrective) used by food enterprises during a product safety crisis. The mediating variable is consumers' risk perception process regarding

product harm, bridging the independent and dependent variables. The dependent variable is retaliatory behavior resulting from the product harm crisis, manifested as negative word-of-mouth, reduced brand loyalty, etc., as shown in Figure 1.

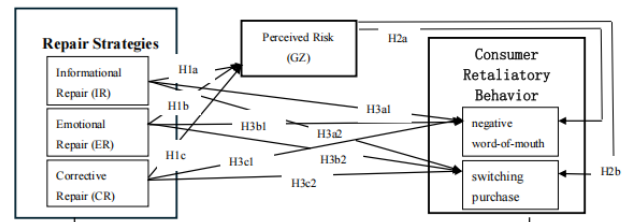


Figure 1. Theoretical Model of Food Enterprise Repair Strategies and Consumer Retaliatory Behavior

4. Research Methods

(1) Variable Measurement

Based on the theoretical framework of repair strategies, perceived risk, and consumer retaliatory behavior, this study employs multi-dimensional quantitative analysis to build the model. Repair strategies are divided into three dimensions (informational, emotional, corrective) with 9 measurement items, sourced from the academic work of Li Silan, Chen Guoping, et al. (2021) [12]. Perceived risk was assessed using three specific scales based on Ma Yanli and Xu Dewu (2025) [10]. The consumer retaliatory behavior evaluation system drew on the research scheme of Han Zhao, Du Gang, and Xiong Aihua (2022) [13], comprising seven main dimensions. The content of these scales was optimized and integrated based on a detailed review of existing literature and the research objectives, resulting in a systematic data measurement tool.

(2) Data Collection

A formal survey was conducted using a combination of online and offline questionnaires. During the questionnaire completion process, respondents' questions were addressed promptly to ensure data accuracy and completeness. A total of 700 questionnaires were distributed, with 686 returned, yielding a response rate of 98%. Based on the 19 scale items in the research design, the final sample size significantly exceeds the minimum required for quantitative analysis (i.e., 95 cases), ensuring the scientific validity and reliability of statistical inferences.

5. Data Analysis and Research Results

(1) Reliability and Validity Analysis

AMOS 29.0 was used for confirmatory factor analysis to test the scale data. Results showed that the overall scale Cronbach's α coefficient was 0.827, exceeding the critical standard of 0.7, with significance $p < 0.001$. All standardized factor loadings were above 0.7, and all Average Variance Extracted (AVE) values were above 0.5, indicating good internal consistency and stability, as well as good discriminant validity among latent variables. This confirms the reasonable classification ability and construct validity of the questionnaire scale.

Table 1. Variable Measurement Items and Sources

Dimension	Code	Measurement Item
Informational Repair (IR)	IR1	During the handling of this product harm incident, the food company promptly informed consumers of its response.
	IR2	The food company proactively provided necessary information to the public regarding this product harm incident.
	IR3	Consumers have channels to access the progress of the food company's handling of this product harm incident.
Emotional Repair (ER)	ER1	The food company considered consumers' emotions when responding to this product harm incident.
	ER2	The food company made an explicit apology for this product harm incident.
	ER3	The food company requested consumers' understanding in its response to this product harm incident.
Corrective Repair (CR)	CR1	The food company made corresponding corrective efforts in response to this product harm incident.
	CR2	The food company indicated it would provide appropriate economic compensation to victims of this product harm incident.
	CR3	The food company used economic compensation methods when handling this product harm incident.
Perceived Risk (GZ)	GZ1	The value obtained from purchasing this product does not match the cost paid.
	GZ2	Purchasing this product may lead to physical injury incidents.
	GZ3	The quality of this product does not meet expectations.
Consumer Retaliatory Behavior	CP1	I will no longer continue to purchase food from this company.
	CP2	I will boycott food from this company.
	CP3	I will switch to purchasing food from other companies instead.
	CP4	Even if the competitor's food prices are higher, I would still buy from them.
	NW1	I will spread negative information about this company's food safety.
	NW2	I will disparage this company's food in front of friends and family.
	NW3	I will advise my friends and family not to buy this company's food.

(2) Structural Model

Using a product harm crisis as the background case, this study employs a multi-layer latent variable structural equation model to examine the influence mechanism of various repair measures adopted by food enterprises on the interaction between the enterprise and consumers. In the model, the three

repair methods are independent variables, perceived risk level is the mediating variable, and switching purchase intention and negative word-of-mouth are dependent variables. This theoretical framework provides a scientific basis for empirical research design and offers operational norms and technical support for data analysis.

Table 2. Path Analysis Results

Path	Std. Coefficient β	S.E.	C.R.	P
Perceived Risk \leftarrow Informational Repair	0.303	0.050	7.415	***
Perceived Risk \leftarrow Emotional Repair	0.179	0.049	4.399	***
Perceived Risk \leftarrow Corrective Repair	0.268	0.047	6.677	***
Switching Purchase \leftarrow Informational Repair	-0.117	0.054	-2.664	0.008
Switching Purchase \leftarrow Perceived Risk	0.498	0.048	10.596	***
Negative WOM \leftarrow Perceived Risk	0.392	0.052	7.919	***
Switching Purchase \leftarrow Emotional Repair	-0.118	0.053	-2.749	0.006
Switching Purchase \leftarrow Corrective Repair	-0.130	0.051	-3.004	0.003
Negative WOM \leftarrow Informational Repair	-0.133	0.058	-2.863	0.004
Negative WOM \leftarrow Emotional Repair	-0.132	0.057	-2.924	0.003
Negative WOM \leftarrow Corrective Repair	-0.101	0.055	-2.230	0.026

(3) Path Analysis

All three repair types had a significant positive impact on

perceived risk ($p < 0.001$). Perceived risk had a significant positive impact on both switching purchase and negative

word-of-mouth ($p < 0.001$). All three repair types had a significant negative impact on both switching purchase and negative word-of-mouth ($p < 0.05$). Thus, H1-H3 are supported. See Table 2 for details.

(4) Mediation Effect Analysis

Perceived risk as a mediating variable significantly influences the effect of the three repair strategies (corrective, emotional, informational) on negative word-of-mouth and consumer switching purchase decisions. Informational repair showed the strongest mediation effect, with β coefficients of

0.119, 0.105, and 0.070 respectively for the paths tested (Note: Table 3 shows specific indirect effects). This indicates its enhanced effect on consumers' information acquisition ability during a product harm crisis, where increased risk perception can also lead to increased retaliatory behavior. The results strongly support hypothesis H4, suggesting that when facing negative events, enterprises should adopt repair measures combining rational and emotional elements to mitigate negative market reactions arising from perceived risk.

Table 3. Mediation Effect Analysis Results

Path	Direct Effect	Indirect Effect (Mediation)	Total Effect	Lower	Upper
Corrective Repair → Perceived Risk → Negative WOM	-0.101	0.105	0.004	0.068	0.154
Emotional Repair → Perceived Risk → Negative WOM	-0.132	0.070	-0.062	0.038	0.110
Informational Repair → Perceived Risk → Negative WOM	-0.133	0.119	-0.014	0.081	0.167
Corrective Repair → Perceived Risk → Switching Purchase	-0.130	0.134	0.004	0.091	0.183
Emotional Repair → Perceived Risk → Switching Purchase	-0.118	0.089	-0.029	0.048	0.135
Informational Repair → Perceived Risk → Switching Purchase	-0.117	0.151	0.034	0.109	0.206

6. Conclusion and Recommendations

(1) Discussion of Findings

Dual Impact Mechanism of Repair Strategies on Perceived Risk: The results show that all three repair strategies significantly positively impact consumer perceived risk. When companies use informational repair, it can paradoxically deepen consumers' risk perception that "the problem indeed exists and is quite serious." Corrective repair deepens the perception that "the product indeed has safety hazards." Emotional repair, while soothing emotions, can lead consumers to perceive that "the company indeed made a mistake." Although intended to alleviate negative consumer emotions, excessive information disclosure or inappropriate emotional expression during implementation may inadvertently increase consumers' risk perception.

Driving Role of Perceived Risk on Consumer Retaliatory Behavior: Path analysis results show that perceived risk has a highly significant positive impact on both switching purchase behavior and negative word-of-mouth dissemination, verifying the mediating role of perceived risk between repair strategies and retaliatory behavior in product harm crisis contexts. The findings theoretically validate the applicability of the SOR theory in explaining the specific context of product harm crises. Practically, consumers' retaliatory behavior stems not directly from the crisis event itself, but from the enterprise's actions; therefore, enterprises should prioritize reducing perceived risk as the core focus of crisis management, rather than simply following an "apologize-recall-compensate" formula.

Direct Inhibitory Effect of Repair Strategies on Retaliatory Behavior: All three repair strategies directly inhibit consumer retaliatory behavior, with significant negative path coefficients for informational, emotional, and corrective repair on both negative word-of-mouth and switching purchase. When enterprises adopt multiple repair strategies, the direct inhibitory effect can offset consumer retaliatory behavior. Substantive corrective measures build trust more effectively than emotional repair alone. Product harm crises severely damage the psychological contract between food enterprises and consumers; crisis response measures taken by enterprises help rebuild trust through various pathways, thereby mitigating negative impacts.

(2) Research Recommendations

Establish a Trinity Crisis Repair Closed Loop: Based on the finding that "informational repair has the strongest effect," build a synergistic "information-emotion-correction" repair mechanism. Food enterprises should use informational repair as the "first line of defense" during crisis response. In the early crisis stage, initiate transparent communication using official websites, social media, and press conferences to release updates, cause analysis, and improvement measures promptly, preventing panic caused by information asymmetry. In the next stage, focus on emotional rebuilding by expressing corporate social responsibility and humanistic care through executive apologies, dedicated customer service hotlines, and caring for affected users. Concurrently, take substantive actions to reduce consumers' economic loss and health risk concerns. This synergistic repair mechanism enables enterprises to support functions mutually and effectively respond to crises.

Establish a Perceived Risk Interruption Mechanism: Based on the "mediating role of perceived risk," build a "cognitive intervention-behavioral guidance-trust rebuilding" risk interruption mechanism. Immediately after a crisis onset, initiate information disclosure, synchronously (push) recall notices and authoritative test reports through official channels to correct public cognitive biases. Management should actively intervene in public opinion handling using sincere acknowledgments of error, proactive explanations, and clear commitments through channels like public apology videos and on-site interactions to help affected populations regain confidence. Establish a full-process risk identification and dynamic monitoring system to develop precise solutions for existing problems, ensuring potential dangers are eliminated promptly.

Establish a Full-Cycle Crisis Management System: Based on the finding that "repair strategies help inhibit consumer retaliatory behavior," build a "warning-response-repair" full-cycle management system. In the early crisis stage, establish a closed-loop risk prevention system including data collection/analysis, contingency plan development, and dynamic adjustment. During the mid-crisis stage, combine multiple measures, starting with informational transparent repair and dynamically adjusting strategies based on public opinion. In the late crisis stage, strengthen emotional support repair through public executive apologies and accountability determination, while focusing on technically oriented repair by strictly implementing specific actions like product recalls

and compensation payments to eliminate the negative impacts of misconduct as much as possible.

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