How Causal Dimensions of Product Harm Crisis Shape Consumer Moral Reputation towards the Crisis Company and Brand Crisis: The Moderating Role of Perceived Societal Damage

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Abstract

Irrespective of many management strategies, product harm crises, discrete, well-publicized occurrences in which products are found to be defective and dangerous, are increasing at an accelerating rate throughout the globe with negative consequences for companies and brands. It alarms the importance of scrutinizing this worst nightmare from a new empirical angle while focusing on the ethical eye of consumers. Therefore, the present study attempts to explore how causal dimensions of product harm crisis related to two Attributional grounds (company accused and consumer accused) shape consumer moral reputation towards the crisis company and crisis brand in product harm crises. A self-administrated, questionnaire was used to examine how Sri Lankan (n= 492) and Chinese (n=492) young consumers see company and brand through their ethical eye that reflects their moral reputation. Results revealed that consumer morally views company and brand in an entirely different way under the two Attributional grounds that ultimately affects brand equity and purchase intention of the crisis brand. There exist significant negative and positive links between consumer moral reputations towards the crisis company and crisis brand respectively, under consumer accused crisis. Subsequently, consumer moral reputation towards the crisis company has a significant negative link with consumer brand equity, while consumer moral reputation toward the crisis brand has a positive link with consumer based brand equity under consumer-accused crisis. This study provides new insights for the companies to manage such crises, while safekeeping the brand equity in midst of product harm crisis.

Key words: *Consumer based brand equity, Moral reputation, Perceived societal damage, Product harm crisis, Purchase intention*

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DOI: https://doi.org/10.4038/kjm.v13i1.7745

Introduction

Product harm crises are specific, well-publicized occurrences in which defective or dangerous products are discovered (Siomkos and Kurzbard, 1994; Dawar and Pillutla, 2000). Mostly product harm crises considered to be happening at the sub-brand level (Lei et al., 2008). Therefore, a “product harm crisis” refers to well-publicized incidents involving product failures or damages linked with certain brands in particular. Product liability crises have recently become frequent in the market (Cleeren et al., 2008). Product harm crises are becoming more visible and transparent at present for many reasons. More stringent product safety regulations and a transparent and widespread media culture accelerated by technological advancements make consumer products more transparent. Further, it is accelerated by closer inspection by producers and policy experts, consumer activist actions, global sourcing of production, and optimistic involvement and control of products by government or governmental agencies (for example, the United States Consumer Product Safety Commission) (Cleeren et al., 2008; Hsu, and Cheng, 2018; Zhang et al., 2019). Product harm crises could incur huge losses to the products as well as brands. For instance, significant income and market declines, damage to company's and brand’s reputation, supply chain destructions with product quality failures (Chakraborty et al., 2023) and the potential and even irrevocable destruction of meticulously crafted brand equity (Van Heerde et al., 2007).

Because of the broad nature of product harm crises, previous literature categorized them into different classes: victim, accidental, and intentional (Crouch et al., 2020). However, intentional forms are common in the prevailing studies of product harm crises induced and attached with consumer moral thoughts that reflect their ethical behavior (Vassilikopoulou et al., 2011). In fact, past literature documented the importance of ethical and supportive environment of front-line employees in product harm crisis management (Pangarkar et al., 2022).

Here are a few examples of such catastrophes. More than 100 people died in accidents involving defective Firestone tyres in the US, Venezuela, and Saudi Arabia in 2000, prompting the manufacturer to recall millions of its goods (Advertising Age, 2000). In September 2008, a high concentration of the chemical Melamine led to the illness of 296 thousand children, with six deaths (BBC News Report, 2009). Furthermore, Fonterra, the world's biggest dairy trading company, suffered a loss of US$113 million as a result of the incident (Evans and Bi, 2008). The Coca-Cola contamination case in 1999 is a well-known historical example of a large-scale corporate product harm crisis (Barbarossa, 2018). After hundreds of people in Belgium and France experienced serious medical issues after drinking Coca Cola, the company was pushed to withdraw 30 million cans and bottles (Birkland & Nath, 2000). These are only a handful of the most well-known examples of recent product-related damage occurrences. These incidents have the ability to harm the company’s brand and stakeholders in an adverse manner (De Blasio and Veale, 2009; Hsu and Cheng 2018). As a result, product harm crises being one of the worst catastrophic events that may occur to businesses (Van Heerde et al., 2007) and brands (Dawar and Pillutla, 2000), exposing their fragile intellectual resources like consumer moral reputation and consumer-based brand equity at potential danger. Consumer-based brand equity, defined as “the differential effect that brand knowledge has on consumer response to that band’s marketing” (Keller 1993, p.45), is vulnerable and is negatively impacted by product harm situations (Dawar and Pillutla, 2000).

Despite many companies’ best efforts, product liability crises have recently become widely prevalent and many companies used different management strategies to overcome them. For instance, recent researchers documented the importance of pre-recall and post recall strategies in product harm crisis management in particular to avoid weak supply chain co-operations that damage company's reputation in particular (Chakraborty et al., 2023). As a result, the current research examines this topic from a novel empirical perspective: consumer moral reputation. Amidst risk assessment and corporate analysis, little is known about consumer moral evaluations of companies and their brands in response to a product-harm crisis (Dawar and Lei, 2009), particularly in terms of different causal inference reasons of the crises, such as internal (company) and external (outside the company), as suggested by attribution theory. The concept of attribution theory is concerned with how people understand events and how it affects their thoughts and actions. The psychological theory of attribution was proposed by Heider (1958) first, but Weiner and colleagues (1979) developed a theoretical framework that has become a major research paradigm in social psychology today. Due to a lack of empirical evidence in this field, the current study aims to investigate how the causative elements of product harm crises influence consumer moral reputation toward the crisis company and crisis brand among young consumers in Asian Emerging Markets, specifically China and Sri Lanka.

The widely used attribution model of Weiner (1980a and 1980b) discusses three causal measurements of attributions that leads to the overall judgment of responsibility or blame: the locus of the behavior (internal or external to the company), the stability of the behavior (unchanging or temporary- fluctuating over time), and the controllability of the behavior, which can be within or outside the control of the actor. Dunn and Dahl (2012) showed that customers with internal attributions of blame behave in a completely different way than consumers with external attributions of blame when it comes to self-threat and goods malfunctions in a product failure scenario. Consumer responses are influenced by the causes for product damage (Folkers, 1984). Consumers tend to assign burden of responsibility to the company if the locus of a product harm crisis is internal (company) and the behavior is steady and manageable (Klein and Dawar, 2004). If the locus is external and the behavior is difficult to control by the enterprise, consumers will accredit liability to external factors (Klein and Dawar, 2004). As a result, comprehending the impact of product harm crisis cause factors on consumer perceptions may aid in taking steps to protect moral reputations and brand equity, the intangible significant values linked to the company and brand, respectively. The majority of previous research has focused on consumer-oriented (Dunn and Dahl, 2012; Russell, 1982) and manufacturer-oriented (Dunn and Dahl, 2012; Russell, 1982) product failures (Folkes, 1984). However, few contemporary studies have looked into how these attributions of locus, stability, and controllability interact to shape consumer moral reputations toward the crisis company and crisis brand, as well as the impact on consumer-based brand equity in various product damage crises. Furthermore, previous product damage literature has not yet looked into the attribution effects of a product harm crisis on a company and a brand independently from a customer moral reputational standpoint. Furthermore, no previous empirical study in the crises literature has directly studied how consumers' reputational judgments of the crisis company and the crisis brand are shaped by perceived societal damage of the product harm crisis.

Literature Review

Product Harm Crisis

A product harm crisis is a situation in which a company's product or service poses a significant risk to the health, safety, or well-being of its consumers (Botes, 2022). These crises can arise from various factors, such as manufacturing defects, contamination, design flaws, or inadequate safety measures (Marucheck et al., 2011). When such crises occur, they can have far-reaching consequences, damaging a company's reputation, eroding consumer trust, and often resulting in legal and financial repercussions (Cleeren et al., 2017). Effective crisis management and communication are essential in addressing these situations, as companies must act swiftly to mitigate harm, recall products if necessary, and transparently inform the public about the steps being taken to rectify the issue and prevent similar incidents in the future (Cleeren et al., 2017).

Product Harm Crisis and Consumer Moral Reputation Towards the Company and Brand

The entire assessment that represents the degree to which individuals' view the corporation as "good" or "bad" can be stated as company/corporate reputation (Laufer and Coombs, 2006). Scholars have shown that moral reputation is an important bridge relationship between the attribution process and consumers' reactions to unfavorable celebrity news in the celebrity literature (Zhou and Whitla, 2012). Because product harm crises are ethical occurrences, it may be more productive to combine moral reputations with explanatory elements to see the real impact in the setting of product harm crises (Weiner 1986; Alicke 2000; Vassilikopoulou et al., 2011; Zhang et al., 2019). When consumers are unsatisfied with a product's performance expectations and the actual product outcomes, the higher the number of self-attributions, the less likely they are to act (Oliver, 1987). In turn, if the consumer is to blame for the product harm situation, the consumer is unlikely to complain (Folkes, 1984; Hocutt et al., 1997). According to Dunn and Dahl (2012), customers are more likely to complain when a product fails due to the product's mistake than when the failure is due to the consumer's fault, and when consumers ascribe product failure to themselves, complaining is damaging to product evaluations. As a result, if a product harm crisis occurs as a result of a customer's incorrect use of the product or as a result of the customer's fault, the brand's reputation may suffer more than the company's, as the customer's moral thinking may lead him or her to believe the product is not intuitive, efficient, or user-friendly. As a result, customers may not hold the corporation responsible for the problem. These convincing evidences motivate the study to hypothesize,

H_1 = If the locus of the product harm crisis is internal (company), stable and controllable (by the company), consumer moral reputation towards the crisis company will decrease more than that of the crisis brand.

H_2 = If the locus of the product harm crisis is external (consumer), unstable and uncontrollable by the company, consumer moral reputation towards the crisis brand will decrease more than that of the crisis company.

Product Harm Crisis and Perceived Societal Damage

Consumer reactions to product harm crises may be anchored in their ethical standards, which appraise the crisis occurrence's outcomes in terms of perceived society harm and how it interacts with their own feeling of the crisis company's and crisis brand's morality. The amount of damage caused by a product harm crisis is determined by the consumer's perception of the severity of the failure (Dawar and Pillutla, 2000). Furthermore, the construct problem intensity has been suggested as a moderating factor in consumer attributions of product harm crisis (Su and Tippins, 1998), and it has been shown that the possible danger and magnitude of harm to the company's image through product harm crisis appears to be smaller for a well-known firm with a good reputation compared to a company with a less favorable reputation (Siomkos and Kurzbard, 1994). If the company already has a socially responsible profile, the losses from the product harm problem could be reduced (Vassilikopoulou et al. 2009). In the case of negative celebrity publicity, Zhou and Whitla (2012) find that perceived societal damage is more likely to magnify the impact of the celebrity's personal improper conduct of attribution on assessment of the celebrity's moral reputation, but not the endorsed brand, whereas perceived societal damage is less likely to enhance the effects of external locus where the performer is not mainly accountable. Therefore, it can be hypothesized that,

H_3 = If the locus of the product harm crisis is internal (company), stable and controllable (by the company), perceived societal damage will accelerate the impact of causal dimensions on consumer moral reputation towards the crisis company but not the crisis brand.

H_4 = If the locus of the product harm crisis is external (consumer), unstable and uncontrollable by the company, perceived societal damage will accelerate the impact of causal dimensions on consumer moral reputation towards the crisis brand but not the crisis company.

Product Harm Crises, Consumer Based Brand Equity and Purchase Intention

Product-harm can substantially affect a brand's image, resulting in negative brand beliefs and, as a result, deteriorating consumer-based brand equity (Dawar and Pillutla, 2000). In a product damage crisis, brand equity has a direct and positive impact on purchase intentions (Dawar and Pillutla, 2000). Folkes and Katsos (1986) demonstrate how attributions in the setting of service delays led to a desire to complain and influenced repurchase behavior. Furthermore, the reasons for the complaints impact the buying expectations (Bearden and Teel, 1983; Oliver, 1980). Therefore, in midst of the product harm crisis, it can be hypothesized that,

H_5 = If the locus of the product harm crisis is internal (company), stable and controllable (by the company), consumer moral reputation towards the crisis company and brand may affect directly and significantly on consumer-based brand equity thereby purchase intentions

H_6 = If the locus of the product harm crisis is external (consumer), unstable and uncontrollable (by the company), consumer moral reputation towards the crisis company and brand may affect directly and significantly consumer-based brand equity, thereby, purchase intentions.

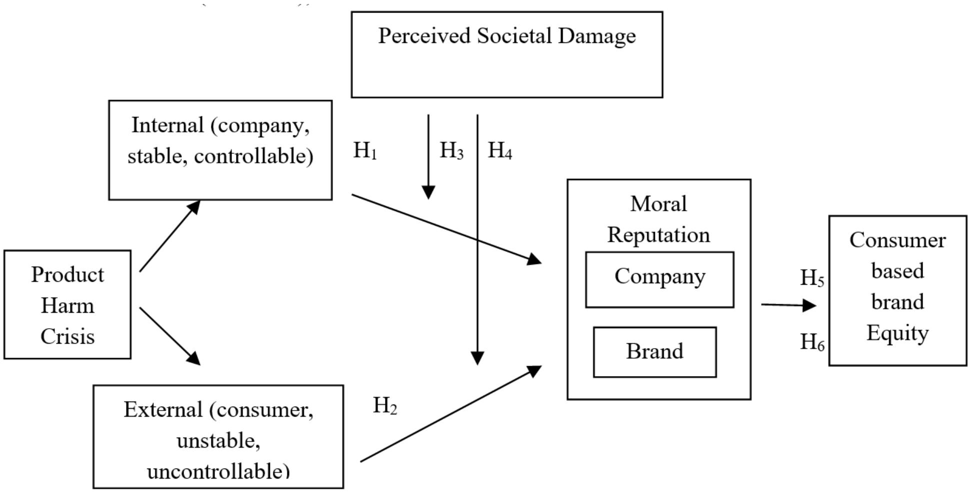

Figure 01: Causative Dimensions of Product Harm Crisis, Moral Reputation and Consumer-Based Brand Equity

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Materials and Methods

The key causative attributions considered in this study on how causal dimensions of product harm crises impact consumer moral perceptions are locus, stability, and controllability. The locus was defined as internal (inside the company) and external (outside the company) in accordance with prior studies (Russell, 1982; Folkes, 1984; Zhou and Whitla, 2012). In this study, under the control of the consumer (himself), Stability and controllability were defined as stable (permanent), unstable (temporary), controllable (in the company's control), and uncontrollable (not under the company's management—respectively. To evaluate the proposed hypotheses, a self-administered, pre-tested questionnaire survey was used. A hypothetical product harm crisis event was used in the study to highlight two separate experimental circumstances. Internal locus, stable and controllable product harm crisis situation was highlighted in Situation 1, whereas external locus, unstable and uncontrollable crisis was highlighted in Situation 2. These two scenarios were labeled as a firm accused (situation 1) and a consumer accused (situation 2) (situation 2). Two questionnaires were developed based on two scenarios, with different questions to derive perceptions of the locus, stability, and controllability of the causative agent of the product harm crisis scenario, perceived societal damage, consumer moral reputation toward the crisis company/brand, consumer-based brand equity, and purchase intention for each scenario. In these two experiments, the stimulus brand was a hypothetical yogurt brand called “X.” To avoid confusion owing to customers’ potential relationships or experiences with current brands and historical product harm crisis situations, a fictitious brand and hypothetical crisis scenario were used (Siomkos and Kurzbard, 1994; Vassilikopoulou et al., 2011). The hypothetical scenario suggested that information regarding dead and hospitalized people due to the intake of the yogurt brand “X” was used to set off the product harm crisis. In conclusion, the hypotheses indicated above were tested in two experimental experiments. Study 1 laid the groundwork for testing H_1, H_3, and H_5 in the context of a steady and controllable product harm crisis in the internal locus (business) (company accused). Study 2 on the other hand, laid the groundwork for evaluating H_2, H_4, and H_6 in the context of the external locus (customer), unstable, and unmanageable (by the corporation) product damage problem (consumer accused). It's worth noting that, in addition to looking at the effects of these dimensions individually, the combine effect, in which all three dimensions are on the same ground, was primarily used to evaluate the aforementioned theories.

Sample

A convenience sample of two groups of undergraduate marketing and business management specialized students from Sri Lanka and China was surveyed. There were 492 people in each group. The questionnaires for scenarios 1 and 2 were delivered to the respondents individually. They were given a questionnaire linked to circumstance 1 first, and then a questionnaire connected to situation 2 after three months, as people tend to forget about crises as time passes (Vassilikopoulou et al., 2009). The convenience sample approach was chosen because of the ease with which the questionnaire could be distributed and collected, as well as the respondents’ willingness to cooperate (Malhotra and Peterson, 2006; Vassilikopoulou et al., 2009).

Measures

This study adopted a mixed approach, a qualitative and quantitative research design to collect information from the two samples collected using convenience sampling technique. Internal/external locus, stable/unstable, controllable/uncontrollable of contributions, perceived societal damage, consumer moral reputation towards the crisis company and the crisis brand, consumer based brand equity, and purchase intention of the crisis brand were all included in the survey instrument. Table 1 lists the measurement items for each of these constructs. Consumer views of these characteristics are elicited using the same set of questions in both company and consumer accused cases. The items used for attributions (locus, stability, controllability), perceived societal damage, moral reputation (Zhou and Whitla, 2012), and purchase intentions (Monroe and Grewal, 1991; Sweeney et al., 1999; Agarwal and Teas, 2002; Dodds et al., 1991, Netemeyer et al., 2004; Ettenson and Klein, 2005; Vassilikopoulou et al., 2011) For example, "the reason is something that represents a feature of the company" was scored using 7 point Likert scale, 1= "strongly disagree" and 7= "strongly agree" in the case of internal locus of attribution (Zhou and Whitla, 2012). As a measure of consumer beliefs, consumer based brand equity was calculated (Aaker, 1991; Keller, 1998). This strategy uses various item scales to tap characteristics of brand equity that have been used in earlier studies to create a consumer-based brand equity measure (Aaker, 1991; Keller, 1993; Agarwal and Rao, 1996; Dawar and Pillutla, 2000). Accordingly, the study used a five-item, seven-point semantic scale to assess brand equity as a composite measure of brand related beliefs, including brand attitude (favorable-unfavorable), brand trust (not at all trustworthy-very trustworthy), perceived quality of brand (low-high), perceived quality of crisis brand products (low-high), and brand desirability (not at all desirable-very desirable). To establish plausibility, respondents assessed imaginary experimental scenarios as 1= "not realistic at all" and 7= "extremely realistic" at the end of each scenario.

Table 01: Validity and Reliability Results of Each Construct with Measurement Scales

Variables	Items	KMO of Sampling Adequacy		Cronbach's Alpha	
		1	2	1	2
Locus	The cause is something that reflects an aspect of the company The cause is something that is inside of the company The cause is something that is related to the company's own responsibility	.71***	. 72***	.81	.83
Stability	Only one item was used				
Controllability	The cause is under the control of the company The company is responsible for the control of its own action	.50***	.50***	.77	.76
PSD	Perceived societal damage of the incident is severe It sets a bad example for public values and decency It perceives a great societal loss	.73***	.75***	.85	.89
MRC	Company "A" deserves little respect from me This event makes me disbelieving about	.75***	.74***	.90	.86

	the virtue and the values of company "A" This event makes me feel that company "A" lacks integrity				
MRB	Brand "X" deserves little respect from me This event makes me disbelieving about the virtue and the values of brand "X" This event makes me feel that brand "X" lacks integrity	.75***	.75***	.88	.91
CBBE beliefs	What do you feel about the attitude of brand "X"? What do you feel about the trust of brand "X"? What do you feel about the overall perceived quality of brand "X"? What do you feel about the overall perceived quality of the products of brand "X"? What do you feel about the desirability of brand "X"?	.87***	.84***	.87	.83
Locus X stability X controllability	Locus Stability Controllability	.71***	.68***	.82	.77

Bartlett's Test of Sphericity ***P< 0.001

Note- 1 and 2 refer to the product harm crisis situations related to company accused and consumer accused respectively. PSD, MRC, MRB, and CBBE beliefs, refer to perceived societal damage, consumer moral reputation towards the crisis company, consumer moral reputation towards the crisis brand and consumer based brand equity as a measure of consumer beliefs, respectively.

Analysis

Assessment of the Measurements of the Model

SPSS was used to analyze the data collected (version 20.0). The proposed hypotheses were analyzed using regression and correlations, and the Hierarchical Regression approach was utilized to discover the moderator factors (Fairchild and MacKinnon, 2010; Ro, 2012). Answers to negative questions (for example, in the instance of moral reputation of the company, "company "A" deserves little respect from me" (Zhou and Whitla, 2012) were reversed to conform to the scales of the remainder of the variables in the questionnaire. The validity and reliability of the different items employed in each construct measured the same underlying concept, according to factor analysis (Pallant, 2008). Cronbach's alpha, a reliability coefficient, was used to assess the scales' reliability (Cronbach, 1951). The dependability coefficient should ideally be greater than 0.7. (DeVellis, 2003). In the case of validity analysis, KMO>0.5 (Sig of Bartlett's Test0.001) confirms the sample's adequacy (Field, 2005). The average correlation among the items was determined, indicating that the items were internally consistent. All of the indices were over their respective levels, indicating that scale dependability was adequate (Table 01).

Results and Discussion

Study 1

The objective of 1st study is to determine how a company's alleged (internal, stable, and controlled) product harms a crisis situation (situation 1) and influences consumer moral reputation, crisis brand, consumer-based brand equity, and crisis brand purchase intention. Procedure

Each respondent was given a standard questionnaire that included a series of questions about the locus, stability, controllability, and subsequent evaluation of consumer moral reputations toward the crisis company, crisis brand, consumer based brand equity, and purchase intention of the crisis brand, as well as a specially designed situational scenario 1 documenting the internal locus, stable, controllable product harm crisis event. This situational scenario highlighted the internal, stable, and controllable situation of the product harm crisis (company accused), stating that "based on its laboratory experiments, company "A" knows some of the preservatives added to the yogurt brand "X" can be harmful only if it mixes with alcoholic substances, and while company "A"
knows it can stop using these harmful preservatives, company has been using them for a long time in order to produce the profit-oriented specific taste."

Results

The majority of responders (91%) correctly identified the locus, stability, and controllability of the product damage crisis, which the experimental scenario required to emphasize. The majority of respondents (72%) believe the experimental situation is plausible. Furthermore, whether the crisis was internal (business), steady, and managed by the company, the majority (97%) of respondents rated the society harm of the crisis as "high," indicating that they "strongly agree" with the social damage aspects. In the company alleged product harm problem, the correlations between causal dimensions and created variables based on consumer perceptions were outstanding (Table 02).

Table 02: Correlations between Causal Dimensions and Constructed Variables under Situation 1 (company accused)

Variables	Locus		Stability		Controllability		Locus X Stability X Controllability	
MRC	-.181**		-.085		- .233**		-.191**	
MRB	-.102*		-.109*		- .158**		-.143**	
PSD	.204**		.122**		.235**		.216**	
CBBE	-.104*		- .078		-.062		-.094*	
Pix	-.108*		-.107*		- .120**		-.130**	

*** Correlation is significant at the 0.001 level (2- tailed test), ** Correlation is significant at the 0.01 level (2- tailed test), *Correlation is significant at the 0.05 level (2- tailed test)

Note- MRC and MRB = Consumer moral reputation towards the crisis company and crisis brand respectively, PSD=perceived societal damage, CBBE= consumer based brand equity, PIx= purchase intention of the crisis brand “X”, (Locus X Stability X Controllability) - combine effect of locus, stability and controllability.

Almost all causal characteristics were negatively connected with consumer moral repute toward the crisis company and the crisis brand ($P<0.01$). Furthermore, the crisis brand's buy intention linked with causal factors in a similar fashion to consumer-based brand equity, confirming the relationship between band equity and purchase intention. The perception of societal harm was positively connected to the causal factors, and the relationship was highly significant (P0.01) (Table 02). The influence of locus (company) on consumer moral repute towards the crisis company was unfavorable in this case (β = -.181, t=-4.07, $P<0.001$), whereas stability was minor (β =-085, t=-1.89, P= 0.06), confirming the above- mentioned correlation results (Table 02). Controllability was also negatively influenced (β = -.233, t= -5.30, $P<0.001$). The influence of crisis controllability on consumer moral reputation toward the crisis company was negative (β = -.238, t= -3.78, $P<0.001$), but locus and stability were negligible ($P>0.05$), according to the results of multiple regression analysis. The combined causative aspects had a negative influence on consumer moral repute toward the crisis company (β = -.141, t= - 4.32, $P<0.001$), with the interaction being highly significant ($F_{(1.490)}$ =18.63, $P<0.001$). The regression analysis was then performed on the basis of customer moral repute toward the crisis brand. Consumer moral repute towards the crisis brand was negatively affected by locus (business), stability (β = -.109, t= -2.42, $P<0.05$), and controllability (β = -.102, t= -2.27, $P<0.05$), confirming correlation results. Only the influence of controllability on consumer moral reputation toward the crisis brand was significant in multiple regression (β = -.152, t= -2.37, $P<0.01$), whereas locus and stability were inconsequential ($P>0.05$). The combined causal dimensions had a negative effect on the brand’s moral reputation (β = -.193, t= -3.20, $P<0.001$). As a consequence of the combined causal dimension results, it is clear that when a company is accused of a crisis, consumer moral reputation toward the crisis company is influenced more than that of the crisis brand (β = -.141 and -.193, respectively), confirming H_1.

Moderating Role of Perceived Societal Damage

A moderator variable indicates, when or under what conditions a predictor variable effects a dependent variable, (Baron and Kenny, 1986; Holmbeck, 1997). A moderator variable can shift the direction of the association between a predictor variable and a dependent variable from positive to negative or vice versa, or it can lessen or improve the direction of the relationship between the two variables (Lindley and Walker 1993). The moderating impact was tested using hierarchical multiple regression analysis, which consists of three sequential phases of regressions (Ro, 2012). The independent variable (combine effect of location, stability, controllability) and the moderator (perceived social damage) were introduced into the model as predictors of the outcome variable in the first phase of the regression (consumer moral reputation towards the crisis company). The moderator effect was then represented by an interaction term (the product of the independent variable and the moderator variable). The interaction term added model explained a statistically significant amount of variance in the outcome variable ($P<0.05$), and hence the change in R^2 for the interaction term added model ($F_{3,\ 488=}$ 21.48, $P<0.000$). The negative Beta coefficient highlighted the negative link between the independent and dependent variables. As a result, when a corporation is accused of a crisis, the negative effect of causal dimensions on consumer moral reputation toward the crisis company is hastened. As a result, H_3 is recommended. Furthermore, because VIF10 and Tolerance >0.1, this model has no multi-collinearity issues (Kleinbaum et al., 1988). Furthermore, the disparities between the obtained and expected dependent variable scores were normally distributed and had a linear connection with the predicted scores, indicating that the homoscedasticity hypothesis was correct (Pallant, 2007). As expected, there was no moderation effect with customer moral reputation toward the crisis brand in a firm accused circumstance ($P= 0.586$). As a result, H_3 is boosted. As a result, perceived societal harm does not accelerate the relationship between the causative dimensions of the product harm crisis and consumer moral reputation toward the crisis brand, but it does accelerate the relationship between the causative dimensions of the product harm crisis and consumer moral reputation toward the company brand under the company accused crisis.

Consumer based Brand Equity and Purchase Intention

Consumer-based brand equity was adversely connected with causal dimensions under the company accused crisis, according to regression analysis ($\beta = -.09$, $t= -2.10$, $P<0.05$). Consumer moral reputation for the crisis company influenced consumer based brand equity considerably ($\beta =.173$, $t=3.89$, $P<0.001$). While investigating the effect of consumer-based brand equity on crisis brand purchase intention, the study discovered that brand equity was also positively connected to crisis brand purchase intention in this case ($\beta =.142$, $t=3.17$, $P<0.01$). As a result, consumer moral reputation toward the crisis company has a considerable impact on consumer-based brand equity and, as a result, purchase intention for the crisis brand, corroborating H_5. Furthermore, consumer moral reputation toward the crisis brand had a significant impact on consumer based brand equity ($\beta =.18$, $t=4.04$, $P<0.001$) and, as a result, buy intention for the crisis brand ($\beta =.21$, $t=4.81$, $P<0.001$), confirming H_5. Multiple regression analysis revealed that consumer moral reputations toward the crisis company and the crisis brand have a significant impact on the crisis brand's purchase intention, with the effect of consumer moral reputation toward the crisis company ($\beta =.18$, $t=3.89$, $P<0.001$) being greater than the crisis brand ($\beta =.12$, $t=2.59$, $P<0.01$). The difference in brand equity was marginally significant ($P<0.09$) (Dawar and pillutla, 2000).

H_1, H_3, and H_5 are supported by Study 1. As a result, if the product harm crisis is internal (company), stable, and controllable (by the company), consumer moral reputation toward the crisis company falls faster than that of the crisis brand, and perceived societal damage accelerates the negative impact of causal dimensions on consumer moral reputation toward the crisis company. However, the negative impact of causative factors on consumer moral reputation toward the crisis brand is not accelerated by perceived societal harm. As a result, a corporation accused of a crisis has a major negative impact on the moral reputation of consumers toward the crisis company and crisis brand. Furthermore, under this situation, consumer moral reputation toward the crisis firm and brand has a major impact on consumer-based brand equity and, as a result, the crisis brands' buy intention. Consumer moral reputations toward the firm and brand are significantly impacted by causal aspects, which has a negative impact on consumer-based brand equity and, as a result, buy intention for the crisis brand. As a result of the negative influence of causal factors on customer moral reputations toward the crisis Company and brand, consumer based brand equity and buy intention of the crisis brand were negatively damaged during the firm alleged crisis situation. Perceived societal damage hastens the negative impact of consumer moral reputation toward the crisis company, lowering consumer-based brand equity and purchase intention for the crisis brand, as consumer moral reputation toward the crisis company is the most important predictor of purchase intention for the crisis brand.

Study 2

The goal of study 2 is to determine how an external, unstable, and uncontrollable product that harms a crisis situation (consumer accused) affects consumer moral reputation toward the crisis company, crisis brand, and, as a result, consumer based brand equity and purchase intention for the crisis brand.

Procedure

Each respondent was instructed to read scenario 2, which documented the external locus, unstable, and uncontrollable product harm crisis event, along with a standard questionnaire that contained a series of questions about the locus, stability, controllability, and subsequent evaluation of consumer moral reputations toward the crisis company, crisis brand, and subsequent effects on consumer based brand equity and purchase intention of the crisis company, crisis brand, and subsequent effects on consumer based brand equity and purchase intention of the crisis company. In the label of yogurt brand X, it is clearly indicated that "avoid taking alcohol immediately after consuming," and an investigation done by the consumer safety commission found that consumers who became ill and died, did not follow the instructions given in the label of the brand X, according to experimental scenario 2.

Results

The majority of responders (93%) correctly identified the locus, stability, and controllability of the product harm crisis as external unstable and uncontrollable, supporting the experimental scenario's successful recording. The experimental situation was deemed realistic by the majority (62 percent). Surprisingly, when the crisis is external, unpredictable, and uncontrollable, and the consumer is to blame, the crisis is viewed to do less societal harm in the perspective of consumers. By stating "disagree" to the societal damage dimensions, the majority (71%) of them assessed the perceived society damage as "low." Consumer moral reputations toward the crisis company, crisis brand, perceived societal damage, consumer based brand equity, and purchase intention of the crisis brand were substantially connected with causal features of consumer accused product harm crises, according to correlation research (Table 03).

Table 03: Correlations between Causal Dimensions and Constructed Variables under Situation 2 (consumer accused)

Variables	Locus		Stability		Controllability		Locus X Stability X Controllability	
MRC		-.179**		-.242**		-.178**		-.243**
MRB		.181**		.122**		.276**		.226**
PSD		.219**		.218**		.205**		.257**
CBBE		.242**		.138**		.291**		.262**
Pix		.070		.096*		.169**		.133**

*** Correlation is significant at the 0.001 level (2- tailed test), ** Correlation is significant at the 0.01 level (2- tailed test), *Correlation is significant at the 0.05 level (2- tailed test)

Note- MRC and MRB = Consumer moral reputation towards the crisis company and crisis brand respectively, PSD=perceived societal damage, CBBE= consumer-based brand equity, PIx= purchase intention of the crisis brand "X", (Locus X Stability X Controllability) - combine effect of locus, stability and controllability.

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All causal characteristics were adversely connected with consumer moral repute toward the crisis company ($P<0.01$). Surprisingly, consumer moral reputation toward the crisis brand and consumer based brand equity were positively correlated with causative dimensions, indicating that when a consumer is responsible for the crisis, causative dimensions have a positive effect on his moral reputation toward the crisis brand and, as a result, consumer based brand equity. Furthermore, buy intention of the crisis brand linked with causal factors in a similar way to consumer based brand equity in the company alleged crisis situation, confirming the inter-relationship of band equity and purchase intention proposed by Dawar and Pillutla (2000). The perception of societal harm was positively connected to the causal factors, and the relationship was highly significant ($P<0.01$). Almost all characteristics were highly linked with consumer accused causative aspects ($p <0.01$) (Table 03). The locus (customer) had a negative impact on consumer moral repute toward the crisis company (β = -.179, t= -4.02, $P<0.001$), according to regression data. Similarly, consumer moral repute was negatively affected by stability (β = -.242, t=-5.51, $P<0.001$) and controllability (β = -.178, t=-4.01, $P<0.001$), confirming the correlation results (Table 03). Multiple regression analysis revealed that stability was the only causal component that influenced consumer moral reputation toward the crisis company (β = -.194, t= -3.63, $P<0.001$). This is reasonable because the locus and controllability are on the side of the consumers. The effect of the combined causal aspects on customer moral reputation toward the crisis company was negative (β = -.243, t=-5.54, $P<0.001$), and the interaction was very significant ($F_{(1.490)}$ =30.75, $P<0.001$), as predicted by correlation analysis. Surprisingly, all causative dimensions, Locus (consumer), (β =.181, t=4.08, P0.001), stability (β =.122, t=2.72, $P<0.01$), controllability (β =.276, t=6.36, $P<0.001$), and combine effect (β =.226, t=5.14, $P<0.001$), showed positive relationship with consumer moral reputation towards the crisis brand, confirming the correlation results (Table 03). Our expectations have not been met with these findings. As a result, H_2 isn't supported. As a result, a consumer-accused product-harm crisis has no negative consequences for the consumer's moral reputation toward the crisis brand. Controllability was the sole causative feature that had a significant impact on customer moral repute toward the crisis brand (β =.226, t= 4.77, $P<0.001$), whereas locus and stability had no effect ($P>0.05$).

Moderating Role of Perceived Societal Damage

Although perceived societal damage did not moderate the effect of causative dimensions on consumer moral reputation toward the crisis company (P =.535) as expected when the product harm crisis is external, unstable, and uncontrollable (consumer accused), the R^2 for the interaction term added model was statistically significant ($F_{3,\ 488}$= 37.35 $P<0.001$). As a result, H_4 is recommended. In addition, the study discovered a moderate effect of causal factors on customer moral repute toward the crisis brand ($P<0.05$), as expected. When the interaction term was included to the model, there was a multi-collinearity problem (VIF>10). To lower it, Zhou and Whitla (2012) and other researchers suggested that respective variables be centered by removing the sample mean from the respective variable, resulting in a centered deviation score with a mean of zero (Ro, 2012; Aiken and West, 1991). The negative Beta co-efficient of perceived societal harm highlighted the unfavorable association between perceived societal harm and consumer moral reputation against the crisis brand. As previously stated, the combined causal dimensions and consumer moral reputation toward the crisis brand, as well as the interaction term, had a favorable association. As previously stated, a consumer-accused crisis scenario improves the consumer's moral reputation toward the crisis brand. As a result, the positive association between causal characteristics and consumer moral reputation for the crisis brand is bolstered by perceived societal harm. Because the interaction term added model explained a statistically significant amount of variance in the outcome variable ($P<0.05$), the change in R^2 for the interaction term added model was statistically significant ($F3_{,\ 488}$= 11.68 $P<0.000$). As a result, H_4 is given further support. Surprisingly, in the case of a customer-accused product harm crisis, greater society harm leads to greater strengthening of consumer moral reputation toward the crisis brand.

The influence of causative dimensions on customer moral repute toward the crisis firm was negative (β = -.243, t= -5.54, $P<0.001$) and positive (β =.226, t= 5.14, $P<0.001$) when the product harm crisis was external (consumer), unstable, and uncontrollable (by the company). Consumer based brand equity was found to be adversely connected with consumer moral reputation towards the crisis firm (β = -.246, t= - 5.89, $P<0.001$) and positively correlated with the same towards the crisis brand (β =.382, t= 9.17, $P<0.001$). Purchase intention for the crisis brand, on the other hand, was found to be substantially associated to consumer-based brand equity (β =.458, t=11.41, $P<0.001$). According to multiple regression analysis, the site of the crisis was adversely connected ($P<0.01$) with crisis brand purchase intention, whereas perceived social damage, brand equity, and consumer moral reputation towards the crisis brand were favorably and significantly correlated ($P<0.001$). The biggest predictor of purchase intention for the crisis brand was consumer-based brand equity ($P<0.001$). Consumer moral reputation toward the crisis brand had a significant ($P<0.001$) effect on purchase intention for the crisis brand, whereas consumer moral reputation toward the crisis company was insignificant ($P>$ 0.05). As a result, H_6 is only partially supported.

Discussion

H_2 was not supported by Study 2, which found that an external locus (in this case, the consumer), unstable, and unmanageable (by the company) product harming the crisis improves consumer moral reputation toward the crisis brand while decreasing it toward the crisis firm. The influence of causal aspects on customer moral reputation toward the crisis brand is accelerated by perceived social damage, according to the study, but not by the company validating H_4. As a result, in the context of a consumer-blamed crisis, perceived societal harm accelerates the positive impact of causative dimensions on consumer moral reputation toward the crisis brand, resulting in increased consumer-based brand equity and purchase intention for the crisis brand, revealing a new research insight in the product harm crisis. The negative impact of causal factors on consumer moral reputation toward the crisis company is not accelerated by perceived societal harm. Consumer moral reputation toward a crisis brand has a significant impact on consumer based brand equity and purchase intentions, whereas consumer moral reputation toward a crisis company has no impact on purchase decisions in a consumer accused crisis situation, according to the study, which partially supports H_6. Because consumer moral reputation toward a crisis firm is neutral in purchase decisions, the negative influence of consumer moral reputation toward a crisis company is not responsible for the crisis brand's buy intention being reduced. When it comes to purchasing decisions, consumers primarily consider brand equity. Intriguingly, there are positive and negative correlations between consumer moral reputation toward the crisis brand and the company with customer accused causal components, respectively, in this study. As a result, under an external locus (not the company, but the consumer), unstable and uncontrollable (by the company) crisis situation, causal dimensions improve consumer moral reputation toward the crisis brand and consumer-based brand equity, resulting in an increase in crisis brand purchase intention. Money and his colleagues' (2006) observations of celebrity endorsement literature are consistent with this finding. The authors discovered that self-centered negative information increased buying intentions.

Conclusion

The primary purpose of this study is to investigate the impact of causal dimensions of product harm crises on customer moral perceptions using experimental methods. In the current study, the major factors were consumer moral reputation toward the crisis company, crisis brand, consumer based brand equity, and crisis brand purchase intention, as these variables are vulnerable to significant change in any product harm crisis situation. This is the first study to investigate product harm crisis situations from two perspectives. Furthermore, this is the first study in the product harm crisis literature to look at the company and its crisis brand independently. The findings of two experimental tests based on Attribution theory indicate that crisis occurrences can be successfully managed. This is most likely because Dunn and Dahl (2012) show in the product failure literature that consumers with internal attributions of blame complain in a completely different way than consumers with external attributions of blame. When a product harm crisis is internal (to the company), stable, and controllable (by the company), there is a negative relationship between causative dimensions and consumer moral reputation toward the crisis company and brand, which has a negative impact on consumer-based brand equity and purchase intention for the crisis brand. In this case, consumer moral reputation toward the crisis firm declines faster than that of the crisis brand, and consumer moral reputation toward the crisis company is the most important indicator of crisis brand purchase intention. Consumer moral repute toward the crisis company is unimportant in a consumer-blamed crisis, and consumer-based brand equity is the most important determinant element in crisis brand purchase decisions. Under these two scenarios, consumers see the same societal damage through different perspectives. When a firm is accused of a crisis, societal damage is perceived as “high,” but it is perceived as “low” when a consumer is accused of a crisis. Furthermore, the study reveals that social damage accelerates the negative customer moral reputation toward the crisis company under the company accused of crisis, resulting in a negative effect on the crisis brand’s purchase intention. Consumers who are accused of a crisis, on the other hand, are more likely to purchase the crisis brand.

Theoretical Contributions

As theoretical contributions, the current study makes significant theoretical advances. The primary contribution of this study to the existing product harm crisis literature is the inclusion of customer moral reputation and perceived societal damage. Furthermore, the current study covers key empirical data. Regression analysis, interestingly, confirms the correlation results. When a product harm crisis happens as a result of the company’s fault and is within the firm’s control, consumer moral repute toward the Crisis Company and brand plummets, having a negative influence on consumer-based brand equity and purchase intention for the crisis brand. Another significant contribution to the literature revealed in this study is the findings, which show significant negative and positive links between consumer moral reputations toward the crisis company and the crisis brand, respectively, under external locus (consumer), unstable, and uncontrollable (by the company) circumstances. As a result, consumer moral repute toward the crisis firm and crisis brand has strong negative and positive correlations with consumer-based brand equity, respectively. In a consumer-blamed crisis, the negative impact of causal factors plants an unfavorable moral reputation toward the crisis company, culminating in a large negative impact on consumer-based brand equity. Because the causal elements of the product harm crisis have different effects on customer moral reputations toward the crisis company and the crisis brand, this situation produces various outcomes. On the other hand, if the positive influence of consumer moral reputation toward a crisis brand outweighs the bad impact of consumer moral reputation toward the crisis firm, the negative effect on a company's and brands reputational status is reduced.

Managerial Implications

As managerial implications, if the location of the product harm crisis is consumer, unstable, and uncontrollable, corporations can ensure customer moral reputation toward their crisis brands, consumer-based brand equity, and subsequent purchase intentions (by the company). In order to secure profits, crisis managers need pay special attention to consumers' moral judgments about the firm and brand. Not only should firm reputational status (Laufer and Coombs, 2006; Klein and Dawar, 2004; Siomkos, 1989) or brand reputational status (Cleeren et al., 2008) be considered when implementing crisis management solutions, but also customer moral reputational status during product damage crises. As a result, if the locus of the product harm crisis is external (consumer), unstable, and uncontrollable (by the company), the company should focus more on the stability of the product damage crisis to protect consumer moral reputation toward the crisis firm. Emphasizing the product harm crisis' unpredictability raises consumer morale toward the crisis company, as instability in the product harm crisis implies that the product will not fail again in the future (Weiner, 1980a). When it comes to societal harm, the visual phenomena of perceived society injury is seen in practically all product harm crises. When the location of the product harm crisis is something related to the firm, and the company's responsibility for the controllability of that crisis is steady, consumers' moral repute toward the crisis company is further lowered. As we have discovered, product harm crises occur as internal (company), stable, and controllable (by the company) events, with perceived societal damage combining with causative dimensions to cause a negative impact on consumer moral reputation toward the crisis company. From the company's perspective, steps should be taken to persuade consumers that the societal damage is not severe. If not, when a firm is accused of causing society harm, the company suffers the most. In other words, companies should focus more on minimizing societal damage to the extent possible in order to lessen consumers' unethical opinions of the crisis organization. Maintaining brands with positive consumer based brand equity, i.e., consumers react more favorably to a product and the way it is sold when the brand is identified than when it is not identified, ensures profitability in the event of a product damage problem. This conclusion backs up Johar and colleagues' (2010) managerial advise about the "not just me" response, implying that the presence of crises in the sector is more successful for consumers who identify with the brand than for those who do not. As a result, corporations that gain a positive moral reputation among consumers, as well as brands with high consumer-based brand equity, may be able to more effectively overcome consumer-reported product harm crises. The main question a corporation should address is how to win and analyze consumer moral reputation toward it. Consumers have become more vocal with firms in recent years, making it easier than ever to obtain feedback from companies and their brands in order to measure consumer reputational status. Furthermore, organizations should have Facebook pages, Twitter profiles, and customer service teams that not only monitor all online input about the company and brand, whether positive or negative (Bard, 2011), but also monitor consumer moral reputation toward them. According to the findings, the impact of all sorts of product harm crises on consumer moral reputation toward crisis brands and consumer based brand equity is neutral in the case of crisis brands and consumer based brand equity. It can be seen as a disguised fortune to increase the consumer moral reputation towards the crisis brand and subsequent favorable impressions in

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consumer based brand equity and purchase intention of the crisis brand in the midst of a product harm crisis when the consumer is accused of causing the product harm crisis and is responsible for the controllability of the product harm crisis. To summarize, companies should constantly take care to persuade the public that the societal damage caused by product harm crises is as small as possible, and that the product harm crisis is managed responsibly in order to restore consumers' morale and avoid future catastrophes. Building a good relationship between a company, its customers, and society may be a timely required response to eliminate the moral reputational damage produced by product harm situations.

Acknowledgement

The authors, G.C. Samaraweera and M.G.T.Lakmali would like to acknowledge the all respondents in China and Sri Lanka for giving their valuable information to fill-up the questionnaires successfully.

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