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Mitigating Product Harm Crises and Making Markets Sustainable: How does National Culture Matter?

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Abstract: Product harm crisis has become a serious issue in the business world today irrespective of the crisis mitigating strategies adopted to remedy the harm. The purpose of the study is to determine whether national culture shapes consumer reactions to crisis response strategies as a result of variation of consumers' perceptions the affected firm's moral responsibility. The study considers a comparison of 303 marketing-based Chinese and Sri Lankan students. Findings of independent sample *t* tests and Analysis of variance (ANOVA) suggested that consumers' moral perceptions vary significantly between China and Sri Lanka in response to crisis response strategies revealing a new insight in the crisis mitigating literature. A wounded company has to launch a super effort response in Sri Lanka whereas the voluntary recall response in China is sufficient in a crisis in order to maintain moral reputation. Moreover, the study reveals that implementation of an inappropriate strategy leads to significant financial and moral reputational loss to a company. Therefore, the study recommends companies choosing culture-specific response strategies in order to protect moral reputational status and to make the market sustainable.

Keywords: moral reputation; product harm crisis; crisis response; ethical beliefs; consumer based brand equity; marketing sustainability

1. Introduction

Product harm crises defined as well-publicized incidences whereby products are found to be defective or dangerous [1] can be devastating events for companies. Product harm crises often result in product recalls, and the strategy used for that is the so-called firm response. Usually, the crisis relates to a particular brand. In 2000, Bridgestone/Firestone recalled 6.5 million tires after news broke that more than a hundred people had died in accidents involving defective tires [2]. In 1999, Coca-Cola was forced to withdraw 30 million cans and bottles in Northern Europe following a scare in Belgium [3]. Other notorious cases include Intel's flawed Pentium chip, Johnson & Johnson's cyanide-laced Tylenol, and the benzene contamination of Perrier. These are very few cases among many, and the most recent examples include Fonterra milk crisis in New Zealand, in 2013, Toyota crisis in Japan in 2010, and the Melamine milk crisis in China, in 2008.

A more active firm response helps reduce the negative impact of product harm crises on consumer perceptions of the firm and their future purchase intention [1]. Moreover, past literature showed that crisis response has a direct positive effect on brand equity [4] and the brand equity has positive and direct effect on purchase intention of the affected brand [5]. Therefore, an effective crisis response seems to secure the financial status of the company.

However, even when a company responds effectively during the crisis, rarely is it possible to rebuild the demolished reputation. An excellent example of how devastating a product harm crisis can be to a company's reputation is the case of the French bottled water company, Perrier, in 1990. In this case, even though the company had decided to undertake a large product recall in North America, France, and the United Kingdom, and not a single consumer was affected by the crisis, Perrier's spotless reputation as a purified water manufacturer was ruined [6].

In the presence of product recalls, the fundamental sustainability of the firm is at risk. For example, Merck's stock price plummeted from $45.05–$33.00 in a single day on 30 September 2004, when Vioxx was recalled. One of the largest makers of frozen hamburgers in the United States went bankrupt after it was forced to recall 21.7 million pounds of frozen hamburger on 29 September 2007. San Lu finally declared bankruptcy on 24th December, 2008 after the Melamine crisis. Moreover, in the Coca-Cola contamination case in 1999, Coca-Cola was forced to recollect 30 million cans and bottles, resulting in $103 million recall costs and a 5% decline in revenues during the year 1999 [7].

Given the increased frequency of product recalls and the potentially devastating consequences for the firm involved, managing such crises effectively and timely has become a top priority for many firms. For instance, Murray and Shohen [8] contended that a company response should be undertaken quickly; a response during the first 24 hours of a crisis is crucial. Tylenol emerged stronger from a terrorist capsule poisoning incident in the early 1980s by responding quickly and effectively to maintain consumer confidence in the brand [9]. Therefore, even though Johnson & Johnson's cyanide-laced Tylenol subjected to two crises (*i.e.*, in 1982 and 1986), it won consumers' trust due to the efficient and effective response. Why is this difference? Perhaps, another unexploited variable guides consumer perceptions in the face of crises responses during product harm incidents.

Regardless of different response strategies, product harm crises have increased at an accelerating rate throughout the world recently along with the negative impacts on companies, brands and the marketing environment [10]. Still, insights into this burning issue are crucial to managers who want to take

appropriate corrective actions to restore brand performance to its pre-crisis level. In this effort, consideration of cultural significance of consumer moral perceptions in response to crisis strategies seem important because culture is "the complex of whole which includes knowledge, belief, art, morals, custom and any other capabilities and habit acquired by man as a member of society" [11]. In addition, consumer response to company strategies in product harm crises is likely to be mainly guided by national culture, defined as "the collective programming of the mind which distinguishes the members of one human group from another [12]. In coordinating the actions of people, it is necessary to understand their values, beliefs, and expressions that are highly embedded with cultural values [13,14]. From a firm policy perspective, because of the greater frequency of product harm crises in recent years, firms need clear guidance on the appropriate strategies and the effectiveness of these strategies under different cultures. National culture is the fundamental determinant of a person's wants and behavior and the consumer combines psychology with certain characteristics (culture, social, personal) in order to make decisions [13].

Past literature showed the existence of a significant relationship between crises and consumer moral perceptions. For instance, crises events are highly unexpected, ethical situations [15] wherein consumers' moral emotions are highlighted [16]. Product harm crises can be regarded as ethical situations not only because crises can inflict harm on individuals [17], but also due to the involvement of a responsible agent [18]. A product harm crisis causes consumer negative emotions toward the affected company [19], and these emotions are the key drivers of moral behavior [20].

Therefore, the current study tries to scrutinize this matter through a new empirical angle, companies' moral reputation. How different crisis response strategies influence consumer perceptions of the affected firm's moral responsibility has not been studied yet. This paucity in research is glaring because there has been increased attention on understanding the linkage between firm response strategies and consumer response in return in a highly competitive global market environment. This grass-root level feedback may remain a promising avenue for a sustainable business environment.

The majority of past literature on crisis response in product harm crises documented consumer perceptions related to the Western cultures [1,5,21] giving very little attention to the Asian consumer. Moreover, highly globalized business environment demands Asian consumer's voice, in particular, which reflects Asian emerging markets. Economic expansion coupled with globalization demands Asian emerging companies to come forward. The majority of multinational companies are rooted by the Asian emerging markets and these markets are increasingly gaining global business attention today. For instance, Samsung of South Korea, China Mobile, and India's Reliance industries share the scale and ambition of their developed world counterparts. Moreover, among the 70 emerging market companies in the Fortune Global 500, around one-fifth are state-owned, the majority of them from China [22].

Therefore, the examination of the ways that emerging market multinationals incubate and sustain demand in a product harm crisis, harness cultural differences and compete in the global market, presumably seeds a promising avenue for future success. As such, investigation of consumer perceptional variations in the Asian emerging markets, in particular, in response to crises responses seems fruitful in deciding holistic crisis mitigating strategies.

Do consumer perceptions vary among Asian countries? How should a company respond to a product harm crisis in a cross-cultural perspective? Are existing theories applicable to the Asian context as well? Therefore, the purpose of the study is to uncover whether national culture shapes consumer reactions in

response to crisis response strategies as a result of variation of consumers' moral perceptions of the affected company with special reference to Asian emerging markets; China and Sri Lanka.

2. Hypotheses Development

Past scholars emphasized the need of implementing appropriate and effective response strategies for the ethical and unethical consumers in times of product harm crises [19]. The field of crisis communication focuses on the emotions consumers feel during crises [23,24]. Consumers' attitudes are the most important indicator for measuring the effectiveness of crisis management [25]. Effective crisis management involves the consumer's approval of the organizational response and consumer's persuasion that the product is safe again as the company has overcome the crisis [26].

Understandably, firms wish to have a cost-effective response, while ensuring maximum restoration of consumer tarnished perceptions in crises. Response strategy can be cost-intensive given the associate promise for remediation [27]. Out of four main strategies proposed by Siomkos and Kurzbard [1]: denial, forced compliance, voluntary compliance, and super effort; the first two response strategies are not particularly effective for companies as a response to a product harm crisis [1]. At one extreme, firms forsake (try to forsake) any responsibility for the defective product by denying culpability and delaying the recall process. At the other extreme, firms respond to consumer complaints early, issue speedy voluntary recalls, communicate extensively with consumers and other stakeholders, and often provide additional compensation beyond the legal requirement. Given the increased frequency of product recalls and the potentially devastating consequences for the firms involved, managing such crises effectively has become a top priority for many firms. Based on their research findings, Simkos and Kurzbard [1] argued that the response strategy between super effort and voluntary seems fruitful in a product harm crisis situation.

Consumers across cultures differ in their reactions to product harm crises [28,29]. Therefore, it is perfectly reasonable to assume that consumers across cultures differ in their reactions to crisis response. Moreover, past scholars have suggested that the selection of an appropriate response strategy varies with gender, nationality and company reputational status [30]. To what extent is this applicable among Asians?

Hofstede's cultural dimensions are yet only available to divide national cultures and author's framework is the most widely used national cultural framework in psychology, sociology, marketing, or management studies [30–32]. In the cross-cultural context, Hofstede [33] showed four dimensions by which countries could be differentiated in terms of cultural differences. As the study concerns product harm crises, discussion of the uncertainty avoidance dimension seems fruitful [29,30], out of the other three dimensions: namely, power distance, individualism-collectivism, and masculinity-femininity [33]. Hofstede [33] (p. 263) defined uncertainty avoidance as "the extent to which the members of a culture feel threatened by uncertain or unknown situations". Therefore, uncertainty avoidance deals with a society's tolerance for uncertainty. Hofstede [33] included China under low uncertainty avoidance countries, however, Hofstede, [12,14,33,34] did not include Sri Lanka in any one of his studies. According to the characteristics of low/high uncertainty avoidance countries suggested by Hofstede [33], Sri Lanka can also be classified as a low uncertainty avoidance country. However, there is not yet any empirical evidence to prove which category Sri Lanka can be classified under. Therefore, the study argues that consumer perceptions vary among these two national cultures and

presumably, if Sri Lanka is categorized as a low uncertainty avoidance country, perceptional variations exist among low uncertainty avoidance cultures as well, related to the Uncertainty Avoidance Index (UAI) suggested by [33]. Accordingly, the Chinese UAI is 30 [33]. Can these two cultures vary in their perceptions based on the variation of this value, if they both classify as low uncertainty avoidance cultures?

In addition, studies on psychology have revealed the differences across-cultures in sensitivity to situational information. In a review of five studies comparing North American and East Asian (China, Japan, Hong Kong, Taiwan, Vietnam, and Korea) perspectives, Lerberman and his colleagues [35] showed that East Asian individuals are somewhat insensitive to situational information in absolute terms, compared with U.S. individuals. However, on the other hand, numerous studies of attribution and behavioral prediction have found that East Asian individuals are more sensitive to situational information than U.S. individuals [36,37]. Therefore, it is impossible to reach a final conclusion. Past literature in other domains revealed the perceptional change among Asians due to the variation of their national business system [38]. Is it possible to change Asian consumer perceptions in response to crisis response strategies in a product harm crisis? Can consumers in China and Sri Lanka vary based on East and South Asian geographical boundaries as they belong to the same Asian cultural root? Do we need intra-cultural dimensions to divide these cultures? Interestingly, Steenkamp [32] argued that there is an empirical support for within- and between-country differences making nationality an acceptable proxy of culture. Nations with a long history have a strong drive towards further integration and "nations are the source of considerable amount of common mental programming of their citizens" [34] (p. 12). In fact, culture, country, nation, and society are often used interchangeably [39,40].

In a product harm crisis situation, the consumer response to a crisis is heavily influenced by the way a consumer is impacted by the crisis event [41]. In that sense, can consumer perceptions on crises vary between these two national cultures based in their crises experience as well? Consumers in these two countries, China and Sri Lanka, seem totally different according to their experiences related to product harm crises. China, based on crises history, has already experienced numerous crises (For instance, the recent Melamine milk crisis). In contrast, the crises concept is relatively new to Sri Lankan consumers as they have yet to experience a country related crisis. Thereby, Sri Lankans may act strongly and curiously to a product harm crisis event, and expect a stronger response from companies than their Chinese counterparts. Moreover, stakeholder theory and image restoration theory describe the way perceptions changes among individuals. These theories argue that consumers tend to "forget" about the crisis and its effects, especially in cases when the company is socially responsible and when the company issues a voluntary recall of its product [42].

After considering the characteristics of Hofstede [33] uncertainty avoidance cultural dimension, Laufer and Coombs [30] suggested that a voluntary recall response strategy is fruitful for the consumers in low uncertainty avoidance countries in an ambiguous product harm crisis. With respect to consumer moral reputational perceptions toward the affected company, the study argues that Chinese and Sri Lankans expect different response strategies in the face of a product harm crisis. For instance, as a prominent low uncertainty avoidance culture, Chinese are less threatened by product harm crises in accordance with rigid cultural characteristics [33], thereby exhibiting a smaller reduction in the company's moral reputation amongst consumers than in Sri Lanka. In turn, they demand a voluntary response that satisfies the legal requirements in a product harm crisis [30]. However, Sri Lankans seem to expect more concern, more sympathy, and a greater communication effort than the Chinese.

Implementing a super effort response implies that "a company may respond by demonstrating concern with consumer welfare by being socially responsible and by being honest in its communications related to the crisis" [1] (p. 32). This involves a recall process extremely easy for the consumer by offering discount coupons or free samples of other products and by widely advertising the recall [25,43,44]. Therefore, a more vigorous response—the super effort—signals additional concern to the public by providing compensation and increasing communication efforts. That is beyond what is required by law [30].

This leads to formulating the following hypotheses.

- H1. The Chinese consumer is expected to enhance his/her perception of the troubled firm's moral responsibility in the presence of the voluntary response strategy.
- H2. The Sri Lankan consumer is expected to enhance his/her perception of the troubled firm's moral responsibility in the presence of the super effort response strategy.

Based on the reaction of various countries to the Coca-Cola product harm crisis, Taylor [29] suggested that countries that rank high in uncertainty avoidance react more strongly to product harm crises than countries that rank lower in this cultural dimension. For instance, Belgium, France, Spain (high uncertainty avoidance countries) banned the Coke, while Sweden, Denmark and Norway (low uncertainty avoidance countries) did not. Based on the study of product harm crisis in Mexico, Laufer and his colleagues [28] provided preliminary evidence that consumers who live in countries that rank high on the uncertainty avoidance cultural dimension seem to be more threatened by a product harm crisis, and as a result, blame a company more for the crisis than do consumers from a country that ranks low on this cultural dimension.

Is the crisis response alone sufficient to shape consumer perceptions? Related to the effect of crises response on brand equity, past literature revealed that firm response alone is likely to be insufficient to predict its effects on brand equity [5,45]. For instance, Dawar and Pillutla [5] attenuated that identical firm responses may have dramatically different impacts on consumer based brand equity depending on consumers' prior expectations about the firm. These expectations are mainly guided by the national culture attached to the consumer [13,33]. Therefore, it is rational to assume that crisis response strategies seem to interact with national culture to decide companies' moral reputation among consumers in product harm crises.

Hence, the study posits,

- H3. National culture moderates the impact of crises response on companies' moral reputation among consumers.

3. Methodology

3.1. Design and Stimuli

The present study conducted two experiments in China and in Sri Lanka. A self administrated, pre-tested questionnaire survey was administered to test the proposed hypotheses. Two versions of the questionnaire, Chinese and English, were used to capture responses from Chinese and Sri Lankans, respectively. The English version of the questionnaire was translated into Chinese by a bilingual researcher and back-translated by a different bilingual researcher in order to maintain translation

equivalence. As denial and involuntary recalls are not particularly effective for companies as a response to a product harm crisis [1], the study used voluntary and super effort response strategies in the experiment.

Therefore, a fictitious company culpability (described as a company locus, stable and controllable (by company) crisis situation) product harm crisis scenario highlighting two crisis response strategies, voluntary product recall and super effort was used. A company culpability crisis situation was considered as attribution theory predicts that consumers' attitudes are more likely to be negatively affected when the crisis event is perceived to be internal and controllable by the firm than when it is external and uncontrollable [46] and it has been proven in a product harm crisis context as well [47]. A fictitious yogurt brand "X" was used as the stimulus brand because pre-test revealed the frequent usage of yogurt by the university students. A fictitious brand and a fictitious crisis scenario were taken to avoid confounding effects due to consumers' potential relationships or experiences with existing brands and past product harm crisis situations [1].

3.2. Sample and Procedure

Convenient samples of three groups in each country, *i.e.*, altogether six groups of Sri Lankan and Chinese based undergraduate marketing and business management specializing students were participated. Therefore, three sets of questionnaires were used in each country. The first set was used as a control, which depicted the company culpability crisis story only. Second and third sets described the voluntary product recall response strategy and super effort response strategy, respectively, along with the same crisis story used in the control. In total, 303 students participated in the survey. Respondents were randomly assigned to three sets of questionnaires separately in classroom sessions in two countries. Each respondent was instructed to read a specifically designed crisis story, followed by a response strategy in conjunction with the standard questionnaire which contained measures related to consumers' perceptions of the affected company's moral responsibility, consumers' perceptions of the affected brand's moral responsibility, consumer based brand equity and purchase intention of the affected brand. All three sets of questionnaires followed the same questions.

3.3. Variables and Measurements

The variables of consumers' perceptions of the affected company, and consumers' perceptions of the affected brand [48], and purchase intention [19] were measured with a 7 point Likert scales ranging from 1 = "strongly disagree" to 7 = "strongly agree". Consumer based brand equity was measured as a measure of consumer beliefs [5,49,50]; including brand attitude (favorable–unfavorable), brand trust (not at all trustworthy–very trustworthy), perceived quality of the brand (low–high), perceived quality of products of the brand (low–high), and brand desirability (not at all desirable–very desirable) using five items in a 7-point semantic scale. Respondents rated fictitious experimental situations as, 1 = "not realistic at all" and 7 = "very realistic" at the end of each scenario to ensure plausibility. Collected data were analyzed by using Software package used for statistical analysis SPSS (version 20.0).

4. Results and Discussion

4.1. Reliability and Manipulation Check

All constructed variables reported adequate reliability of the constructed variables in response to these two response strategies and to the control (Tables 1–3). Moreover, the majority of respondents in China (78%) and Sri Lanka (92%) stated that the control scenario was "realistic" (rated as 5, 6, and 7 on a 7-point scale). In addition, the majority of Chinese (73%) and Sri Lankans (98%) stated that the super effort experimental scenario was "realistic", and the majority of Chinese (75%) and Sri Lankans (94%) stated that the voluntary response experimental scenario was "realistic".

Table 1. Validity and reliability results of each constructs with measurement scales: control.

Variables	Items	KMO of Sampling Adequacy		Cronbach's Alpha	
		China	SL	China	SL
MRC	Company "A" deserves little respect from me This event makes me disbelieving about the virtue and the values of company "A" This event makes me feel that company "A" lacks integrity	0.74 ***	0.77 ***	0.90	0.95
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	0.78 ***	0.77 ***	0.96	0.94
CBBE belief	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"?	0.84 ***	0.86 ***	0.94	0.92

Note: *** Bartlett's Test of Sphericity($P < 0.001$); KMO refers to Kaiser-Meyer-Olkin statistics, SL refers to Sri Lanka; MRC, MRB, and CBBE refer to consumer perceptions of the company's moral responsibility, consumer perceptions of the brand's moral responsibility and consumer based brand equity (as a measure of consumer belief), respectively.

Table 2. Validity and reliability results of each construct with measurement scales: Voluntary response strategy.

Variables	Items	KMO of Sampling Adequacy		Cronbach's Alpha	
		China	SL	China	SL
MRC	Company "A" deserves little respect from me; This event makes me disbelieving about the virtue and the values of company "A"; This event makes me feel that company "A" lacks integrity	0.71 ***	0.77 ***	0.80	0.94
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	0.72 ***	0.75 ***	0.91	0.94
CBBE belief	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"?	0.84 ***	0.89 ***	0.92	0.98

Notes: *** Bartlett's Test of Sphericity ($p < 0.001$); KMO refers to Kaiser-Meyer-Olkin statistics, SL refers to Sri Lanka; MRC, MRB, and CBBE refer to consumer perceptions of the company's moral responsibility, consumer perceptions of the brand's moral responsibility and consumer based brand equity (as a measure of consumer belief), respectively.

Table 3. Validity and reliability results of each construct with measurement scales: Super effort response strategy.

Variables	Items	KMO of Sampling Adequacy		Cronbach's Alpha	
		China	SL	China	SL
MRC	Company "A" deserves little respect from me; This event makes me disbelieving about the virtue and the values of company "A"; This event makes me feel that company "A" lacks integrity	0.77 ***	0.75 ***	0.95	0.91
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	0.75 ***	0.74 ***	0.96	0.86

Table 3. *Cont.*

Variables	Items	KMO of Sampling Adequacy		Cronbach's Alpha	
		China	**SL**	**China**	**SL**
CBBE belief	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"?	0.79 ***	0.86 ***	0.94	0.92

Notes: *** Bartlett's Test of Sphericity ($p < 0.001$); KMO refers to Kaiser-Meyer-Olkin statistics, SL refers to Sri Lanka; MRC, MRB, and CBBE refer to consumer perceptions of the company's moral responsibility, consumer perceptions of the brand's moral responsibility and consumer based brand equity (as a measure of consumer belief), respectively.

4.2. Descriptive Statistics-Sample Characteristics

Table 4 shows the summary of the sample characteristics of two countries related to three situations, control, voluntary response and the super effort response strategy.

Table 4. Sample characteristics.

Situation	Country	Average age	Gender		Average family income(US$/month)	Average family size * (No.)
			male	female		
Control	China	22	46	54	795	3
	Sri Lanka	26	40	60	338	4
Vol.	China	21	22	78	800	3
	Sri Lanka	25	68	32	320	5
Super	China	21	25	75	1000	3
	Sri Lanka	25	48	52	400	6

Note: Vol. and Super refer to voluntary and super effort response strategies, respectively,* in number.

4.3. Empirical Results and Discussion

A two country (China, Sri Lanka) × three situations (control, voluntary response, super effort) ANOVA full factorial experimental design was used to test H1, H2 and H3. Results revealed that as expected, main effects; country ($F_{1, 297} = 7.38$, $p = 0.007$) and situations ($F_{2, 297} = 47.18$, $p = 0.000$) were highly significant. Mean values suggested that Chinese opinion of the affected company was enhanced compared to Sri Lankan opinion in the presence of a voluntary response strategy (means were 5.58 *vs.* 2.28, respectively, among Chinese and Sri Lankans), substantiating H1. This is compatible with past literature which stated the suitability of the voluntary response strategy in low uncertainty avoidance cultures [30].

Moreover, it is interesting to note that as expected, Sri Lankan opinion was improved in the presence of a super effort response (means were 2.38 *vs.* 5.81, respectively, among Chinese and Sri Lankans). Therefore, H2 is supported. Surprisingly, Chinese exhibited less improvement in opinion in the presence of a super effort response comparatively to the control (means were 3.35 *vs.*, 2.38, respectively, in the presence of the control and the supper effort response). This means that from a company's reputation perspective, the product harm crisis situation is better than a super effort response. This builds on past literature. Despite being an effective response strategy in certain circumstances, a super effort can harm a company when consumers view it as an overreaction [30]. Therefore, a company loses out in two key ways when it uses a super effort response strategy unnecessarily: bearing high costs and receiving a bad image.

Interestingly, the study found the highly significant interaction effect between countries and situations (Figure 1) indicating the moderating effect ($F_{2, 297} = 280.41$, $p = 0.000$). Therefore, H3 is substantiated.
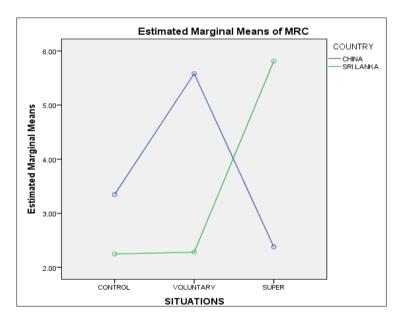
Figure 1. Moderating role of national culture.

Therefore, the product harm crisis response strategy alone is not likely to be sufficient to decide the effects of crisis response on consumer perceptions of the affected company in product harm crises. National culture is a significant moderator to be considered. In other words, an identical response can have dramatically different effects on consumer perceptions of an affected company's moral responsibiliy, depending on the national culture. In addition to the main hypotheses developed, the study conducted a regression analyses to explore how consumer perceptions of the affected company's moral responsibility affect that of the brand in the presence of two response strategies. Based on Chinese and Sri Lankan consumers' views, regression analyses found that consumer perceptions of the wounded company significantly affected consumer brand perceptions in China ($\beta = 0.66$, $t = 6.09$, $p < 0.001$) and, in Sri Lanka ($\beta = 0.61$, $t = 5.38$, $p < 0.001$) in the presence of a voluntary response. Moreover, it is noteworthy that consumer perceptions of the wounded brand significantly affected consumer based brand equity in China ($\beta = 0.64$, $t = 5.90$, $p < 0.001$) and in Sri Lanka ($\beta = 0.69$, $t = 6.59$, $p < 0.001$). Past literature has already revealed the existence of a positive relationship between consumer-based brand equity and purchase intention of the affected brand [5]. This challenges the financial status of the

business in Sri Lanka, because the study revealed the negative relationship between voluntary response and consumer perceptions of the wounded company.

Interestingly, these significant relationships between consumer perceptions of moral responsibility of the affected company and brand were found in the presence of the super effort response in both countries ($\beta = 0.84$, $t = 10.73$, $p < 0.001$ in China and, $\beta = 0.43$, $t = 3.32$, $p < 0.01$ in Sri Lanka). Subsequently, consumer perceptions of the wounded brand had a significantly affect on consumer based brand equity in China ($\beta = 0.70$, $t = 6.86$, $p < 0.001$) and in Sri Lanka ($\beta = 0.45$, $t = 3.49$, $p < 0.01$) challenging the financial status of the business in China.

5. Conclusions

Two countries considered here, China and Sri Lanka, showed entirely different moral perceptions of the affected company in response to the two main crisis response strategies discussed here; voluntary product recall and super effort response. This is the first empirical study of consumer moral perceptions in response to the firm response strategies in the product harm crisis literature. Moreover, this is the first cross-cultural study bringing together consumer moral perceptions in a crisis context. Major findings of the study can be summarized as follows.

In response to a product harm crisis communication strategy, national culture affects significantly consumers perceptions of the affected company's moral responsibility in a company culpability crisis, thereby having a subsequent significant effect on the the affected brand's moral reputation, and consumer based brand equity.

Being a low uncertainty avoidance country, a Chinese company requires launching a voluntary response strategy to build its moral reputation among consumers during a crisis where a firm is responsible. Launching a super effort response creates a significant negative impact on a company's moral reputational and financial status.

Sri Lankan firms need more customer concern response strategies (super effort) to build there moral reputation among consumers. A voluntary recall response is not enough for them to build good moral reputation among their customers.

Culture moderates the impact of crisis response on consumers' perceptions toward the wounded company revealing a new insight in the crisis management literature.

Therefore, the current study suggests that the effectiveness of the crisis response strategy does depend on the cultural variation among consumers.

Managerial Implications

The current study directs crisis managers to take managerial decisions related to the selection of appropriate communication strategies as a crisis response, especially during a company culpability crisis. Crisis managers should communicate with different cultures differently. Selection of culture specific crisis response strategies is vital as the wrong strategy creates a great revenue and reputational loss to the wounded firm. Moreover, from a managerial perspective, the results that culture moderates the consumer perceptions indicates that an identical response strategy can have dramatically different effects on consumer perceptions of the affected company, depending on a consumer's national culture. In addition, consumer perceptions of the affected company's moral responsibility have a positive and

significant effect on consumer perceptions of the affected brand, and finally it seems to affect the financial status of the company. An undesirable and inappropriate response in the face of crises leads to significant moral reputational and financial damage to the wounded company. Most human responses are understandable, but this is actually an element of crisis itself, even if a hidden one [1]. Therefore, the study suggests that the way a firm responds to a crisis can be viewed as one of the potentially hidden variables that can threaten business sustainability if unexploited. Employing an effective crisis response strategy really does depend on the degree of managerial flexibility and understanding of the ethical nature of the crises. Of course, a company should launch a culture specific crisis response. In particular, multinational companies should be more decisive in this regard.

However, the study considered only two national cultures (*i.e.*, China and Sri Lanka) and one type of crises (*i.e.*, company culpability). Further empirical research investigations related to more cultures and more crisis situations are vital in order to give a more precise picture of the relationship between crisis response and consumer perceptions of the affected company's moral responsibility. Moreover, even though the study revealed significant results, it failed to reveal the reason behind that with the support of the existing literature. Perhaps, the low experience of Sri Lankans demands a stronger consumer concerned response strategy (*i.e.*, super effort) than their Chinese counterparts. Or, Sri Lanka's uncertainty avoidance index (UAI) may be higher than China, because the super effort response strategy is suitable for high uncertainty avoidance countries [30] or it may be due to both these reasons and/or any other reason. In addition, the rise of the multi-polar world is constantly reshaping consumer perceptions. Hence, current research demands further studies to address this issue. Thus, this phenomenon deserves future research attention for the sake of business sustainability throughout the world.

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Author Contributions

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Conflicts of Interest

The authors declare no conflicts of interest

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