

**HOW CHINESE AND SRI LANKAN CONSUMERS PERCEIVE SOCIETAL DAMAGE
IN A PRODUCT HARM CRISIS – THE MODERATING ROLE OF GENDER**

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Abstract

The main purpose of current study is to uncover how consumer perceives societal damage of the crisis with respect to culture, gender and causal attributions of the product harm crisis. Based on a survey conducted in China and Sri Lanka study uncovers that gender moderates the impact of culture on societal damage perceptions when company is accused for the crisis. However, gender is insignificant when consumer himself is accused for the crisis. In addition, female consumers perceive higher societal damage than males in both countries and perceived seriousness of the societal damage depends on the culpability of the crisis. This study provides new insights for crisis managers for implementing crisis management strategies in midst of product harm crisis and for further research initiatives.

Keywords: Causal attributions, culture, product harm crisis, gender

INTRODUCTION

Gender is an important variable used by companies. In fact, many product categories are sold separately to men and women. Therefore, from business perspective, the gender issues related to product harm crisis are vital in order to achieve a healthy business environment. Literature shows us how causal attributions of crisis and how gender of the consumers shape consumer

perceptions in product harm crises. Existing literature explains how consumer perceptions toward the company vary with respect to an internal, stable, controllable crisis and an external, unstable, uncontrollable crisis (Klein & Dawar, 2004). However, studies have not yet investigated how gender and causal attributions of crises shape consumer perceptions in different cultures. To the best of our knowledge, no empirical studies could be found in crisis research in marketing that considered the effect of gender on consumer perceptions as a reaction to the culpability of a crisis i.e., company culpable or consumer culpable. Therefore, in spite of mounting body of literature on product harm crisis, there exist several questions unanswered. How do consumer segments (for instance gender and culture) shape consumer perceptions in crisis? Do consumers in different cultures perceive a same societal damage in different eyes based on the culpability of the crisis? Should company expect different consumer segments react differently or in a similar manner in assessing the societal damage incurred by the crisis? Present study tries to answer these questions. As companies develop products that fit the needs of these consumer segments, understanding the gender and culture specific perceptions are vital for companies in crisis in order to mitigate the potential negative impact caused by the crisis.

Therefore, the main aim of this study is to explore the effect of gender on Chinese and Sri Lankan consumers' perceptions in two crises grounds; where culpability of the crisis is company (company culpable) and where culpability of the crisis is consumer (consumer culpable). This article begins with a review of the relevant literature in order to formulate hypotheses regarding differences between male and female in their perceptions in these two different crisis grounds and two different cultures. Then consumer perceptions related to the perceived societal damage of the crisis are discussed. Finally, the implications of the empirical findings are presented. Not only this is the first study discusses consumers' perceptions regarding the societal damage incurred by the product harm crisis in different cultures, but also this is the first research combines Attributions, gender, culture and consumer perceptions simultaneously in a product harm crisis context. Moreover, to the best of our knowledge, this is the first article comparing consumers' perceptions in two different grounds of product harm crises with respect to two Asian countries.

LITERATURE REVIEW

Gender and Product Harm Crises

Gender plays an important role in the past crisis literature. Women view threatening events as more severe than men, due to biological and socialization factors (Harris & Miller, 2000). Laufer & Gillespie, (2004) acknowledge as first authors who found the gender difference in consumer perceptions in product harm crisis context. Authors showed that women feel more vulnerable

than men after reading about the product harm crisis. Laufer and Coombs (2006) found that women, more than men blame the companies for the product harm crisis. Su and Tippins (1998) showed that gender is insignificant in blaming to the consumer. However, authors found that females place more blame on the retailer than did men. Majority of these studies considers the implications when culpability is ambiguous. Moreover, these studies did not consider the effect of crisis on consumer perception in different cultures when culpability is known. Even there exist some cultural studies in product harm crisis literature; majority of these studies were based on European and American context (Laufer, Gillespie, McBride & Gonzalez, 2005; Taylor, 2000), giving very little attention to Asian countries.

Causal attributions and product harm crisis

When a product harm crisis occurs, the general public wants to understand what happened. Consequently, there is a need to uncover the causation of the accident (Dean, 2004). In particular, negative and unexpected events initiate causal search (Folkes, 1982). Accordingly, after the product harm crisis event, consumers often become involved in an Attributional activity (Folkes, 1988) and seek to assign blame. These attributions are important from a business perspective because they form the basis of consumers' judgments and behaviors. Past literature has already discussed how attributions shape consumer perceptions in a product harm crisis (Klein & Dawar, 2004). However, the cultural variation of consumers' perceptions with respect to different crises grounds is an unexploited area in the crisis literature. In addition, majority of attributional studies have been grounded in a product failure literature (Folkes, 1984; Dunn & Dahl, 2012). However, in terms of severity, product harm crisis is more severe than product failure. Product harm crisis involves more serious outcomes that can result injuries and even deaths than product failure which involves mild inconvenience to the consumer.

How culture shapes consumer perceptions during product harm crisis

Consumer perceptions vary based on culture (Kotler, 2005; Hofstede, 1997). A flourishing body of literature found the cultural differences in responding to a product harm crisis (Taylor, 2000; Laufer et al, 2005; Laufer & Coombs, 2006) and consumer perceptions vary across cultures (Taylor, 2000; Sorrentino, Szeto, Chen & Wang, 2013). Product harm has not yet become a crisis status in Sri Lanka while Chinese consumers have already experienced dreadful experiences of product harm crisis. Hence, this study is the first study of comparing two Asian countries; Sri Lanka and China, where consumers' perceptions related to product harm crises can drastically vary based on their experience.

Perceived societal damage and consumer perceptions

Product harm crisis is defined as well publicized incidences wherein products are found to be defective or dangerous (Siomkos & Kurzbard, 1994). Therefore, even by definition it involves a risk of damage to the people in a society. Damage associated with product harm crisis depends on the perceived seriousness of the failure by the consumer (Dawar & Pillutla 2000). According to the Weiner's (1986) Attribution theory, in the first stage the individual evaluates the outcome and typically experiences happiness or sadness depending on the seriousness of the outcome. Severity of an outcome can be based on objective criteria such as number of victims injured or the status of the severity of their injuries (Kouabenan, Medina, Gilibert and Bouzon, 2002). Perceived severity of an outcome can be calculated by measuring differences between observers on how serious each judges an accident to be (Phillips, 1985), and previous researches have already discussed the perceived severity of product harm crisis (Laufer et al, 2005). Past literature showed that women view threatening events as more severe than men, due to biological and socialization factors (Harris & Miller, 2000). Moreover, women feel more vulnerable to harm than men, after reading about product harm crisis (Laufer & Gillespie, 2004). Culture shapes consumer perception on perceived seriousness of the damage as well. For instance, Pennings, Wansink & Meulenberg (2002) found that even though the mad cow disease impacted both countries in a similar fashion, German consumers perceived more risk from the disease than Dutch consumers.

Above convincing evidences motivate the study to hypothesize following hypotheses.

H1: Chinese and Sri Lankan consumers will perceive the societal damage of the crisis in a different way under the company culpable crisis.

H2: Chinese and Sri Lankan consumers will perceive the societal damage of the crisis in a different way under the consumer culpable crisis.

H3: Female and male consumers will perceive societal damage of the crisis in a different way in a company culpable crisis

H3a: Chinese female will perceive higher societal damage than male

H3b: Sri Lankan female will perceive higher societal damage than male

H4: Female and male consumers will perceive societal damage of the crisis in a different way in a consumer culpable crisis

H4a: Chinese female will perceive higher societal damage than male

H4b: Sri Lankan female will perceive higher societal damage than male

In Social dominance orientation domain, Wilson & Liu (2003) found that gender group identification moderates the relationship between gender and Social dominance orientation. In a product harm crisis literature, Laufer & Coombs (2006) showed that consumers responses to a crisis vary based on their respective nationality and gender. Based on psychology's defensive attribution hypothesis, Robbennolt (2000) found that when an incident result in a severe outcome, blame directed to the potentially responsible party depends on the perceived severity of the event. Fiske & Taylor (1991, p.85) explained the impact of the perceived severity of outcomes as follows. "As the consequences of an action become more severe, they become more unpleasant, and the notion that they might be accidental becomes less tolerable: The fear that the same thing might involve the self becomes a realistic possibility. Seeing the actions are avoidable and blaming a person for their occurrence makes the actions more predictable and hence avoidable by the self"

H5: Gender is likely to amplify the impact of culture on consumers' perceived societal damage perceptions in a company culpable crisis ground

H6: Gender is not likely to amplify the impact of culture on consumers' perceived societal damage perceptions in a consumer culpable crisis ground.

METHODOLOGY

A self administrated, pre-tested questionnaire survey was conducted to test the proposed hypotheses by using two samples of Sri Lankan (n=100) and Chinese (n=101) based undergraduate marketing and business management students. The study used a fictitious product harm crisis scenario to highlight the company culpable (company locus, stable and company controllable) and consumer culpable (consumer locus, unstable and consumer controllable) product harm crises situations. Experimental scenario was followed by different questions to elicit perceptions of the locus, stability and controllability of the cause of the product harm crisis event and perceived societal damage. A fictitious yogurt brand "X" was used as the stimulus brand in both experimental situations. Questionnaires were distributed randomly in two countries in classroom sessions. It is noteworthy that although, the sample seems to be convenience, the interviews were conducted randomly at different classrooms and on different days and times, in both countries in order to reduce response- bias resulting from date, time and location parameters (Vassilikopoulou, Chatzipanagiotou, Siomkos & Triantafillidou, 2011). Upon completion of the questionnaires, the subjects were informed that the product harm crisis scenario was fictitious. The items used for attributions (locus, stability, controllability), and perceived societal damage were measured with 7- point Likert scales ranging from 1= "strongly disagree" to 7= "strongly agree" (Zhou & Whitla, 2012). Collected data were analyzed by using

SPSS (version 20.0). Factor analysis identified the validity and reliability of the different items used in each construct measured the same underlying construct. The reliability of the scales was assessed by reliability coefficient, Cronbach's alpha (Cronbach, 1951). In case of validity analysis, Kaiser, Meyer and Olkinn (KMO) sampling criterion ($KMO > 0.5$) and the statistically significant Bartlett's sphericity criterion ($P < 0.001$) verified the adequacy of the sample (Field, 2005).

RESULTS AND DISCUSSION

Reliability Analysis

Related to the two crisis grounds, analysis showed that the average correlation among the items verifying the internal consistency. All indexes were above their respective thresholds, providing evidence for acceptable scale reliability.

Manipulation check

Analysis revealed that majority of the respondents in two countries recognized two crisis situations correctly which the experimental scenario needed to accentuate. In addition, majority of respondents stated that the experimental scenarios were realistic (Table 1).

Table 1: Consumer identification of two crises grounds

Consumer response (%)				
Cause of the crisis ¹	Company culpable		Consumer culpable	
	China	Sri Lanka	China	Sri Lanka
Locus	96	96	80	96
Stability	98	90	86	82
Controllability	96	90	86	94
Realism	78	92	65	92

*Note:*¹ cause was stated as company locus, stable, controllable in case of company culpable crisis and consumer locus, unstable and controllable by the consumer in case of consumer culpable crisis.

Consumer perceptions in crises grounds- Hypotheses Tests

The independent samples *t* test was conducted to check the hypotheses H1 and H2. As predicted, results indicated that there is a significant difference between how Chinese and Sri Lankan consumers perceive societal damage in a company culpable crisis (means 6.18 vs. 5.17, $t_{98} = 3.41$, $p < 0.01$) and in a consumer culpable crisis as well (means 3.75 vs. 2.91, $t_{99} = 3.28$, $p < 0.01$) supporting H1 and H2. It is interesting to note that consumer perceived same

societal damage as “high” in the company culpable crisis ground exhibiting higher mean values on 7 point Likert scale while perceived “low” in the consumer culpable crisis ground exhibiting lower mean values revealing another new insight in the crisis literature (Table 2). In addition, Chinese perceive higher societal damage than Sri Lankans in both crises situations, perhaps reflecting their awful experiences in past crises.

Table 2: How consumer perceive societal damage in different crisis grounds

	China		Sri Lanka	
	<i>Mean</i>	<i>t</i>	<i>Mean</i>	<i>t</i>
Company culpable crisis	6.18	3.41**	5.17	3.28**
Consumer culpable crisis	3.75		2.91	

Note: ** $p < 0.01$

Results of independent samples *t* test showed that male and females perceived societal damage in a different way in company culpable crisis ground, verifying H3 (Table 3). Female perceived higher societal damage than did men in China as well as in Sri Lanka. Therefore, H3a and H3b are supported. This embellishes the past literature (Harris & Miller, 2000; Laufer & Gillespie, 2004) Authors showed that women view threatening events more severe than men and women feel more vulnerable to harm than men, after reading about product harm crisis. However, gender is insignificant in consumer decisions related to the perceived societal damage when consumer is culpable for the crisis. Therefore, H4a and H4b are not supported. This adds new insight to the crisis literature. When consumer himself is culpable for the crisis, male and female both perceive the societal damage of the crisis in a same eye. That embellishes the findings of Su and Tippins (1998). Authors found that gender is insignificant in blaming to the consumer. Therefore, it is rational to assume that gender will not affect on consumers perceptions when consumer himself culpable for the crisis. Moreover, mean values suggest that both male and female perceive the same societal damage as “high” in company culpable crisis and as “low” in consumer culpable crisis.

Table 3: How female and male perceive societal damage of the product harm crisis

	Company culpable				Consumer culpable			
	China		Sri Lanka		China		Sri Lanka	
	<i>Mean</i>	<i>t</i>	<i>Mean</i>	<i>t</i>	<i>Mean</i>	<i>t</i>	<i>Mean</i>	<i>t</i>
Male	5.36	-3.43**	4.07	-4.18***	3.00	-1.86	2.81	-0.99
Female	6.47		5.91		4.01		2.97	

Note: *** $p < 0.001$, ** $p < 0.01$

ANOVA was employed to check whether the gender moderate the impact of culture on consumers' societal damage perceptions. A two country (China; Sri Lanka) x 2 gender (male; female) factorial between subjects design was used to test the hypotheses. (Table 4). It is noteworthy that apart from main effects, the interaction effect (Country x gender) also significant under the company culpable crisis ground revealing the moderating effect of gender. Therefore, H5 is supported. Therefore, gender moderates the relationship between culture and consumers' perceptions on societal damage in company culpable crisis. As expected, the interaction did not significant under the consumer culpable crisis ground; even the main effects were significant. Therefore, H6 is supported as well. It is likely to happen that when consumers themselves are culpable for the crisis, gender will not accelerate their societal damage perceptions.

Table 4: Chinese and Sri Lankan consumer perceptions on perceived societal damage in different crisis grounds

Factor	Company culpable crisis	Consumer culpable crisis
	<i>F</i> (1, 93)	<i>F</i> (1,95)
Country	26.08***	5.21*
Gender	16.08***	4.76*
Country x Gender	8.95**	1.61

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

CONCLUSIONS AND IMPLICATIONS

Gender, culture and culpability of the crisis shape consumer perceptions in product harm crisis. Chinese consumers perceived more societal damage from the crisis than Sri Lankans despite the fact that the societal damage impacted both countries in a similar fashion. Perhaps that reflects Chinese consumers' terrible societal damage experiences due to awful crises in the past (for instance, recent Melamine milk crisis). Moreover, study shows that culpability of the crisis shapes how consumer perceives the degree of societal damage. Consumers perceive same societal damage in an entirely different degree according to the culpability of the crisis. For example, both male and female consumers in both countries perceive "high" societal damage under the company culpable crisis ground which becomes "low" under the consumer culpable crisis ground. The most interesting finding is noteworthy to mention. Male and females perceive same societal damage in different eyes when company is accused for the crisis, while both perceive societal damage in a same eye when consumer is accused for the crisis. For instance, when company is accused for the crisis female perceive higher societal damage than do male. However, gender is insignificant in societal damage perceptions when consumer himself is accused for the crisis.

Theoretical contribution

This research provides several unique contributions to the existing product harm crisis literature. Introduction of the link between culture and consumers societal damage perceptions in the product harm crisis context incorporating the crisis culpability attributions and gender is the main contribution of this research to the existing crisis literature. In addition, current study demonstrates the relevance of the defensive attribution hypothesis in a consumer setting and in an Asian context as well. Further, current study sharpens the understanding of Weiners (1986) Attribution theory in a crisis context as company culpable crisis causes more detrimental effect on consumer perceptions than consumer culpable crisis.

Managerial implications

Beyond the theoretical contribution to the existing literature of establishing the link between culture and consumer societal damage perceptions in crisis, these findings have several important practical implications for companies. In fact this research is of great importance to multinational companies who have to deal with the ramification of product harm crisis across cultures. These companies may have to face a potential challenge in crisis. Study suggests that companies may need to react differently in different grounds of product harm crises as well as in different cultures depending on whether the product is mainly used by men or women. If the product is primarily used by women and the company is accused for the crisis, company will have to react quicker and more decisively to minimize the societal damage. Company should take especial attention to control the crisis and to shrink the societal damage in a best possible manner in order to win consumers and to avoid great potential financial loss as well.

Limitations and future research

The current study has several limitations that can seed future investigations. Main limitation of this research relates the use of hypothetical scenarios that limits the generalization of the conclusions drawn from the current research. Therefore, findings related to embellish past findings may change with the real product harm crisis incidence with the real brand. While our sample is common to consumer behavior experiments, scenarios were created with a product frequently used by students (Vassilikopoulou et al, 2011). Therefore, caution is advised when extrapolating beyond the sample. In addition, the sample chosen which consists of both young and a single (Asian) culture limits the generalization of findings, as Laufer et al, (2005) explore the differences between older and younger consumers in attributions of blame for product harm crises. Therefore, the results may not be easily transferable to other age groups and cultures as well. Though, these limitations limit the generalization and the precision of the results obtained, these issues remain promising avenues for future research. Future research could examine

consumer perceptions related to the other cultures as well in order to check whether gender and cultures play different roles with respect to causal attributions of the crises. Therefore, the process underlying the gender, culture and causal attribution differences could yield a significant practical implication in a crisis literature in future. As consumer perceptions are changing constantly, up-to-date checks and balances are needed in cross-cultural perspective to ensure healthy marketing environment globally. These phenomenons deserve further research attention in marketing.

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