Is Brand Equity an Asset or a Liability in Brand Harm Crisis? Buffering and Amplifying Effects and Contingent Conditions

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ABSTRACT

Brand harm crisis often result in negative consumer responses. This thesis addresses the buffering and amplifying theoretical perspectives of brand equity effects. We theorize that brand equity may interplay with the nature of brand-harm crisis in shaping consumer reactions. Results from focus group studies provide interesting insights into the amplifying and buffering effects. Moreover, research findings from two experiment studies show that brand equity amplifies consumer negative responses in a performance-related crisis but only when the crisis is extremely severe. When the crisis becomes less severe, the amplifying effect diminishes from outset. However, in a value-related crisis, the amplifying effect of brand equity is pervasive regardless of the level of crisis severity. The current thesis adds to the extant literature by demonstrating that brand equity can have very complex effects on consumer responses, which are contingent on the severity and domain of a crisis. Theoretical and managerial implications are discussed.

Key words: brand crisis, brand equity, buffering and amplifying effects, crisis severity, crisis type
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1. INTRODUCTION

Brand crises are becoming increasingly prevalent in today’s marketplace. Some notable examples include KFC’s toxic chicken scandal in China, Toyota’s worldwide recall due to unintended acceleration problem, Texaco’s racial discrimination litigation and Nike’s employing child labor in developing countries. These well-publicized incidents are defined as either performance-related or value-related brand crises depending on whether the crises mainly involve defective products or unethical firm conducts (Siomkos and Kurzbard 1994; Dawar and Pillutla 2000; Pullig et al. 2006). Such brand crises can be extremely devastating for the involved brands. For example, the sales in China plummeted by 41% due to KFC’s chicken scandal in 2012, whereas the Toyota’s recall of more than 8.5 million cars cost over $5 billion, and Texaco paid $178 million on legal judgments for its racial discrimination (Reuters 2013; Sanchanta and Takahashi 2010; Gregory et al. 2012). Except for the tremendous immediate loss from baseline sales and costly compensations, brand crises may also have some far-reaching detriments on the involved brand in the long run such as loss of customers’ confidence, downgraded quality perceptions and customer distrust (e.g., Van Heerde et al. 2007; Darke et al. 2010). Considering the enormous negative impact from brand crises, it is imperative to identify and understand key factors influencing consumer responses.

Previous literature has identified various consumer-, firm-, and/or crisis-related factors that influence consumer responses to a brand crisis. For example, brand commitment has been demonstrated to attenuate consumer negative responses towards brand negative publicity (Ahluwalia et al. 2000). Firm quality reputation, on the other hand, has been found to be a liability, hurting future market share in automobile industry after product recalls (Rhee and Haunschild 2006). The frequency of a crisis has also been identified to affect consumers’
attributions towards a brand transgression (Lei et al. 2012). However, the role of brand equity, a key marketing construct, has rarely been examined in the context of brand crisis (Dawar 1998; Rea et al. 2014). In this research, we identity some of the contradictory perspectives regarding the role of brand equity, and attempt to address the following two research questions: Is brand equity an asset or a liability in a brand crisis? Are there any boundary conditions that will influence brand equity’s effect? Theoretically, there are compelling arguments regarding the role of brand equity in relation to consumer responses to brand crisis. On one hand, prior positive brand associations derived from strong brand equity may bias consumers’ evaluations against the crisis information, offsetting their negative responses (e.g., Brady et al. 2008; Cleeren et al. 2008; Rea et al. 2014). One the other hand, the drastic contrast between a negative crisis and a reputable brand may exacerbate consumers’ backlash, intensifying their negative responses (e.g., Seo and Jang 2013). To unravel the seemingly contradictory effects, we posit that there might be some important contingent conditions that further explain brand equity’s effects. We argue that the nature of brand crisis can be important contingency condition in this case. Thus, we adopt a contingency perspective to examine the role of brand equity in a brand crisis context. Specifically, we include crisis severity and crisis type as two important contingency variables in our theoretical framework.

As limited research has addressed how brand equity works in a brand crisis, we first conducted focus group studies so as to gain some baseline understanding about brand equity’s role and explore potential boundary conditions. The insights of focus group studies suggest that brand equity can both attenuate and augment consumer negative responses, and such effects may be contingent on crisis severity and crisis type (performance-based vs. value-based). In turn, we develop a theoretical framework that explicitly addresses buffering and amplifying effects of
brand equity in a crisis context. Two laboratory experiments were conducted to test our framework. We also delineate and test the psychological processes responsible for brand equity’s differential effects in different brand crisis contexts. Specifically, Experiment 1 examined brand equity’s role in performance-related crises. The results demonstrate that brand equity amplifies consumer negative responses but only when the crisis is of high severity. Consumers’ counterarguments were identified to account for the absence of brand equity’s boomerang effect in a low severity condition, whereas disconfirmation of expectation was demonstrated to mediate the amplifying effect in a high severity condition. Experiment 2 essentially replicates Experiment 1 by extending the theoretical model to the context of value-related crisis. The results reveal that brand equity augments consumer negative responses in a value-related crisis regardless of the crisis severity. Disconfirmation of expectation was found to account for (i.e., mediate) this amplifying effect in both low and high severity conditions.

The rest of the thesis will be organized as follows: first, theoretical contributions of this thesis will be highlighted. Second, literature on brand crises will be reviewed. Next, a focus group study will be discussed. Then hypotheses regarding brand equity’s role in performance-related crises and its process explanations are developed, followed by the discussion on study 1. In the same fashion, next, hypotheses about brand equity’ effect in value-related crises and its underlying mechanisms are developed, followed by the discussion on study 2. Finally, the thesis will conclude with a general discussion including theoretical and managerial implications, as well as limitations and directions for future research.
2. CONTRIBUTION

First, this research extends negative publicity literature by examining the role of an important yet rarely explored construct – brand equity, in consumers’ responses to a brand harm crisis. While prior research has addressed some related constructs such as brand commitment, brand familiarity, and brand expectations (Ahluwalia et al. 2000; Cleeren et al. 2008; Dawar and Pillutla 2000), few studies have specifically examined brand equity’s effect in such a brand crisis context (Dawar 1998). In a recent study, Rea et al. (2014) have highlighted the critical role of brand equity in shaping consumers’ reactions to the brand-harm crisis. Our research advances a better understanding of the impact of brand crisis by specifically examining the role of brand equity and its contingent conditions. This is one of the few studies that looked into brand equity effects in a negative publicity context. In addition, we contend that our study on brand equity has strong managerial significance due to the wide accessibility of brand equity reports provided by consultancy firms such as Interbrand.

Second, our research contributes to the literature by incorporating contingency theory into negative publicity research. Given the tangle of findings in the brand crisis literature, contingency theory provides a promising avenue to resolve the conflicts in this field. Specifically, we addresses both buffering and amplifying theoretical perspectives of brand equity’s effect, and developed a contingency-based framework by including crisis severity and crisis type as key contingency variables to examine brand equity’s effect on consumer negative responses. To the best of our knowledge, this is the first research that revealed the moderating roles of crisis severity and crisis type with regard to the impact of brand equity in a brand harm crisis context. In addition, given a scarcity of literature on value-related crisis, this thesis also helps to enhance understanding on consumers’ experience and responses on firm unethical conducts. Moreover,
our framework can also provide some guidance to crisis managers by showing them a practical method to evaluate the potential backlash from consumers given specific crisis situations.

Finally, our research also enhances understanding on consumers’ processing of negative publicity information by delineating the psychological mechanisms underlying the effects of brand equity on consumer responses. Though previous literature has shed some lights on the underlying mechanisms for both buffering and amplifying effects from certain psychological rent, we contend that multiple psychological mechanisms can coexist and the activation/domination of certain mechanism is contingent on contextual factors such as crisis severity and crisis type (Ahluwalia et al. 2000; Dawar and Pillutla 2000). This thesis is among one of the few studies that tested the interplay of multiple psychological mechanisms related to brand harm crisis. We believe that this stream of thoughts can provide a promising avenue for future research. In addition, this detailed understanding on consumer psychological mechanisms can also help facilitate crisis managers in designing more effective PR policies and response strategies when faced with a brand crisis.

3. LITERATURE REVIEW

This section will provide an overview of the key constructs in this research and highlight the conceptualization about customer-based brand equity, brand crisis, and crisis typology. Theoretical perspectives of brand crisis and relevant findings will be described. The discussion will tap into supporting theories regarding buffering, amplifying as well as contingency perspective in the brand crisis literature.
3.1. Customer-Based Brand Equity

Building a strong brand can yield numerous competitive advantages. Keller (1998; 2003) showed that companies with high brand equity can not only charge premium prices on customers, but also benefit from customer loyalty and long-term customer relationship. In addition, high equity brands are less vulnerable to competitor actions (Keller 2003). Moreover, a strong brand can better leverage the efficiency of various marketing activities such as extension-, communication-, and channel-related marketing activity (Hoeffler and Keller 2003). Apart from numerous benefits in routine situations, recent studies also indicate that a strong brand may be able to provide some protection against the negative effects in abnormal situations such as in a product-harm crisis. For example, case studies based on 1996 Kraft peanut butter recall have shown that compared with the weaker brand Eta, the stronger brand Kraft regained market share more quickly and enjoyed better efficiency on its marketing activities (e.g., Cleeren, Dekimpe and Helsen 2008; Darke, Ashworth and Main 2010). Also, several studies in the corporate reputation literatures suggest that a good prior reputation can attenuate consumer negative responses in a brand crisis context (e.g., Siomkos and Kurzbard 1994; Decker 2012). Yet surprisingly, limited research has actually examined the role of brand equity in a brand crisis context. In the following section, we provide conceptualization on the customer-based brand equity construct and distinguish it from some closely related constructs.

Brand equity has been conceptualized by various researchers at various levels, including stock-market valuation measures, revenue premium measures, signaling ability measures based on information economics perspective as well as customer-based mental association measures based on cognitive psychology (Simon and Sullivan 1993; Ailawadi et al. 2003; Erdem and Swait 1998; Keller 1993). Each perspective captures different domains of the brand equity
concept. Given the purpose of this thesis, we take the customer-based view of brand equity and draw the conceptualization from Keller (1993, p. 2) who defined customer-based brand equity as “the differential effect of brand knowledge on consumer response to the marketing of the brand”. Such differential consumer response derives from brand knowledge stored in consumers’ mind, which is structured as a network of associations in memory about brand-related beliefs such as brand awareness and brand image. In this sense, customer-based brand equity occurs when people have substantial brand knowledge with readily accessible and favorable brand associations in memory, and such associations generally come from some direct or indirect sources such as personal experience or advertising (Keller 1993, 1998). In another word, customer-based brand equity manifests itself as the brand knowledge structure in the minds of consumers. Based on this conceptualization, we contend that consumers should have more positive and accessible brand associations towards high-equity brands.

Brand equity is often vaguely described in the previous negative brand publicity literature. Various related constructs such as brand commitment, brand familiarity, brand image as well as brand reputation have been used as proxies for brand equity (Germann et al. 2014; Dawar and Lei 2009; Siomkos and Kurzbard 1994; Decker 2012). Although these literatures often concluded with that a “good” or “strong” brand can provide a buffer against consumer negative responses, ironically, very few studies actually addressed the customer-based brand equity construct. Therefore, we believe it is desirable to first distinguish brand equity from some similar constructs such as brand commitment, brand familiarity, and corporate reputation. The clarification on constructs is also one of the key steps in the process of theory development (Stern et al. 2001).
We view brand equity as a related yet distinct construct from brand familiarity, brand commitment, and brand image (Arnett et al. 2003). While brand familiarity only pertains to one’s ability to recall or recognize brand-related information, brand equity is a conceptually broader construct, incorporating multiple facets of consumer brand knowledge (Keller 1993). Also, unlike brand commitment which involves explicit behavioral bindings, brand equity does not request any observable actions and can be manifested as implicit perceptions towards the brand (Ahluwalia et al. 2000). In addition, based on Keller’s (1993) conceptualization, brand image only pertains to one dimension of brand equity construct while brand awareness is not incorporated in the brand image construct. Such distinctions are in line with Petty and Krosnick’s (1995) warning that generalizing outcomes and processes from one attitude strength dimension to another should be constrained. Drawing from Aaker’s (1996) and Keller’s (1993) conceptualization, Yoo and Donthu (2001) developed and validated a multidimensional customer-based brand equity scales including brand image, brand awareness, brand quality as well as brand loyalty. In relation to multidimensional approach to brand equity, we argue that brand equity should be perceived as a higher order construct which captures various attitudinal and behavioral components of consumer knowledge.

We choose to examine brand equity in this thesis for several reasons. First, brand equity has become one of the most important concepts in the marketing literature, yet its effect in a brand crisis context has received limited attention (Aaker 1996; Keller 1998). To understand the role of this important concept in both routine and non-routine situations should be especially beneficial for theory building and development in the brand equity literature. Second, it is a higher order construct encompassing various important attitude dimensions. Instead of examining subcomponents, looking at the same phenomenon from a higher level of hierarchy
may provide some new insights. Third, compared with its nuanced attitudinal components, brand equity is relatively easier to understand and monitor for practitioners due to the wide accessibility of brand equity reports provided by consultancy firms such as Interbrand. Krishnan (1996) also showed that consumer-based brand equity is consistent with external equity indicators. Therefore, our research on brand equity should have stronger managerial significance.

3.2. Brand Crisis

In this research, brand crises are defined as well-publicized incidents in which a brand’s perceived ability to deliver expected benefits is seriously threatened due to defective and dangerous products or violation of ethical norms (Siomkos and Kurzbard 1994; Dawar and Pillutla 2000; Huber et al. 2009). Although Huber et al. (2009) classified performance failure as one type of brand crisis, and many previous literatures also examined performance and service failure as a crisis, in this thesis, we refine our focus on the phenomenon of negative brand publicity (Brady et al. 2008; Choi and Mattila 2008; Laczniak et al. 2001). Unlike product performance or service failure, negative brand publicity is typically involved in the incident that is well-publicized and can seriously threaten a brand’s key propositions. As such, we restrict our literature review and conceptual development to the emerging literature on negative brand publicity.

Brand crises are among a firm’s worst nightmares, causing both immediate and long-term negative effects such as a substantial loss in baseline sales, costly remedies, reduced marketing effectiveness, increased vulnerability to competitors’ marketing instruments, damaged brand equity, tarnished reputation and a considerable loss in investors’ confidence (Van Heerde et al. 2007; Cleeren et al. 2008; Laufer and Coombs 2006; Rhee and Haunschild 2006; Siomkos and
In addition, brand crises may also spillover to other non-contaminated brands, leading to industry-wide damage (Roehm and Tybout 2006; Lei et al. 2008). Recently, there’s an increasing academic interest in consumer-related consequences of brand crises. Various negative effects from a consumer perspective have been documented in various crisis contexts (Ahluwalia et al. 2000; Dawar and Pillutla 2000; Creyer and Ross 1996; Folkes and Kamins 1999). For example, Ahluwalia et al. (2000) identified a substantial attitude decline after consumers are exposed to product-harm crises. Similarly, Dawar and Lei (2009) found that product-harm crises can significantly damage consumers’ trust and confidence in the involved brands. In addition, Aaker, Fournier and Brasel (2004) concluded that performance-related brand transgression will negatively impact customers’ perceived brand quality as well as damage customer-brand relationship. In the same vein, firm unethical conducts have also been found to negatively impact consumer attitude, satisfaction and purchase intentions (e.g., Schmalz and Orth 2012; Ingram and Taylor 2005). Overall, the literature has been unanimous on the negative impact of brand crises on consumer responses.

### 3.3. Brand Crisis Taxonomy

Along with previous studies, we conceptualized brand crises into two distinct types: performance-related crises and value-related crises (Pullig et al. 2006). Performance-related crises generally involve defective or dangerous products that call into questions of brands’ ability to provide basic functional benefits. In this sense, performance-related crises mainly pertain to products per se (e.g., the failure of an automobile part or the detection of poisonous substance in food). The term “product-harm crises” has been extensively used in previous literature to refer to performance-related crises (e.g., Siomkos and Kurzbard 1994; Dawar and Pillutla 2000; Cleeren
et al. 2013). On the contrary, value-related crises do not involve any functionality-level attributes. Rather, value-related crises mainly pertain to firm unethical or non-social responsible behaviors that go beyond products per se (e.g., discrimination in workplace or violation of environmental regulations) (Huber et al. 2009; Dutta and Pullig 2011). In general, performance-related crises mainly impact brands’ expected functional benefits whereas value-related crises mostly impact brands’ expected symbolic and psychological benefits (Pullig et al. 2006; Dutta and Pullig 2011). This taxonomy is also consistent with Keller’s (1993) conceptualization on brand equity where functional benefits and symbolic benefits are distinguished at brand level. Similar with our categorization, Trump’s (2014) recent research on brand transgression also classified brand misdeeds into product versus ethical transgressions. Though labelled differently, the mechanism of categorization is essentially the same.

Although in reality, some crises may reside in the grey areas involving both product defects and firm unethical behaviors (e.g., dangerous products combined with unethical cover-ups), we treat brand crises as two distinct categories in this thesis, either as performance-related or value-related crises. We believe it’s important to first examine the most distinct qualitative differences in these two different types of crises contexts in order to advance our understanding of the negative brand publicity literature.

Performance and value-related crisis have been examined separately in previous literature. Specifically, product-harm crisis (i.e., performance related crisis) has been put under academic spotlight recently due to its increasing occurrence, whereas value-related crisis has received relatively less academic attention (Ahluwalia et al. 2000; Dawar and Pillutla 2000; Cleeren et al. 2008; Chen et al. 2009; Darke et al. 2010; Ingram and Taylor 2005; Schmalz and Orth 2012). However, there is a scarcity of studies that have examined both types of crisis. Two exceptions
are Trump’s study on connected consumers’ responses to product versus ethical transgressions and Dutta and Pullig’s (2011) examination on consumers’ responses to firm response strategies in performance versus value related crisis. In this thesis, we are interested in how brand equity and crisis type along with other contingent factors influence consumers’ reactions to the crisis-associated brands.

3.4. Buffering Perspective

Traditional literature on brand crises as well as product and service failure has mainly supported a “buffering” perspective. That is, researchers have identified a variety of consumer and brand characteristics that can help to insulate an erring brand from negative consumer responses. This line of research indicates that brand equity may indeed be an asset in a brand harm crisis. For example, using experiment procedure, Rea et al. (2014) showed that there is smaller loss in consumer perceptions for a high-equity brand than for a low-equity brand in a product-harm crisis. They argued that positive brand associations of a high-equity brand often lead to consumers’ favorable reactions to the brand.

In addition, Ahluwalia and her colleagues (2000) argued that brand commitment can provide such a buffering effect against consumers’ negative responses after a product-related negative publicity. Specifically, they found that highly committed consumers tend to have less negative responses in the face of a negative publicity. They explained that when faced with challenging information (i.e., product-harm crisis), highly committed consumers are more likely to engage into biased processing by counterarguing the negative information. But for low commitment consumers, they tend to have more ambivalent attitudes when exposed to negative information and thus revise their attitude to a greater degree. Similarly, Huber et al. (2010)
examined consumer-brand relationship in a brand misconduct context and they found that the
deterioration of consumer-brand quality as well as consumer repurchase intention is smaller
when the existing consumer-brand relationship is longer and has higher quality.

Brand awareness was also proved to be an important factor that can attenuate consumer
negative reactions in a performance-related crisis. For example, Ho-Dac et al. (2013) recently
examined the effect of online customer review and found that brand awareness can provide a
safety cushion against negative online customer review to a certain degree such that sales suffer
less for a well-known brand in the face of negative online customer review. In addition, in a
study where country of manufacture (COM) effect has also been examined in a product-harm
crisis context, Laufer et al. (2009) showed that negative COM will negatively impact brand
evaluation in a product harm crisis, such that consumers tend to attribute more blame to the
erring brand and downgrade their evaluations. However, this negative COM effect only exhibits
when an unknown brand is involved in a crisis, while a well-known brand is immune to the
negative COM effect. This implies that well-known brands can enjoy certain reputation shield in
the wake of a product-harm crisis.

Moreover, corporate reputation has also been demonstrated in several studies to provide a
shield against negative consumer responses in a performance-related crisis. For example, In
Siomkos and Kurzbard’s (1994) pioneering study on product-harm crisis, they found that
consumers’ purchase intention after a product-harm crisis is less damaged when the product is
sold by a company with good reputation. Consumers also perceive the products as less harmful
when the erring company has better reputations. Similarly, Grunwald and Hempelmann (2010)
examined the role of corporate reputation for quality in product-harm crisis context using an
online experimental study and they found that a good reputation for quality can provide some
protection and attenuate the blame assigned to the involved manufacturer. They applied cognitive dissonance theory to explain the buffering effect, arguing that consumers are motivated to resolve cognitive dissonance by selectively processing or re-interpreting the dissonant information. Consistent with the mainstream corporate reputation literature asserting that “reputational capital” can protect a firm against the negative consequences from negative publicity, Decker (2012) further found that both firm’s perceived trustworthiness and level of expertise, two key components of corporate reputation construct, can attenuate the harm suffered from negative publicity.

Though the brand equity construct was not specifically tested, several previous studies did show that a strong brand can provide some protection against the negative effects from a product-harm crisis. Analyzing scanner data before and after the 1996 Kraft peanut butter crisis in Australia, Cleeren et al. (2008) found that the stronger brand Kraft regained its market share more quickly than the weak brand Eta. More specifically, their model showed that pre-crisis loyalty and familiarity can provide a direct buffer against the negative effects from the product recall, and the stronger brand Kraft also enjoyed a more effective post-crisis advertising than its counterpart Eta. They argued that loyal consumers who are familiar with the brand are more likely to give the erring brand the benefits of doubt and discount the diagnosticity of the negative information, leading to the direct buffering effect. Consistent with this buffering perspective, based on a field survey and two laboratory experiments, Dawar and Pillutla (2000) showed that consumers revise their attitude less in the face of a product-harm crisis when they initially have strong positive expectations about the crisis-associated brand and this finding is robust across the continuum of firm response strategies. They argued that people are more likely to engage in
confirmatory bias to maintain their prior positive attitude to minimize cognitive dissonance from the negative information.

Some less commonly studied factors have also been proven to provide a buffering effect under performance-related crisis. For example Lei and his colleagues (2012) identified that when a product-harm crisis happens, consumers place less blame towards the brand that they have positive prior beliefs. But this buffering effect is contingent on the availability of base-rate information and similarity information. They argued that information inconsistency occurs when positive prior beliefs encounter negative information, and to resolve such inconsistency, consumers tend to seek information (i.e., base-rate and similarity information) to help refute the negative (e.g., product-harm crisis) information (Edward and Smith 1996; Kunda 1990). And when they succeed in gathering information and construct reasonable refutations, buffering effect occurs. One of the premises for their observed buffering effect is when the product-harm crisis happens to a strong brand to which consumers have positive prior beliefs. In the same vein, Pullig et al. (2006) have identified another attitudinal dimension that can help to insulate consumer negative responses from negative publicity. They proposed that attitude certainty (i.e., the strength of an initial attitude) will moderate consumer responses in regards with negative publicity. Specifically, they argued that people with high attitude certainty are more likely to engage into defensive mechanisms to protect their initial attitude against negative information whereas people hold weak attitude certainty tend to process the negative information in a relatively objective manner and change their attitude accordingly.

Although performance and service failures are not considered as brand crisis in our research, the phenomenon does resemble the negative publicity situations. Therefore, literature on this area should be able to provide some valuable insights and guidance about brand crisis
phenomenon. The mainstream researches on performance and service failure also support a buffering perspective. For example, Laczniak et al. (2001) revealed that when faced with product failures (i.e., computer problems), consumers attributed more blame to the company in the unknown brand condition, but they assigned more blame to the users when a well-known brand is involved. They argued that a prior positive attitude will weaken the persuasiveness of the negative information. Adding to the buffering perspective, Huang (2011) showed that after a service failure, service recovery is more effective in restoring consumer satisfaction and behavioral intentions when the erring service provider has higher brand equity. Similarly, Choi and Mattila (2008) investigated how consumers’ prior expectation about service quality impacts their responses after a service failure encounter before any recovery strategies, and they found that high service quality expectation can shield the erring service provider against the negative consumer responses. In addition, Cowart et al. (2014) examined religious affiliation’s effect on consumer responses to a service failure and observed a buffering effect of religious affiliation. That is, consumers tend to be more forgiving about a service failure when the service providers have religious associations. Recently, Liao and Cheng (2013; 2014) investigated brand equity’s effect in a product innovation failure context. They showed that brand equity can shield the adverse effect of product innovation failure to certain extent. They explained the buffering effect by arguing that consumers’ prior strong quality perceptions about a strong brand can serve as an anchor, dragging post-failure brand evaluation towards the positive end.

This buffering effect is further supported beyond brand crisis context. For example, Klein and Ahluwalia (2005) found that in evaluating political candidates, voters who like a candidate already are immune to the established negativity effect (i.e. people weigh negative information more heavily than positive information). They argued that even a weak liking or preference is
enough to provoke a consistency motivation such that voters will process the negative information in a biased manner to discount the relevance or diagnosticity of the negative information.

Although there are ample literatures supporting the buffering perspective, very few of the studies actually examined the specific construct of brand equity in a valid brand crisis context. Moreover, this buffering effect is exclusively observed in performance-related crisis context, implying that such a buffering effect may be constrained to performance-related crisis.

3.5. Amplifying Perspective

Although researchers in brand crisis context mostly focus on identifying key drivers to fend off the negative effects from a brand crisis, some recent studies have started to look at the phenomenon from the opposite perspective, that is, they are trying to understand what factors will make a brand especially vulnerable to a brand crisis. This stream of research mainly supports an “amplifying” perspective and emphasizes on the dark side of various consumer and brand characteristics.

Seo and Jang (2013) examined the role of brand equity in food crises and observed such an “amplifying” effect. They found larger deterioration in consumers’ visit intention for crisis-associated restaurants with high brand equity. They used the “love becomes hate effect” to explain the phenomenon, arguing that long-standing consumers feel more intensively betrayed in a brand crisis context. Consistent with this amplifying perspective, using a scenario-based multistage choice experiment, Korkofings and Ang (2011) found that a product recall damage a well-known brand to a greater extent than an unknown brand in regard with brand equity and future product choice. They argued that instead of discounting the negative information,
consumers feel especially disappointed and betrayed when a strong brand issues a recall. In the same vein, using data on automobile recalls in the U.S. market from 1975 to 1999, Rhee and Haunschild (2006) demonstrated that reputation for quality can be a liability such that automobile firms with high quality reputation suffers more in regards of market share loss. They argued that consumers have high expectations about products manufactured by high-reputation firms and they become especially disappointed when a product recall occurs. In addition, problems from highly reputable firms tend to attract more media attention.

Further supporting the amplifying effect, Berger et al. (2010) revealed that brand awareness can be a liability when negative publicity occurs. Specifically, using econometric analysis as well as experimental studies, they showed that negative publicity hurt sales of well-known brands but benefit the unknown brands. They argued that negative publicity increases the awareness of an unknown brand and thus increases sales. But a well-known brand cannot take advantage of the potential increase in brand awareness due to a ceiling effect from its already high brand awareness and therefore suffers from the negativity effect from the negative information. Along with the same logic, Fennis and Stroebe (2014) examined the effectiveness of self-disclosure versus third-party disclosure of negative information in a brand crisis, and they found that self-disclosure of negative information is more effective in restoring consumers’ attitude, perceived company trustworthiness as well as behavioral intentions, but with the positive effect only constrained to firms with poor prior reputation. They argued that this effect is explained by the increased company trustworthiness for poor brands, while a good brand suffers from a ceiling effect of its prior high trustworthiness.

In addition, Puzakova et al. (2013) examined the role of brand anthropomorphization in product-harm crises and they found that consumers have more negative brand evaluations for
humanized brand amid product wrongdoing. They argued that consumers perceive humanized brands as capable of having their own intentions and therefore assign more responsibility to the crisis-associated brand in a product-harm crisis. Beyond the B2C domain, Chandrashekaran and his colleagues showed that customers who have better relationship aspects (i.e., length of relationship, volume of business, and favorability of prior experience) are more sensitive and vulnerable to problems and are more likely to defect despite of their alleged high satisfaction level in business-to-business context.

Though most of the studies support a buffering effect in product and service failure literature, the findings are not conclusive. There is another stream of studies supporting an opposite amplifying effect (Laczniak 2001; Choi and Mattila 2008; Huang 2011). For example, Grégoire and Fisher (2008) found a “love becomes hate” effect after a service failure and poor recovery. That is, they observed that high relationship quality customers feel more betrayed and tend to engage in retaliation behavior to a greater extent when they feel a violation of fairness norm. Using two laboratory experiments, Roehm and Brady (2007) exposed participants to food delivery failure scenarios and found that performance failure hurts high-equity brand to a greater extent than a low-equity brand. Their explanation is that high-equity brand has significant stature to lose and consumers’ prior high expectations may backfire in the wake of performance failure. On the other hand, a low-equity brand has nothing to lose and consumer disappointment is mitigated due to non-existing prior expectations.

One thing worth mentioning is that unlike literature buttressing a buffering effect, the amplifying effect is not exclusively limited to performance-related crisis. Cooksey and Kuchina-Musina (2010) investigated public’s perception regarding firm ethical decisions in both small and large business. They found that public is generally less concerned about ethical decisions of
small business compared with large ones and people actually favor small unknown business than large well-established ones in the wake of ethical dilemmas. The same boomerang effect has also been observed in firm ethical transgressions. Trump (2014) found that highly connected consumers tend to perceive firm ethical transgression as especially negative and diagnostic, and consequently downgrade their evaluations to a greater extent.

3.6. Contingency Perspective

The conflicting findings from the above two streams of research fail to answer our main research question – is brand equity an asset or a liability in a brand harm crisis context? Will consumers defend against negative information when the involved brand has high brand equity, leading to the buffering effect, or will they feel especially disappointed about a high-equity brand, leading to the amplifying effect? It seems that a contingency perspective may provide the long sought answer. Originally used in organizational studies, contingency theory suggests that there is no single best way to achieve the optimal fit between organizational factors. It emphasizes the multivariate nature of a phenomenon and is aimed to understand the interactions among organizational factors (Kast and Rosenzweig 1973; Teo and King 1997). Therefore, this new stream of research in brand crisis context does not favor buffering nor amplifying explanations. Instead, it suggests that both effects are plausible depending on the contextual factors.

To some extent, several recent studies on negative publicity and service failures reflect the contingent view. For example, using a combination of laboratory experiment and event study, Germann and his colleagues (2014) showed that brand commitment can attenuate consumer negative responses in a product recall but only when the recall is of low severity level. In a high-severity product recall situation, brand commitment will backfire, augmenting consumer
negative responses. Adopting Ahluwalia’s (2000) logic, they argued that highly committed
consumers are more likely to engage in biased processing of the negative information and
counterargue the negative information when the product recall is of low severity level, leading to
brand commitment’s buffering effect. However, when the product recall is of high severity level,
the negative information becomes difficult to counterargue and biased processing is impeded.
They used Oliver’s (1993) disconfirmation(expectancy paradigm to argue that highly committed
consumers will become especially disappointed in the face of a severe product recall and the
intensified incongruity lead to augmented consumer negative responses.

Similarly, Einwiller et al. (2006) also identified crisis severity as a contingency variable.
They examined the role of consumer-company identification in the negative publicity context
and they found that identification can only attenuate the negative effects of moderately negative
information but does not mitigate the effects of extremely negative publicity. Drawing from
Kunda’s (1990) motivated reasoning theory, they argued that strongly identified consumers are
motivated to protect their initial attitudes and tend to engage in defensive processing. However,
the extremely negative information is highly diagnostic and difficult to counterargue, therefore
defensive information processing is impeded and the safety cushion from strong identification no
longer exists. Hess Jr. (2008) investigated the effect of firm reputation for service quality on
consumer responses to service failures and he found the same result. That is, a buffering effect
was observed in their experimental study such that consumers have less negative responses when
the erring firm has a higher reputation for quality service. However, this buffering effect is
attenuated with the exacerbation of service failures.

The contingency role of transgression severity was also observed in business-to-business
market. In a study examining the effects of relationship commitment in a business-to-business
context, Ganesan et al. (2010) found that both calculative and affective commitment can provide a buffering effect against incumbent suppliers’ misbehaviors but only to a limited degree. When the transgressions become conspicuous, the relational rent from commitment can no longer shield the misbehaving supplier and will even backfire when the incumbent supplier is involved in flagrant opportunism. They explained this phenomenon using the assimilation and contrast framework from social judgment theory, arguing that when the transgression are mild, the misbehaviors will be assimilated to the previous attitude anchor and be perceived as less of a transgression. But when a stimulus is sufficiently discrepant from the previous anchor (i.e., a severe transgression), a contrast effect will occur, leading to intensified adverse effect from the misbehavior. In the same vein, Antia and Frazier (2001) also observed the similar buffering and amplifying effects in a franchising relationship context. When relationship is of high quality, franchisors are more tolerant of franchisees’ violations and tend to exert less severe enforcement responses. However, this relationship rent will backfire when transaction specific violations are involved. That is, when a transgression is outrageous and interfirm interactions are more cooperative, franchisors tend to enforce harsh sanctions.

In addition, the contingency role of crisis severity has also been proved in value-related crisis. For example, Ingram et al. (2005) found that highly committed consumers tend to forgive a firm’s unethical marketing behaviors when the perceived harm is low, but they become especially disappointed and the negative responses intensified when the perceived harm is high from the firm unethical behavior. They explained that when the magnitude of harm increases, consumers are more likely to feel an act of unfair and no longer can defend the erring brand regardless of their commitment level. In the same logic, Schmalz and Orth (2012) demonstrated that consumer brand attachment can provided a buffering effect against firm unethical behaviors,
but only when the negative information is moderately rather than extremely negative. They drew from motivated reasoning theory, arguing that highly attached consumers are more likely to engage into defensive reactions and discount the negative information, but this defensive ability will lose its magic power when the negative information becomes too diagnostic too discount (Kunda 1990).

Except for crisis severity, other contingency variables have also been identified in previous brand crisis literature. Using two scenario-based experiments, Brady and his colleagues (2008) examined the role of brand equity in a performance failure context, and they found consistent result that high brand equity can lead to more favorable customer satisfaction and behavioral intentions in both product and service failure scenarios. However, consumers downgrade brand evaluations to a greater extent immediately after a failure episode. Their findings indicate that whether brand equity is an asset or liability in a performance failure context is contingent on the timing of evaluation. Klein and Dawar (2004) found that firm’s corporate social responsibility level can also work as a reservoir of goodwill in a product-harm crisis, effectively attenuating consumer negative evaluations. Using attribution theory, they argued that consumers assign less blame to firms with high CSR levels in a product-harm crisis, but this buffering effect is contingent on whether consumers are CSR sensitive. In a similar vein, Vanhamme and Grobben (2009) verified firm CSR involvement history as another contingency variable. They found that firm CSR involvement can help to protect companies against the negative effects from negative publicity only when firms have long CSR involvement history, while a short CSR history may backfire due to consumer skepticism. In addition, other factors such as crisis relevance, gender, processing style as well as brand personality have all been identified to work as contingency variables, moderating consumers’ responses to negative crisis
information (Dawar and Lei 2009; Laufer and Gillespie 2004; Monga and John 2008; Aaker et al. 2004).

3.7. Summary

Previous studies have examined the role of various factors in a brand crisis context, such as brand commitment, familiarity, expectation, attitude certainty as well as reputation, yet the role of an important marketing construct, customer-based brand equity, in a non-routine brand crisis context has rarely been explored. Although there are a few studies that examined the role of brand equity in a crisis context, they all suffer from some limitations that will constrain our understanding in this important phenomenon. For example, Seo and Jang (2013) studied brand equity’s effect in restaurant food crisis and Rea et al. (2014) examined the role of brand equity in personal computer industry, yet both studies failed to address the complexity of brand equity effect. Another exception is Brady and his colleagues’ (2008) study on brand equity’s effect in a performance failure context, yet their phenomenon was not directly related to the key domain of brand harm crisis.

We reviewed the three major streams of research in the brand crisis literature and the relevant findings are far from consensus. On one hand, brand equity may provide a buffering effect as consumers may engage into biased processing and discount the negative information towards a strong brand. On the other hand, brand equity may also lead to an amplifying effect because consumers tend to feel especially disappointed due to their high expectation about a good brand. In addition, the role of brand equity in crisis context may also be contingent on other contextual factors such as crisis severity or crisis type. While the extant literature provides important insights and perspectives, we feel that a baseline ground work is needed to lay the
conceptual foundation of both the buffering and amplifying effects in relation to brand equity, crisis type, and crisis severity. In turn, we conduct focus group studies which aim to gain a better understanding of the role of brand equity in a brand harm crisis context.

4. FOCUS GROUP STUDY

In the focus group studies, we intend to gain some preliminary insights as to whether brand equity is an asset or a liability and how consumers may respond differently to the same crisis that happens to different brands. In so doing, we attempt to address the boundary conditions that would restrict brand equity’s effect and explain why. The purpose of the focus group study is to provide some baseline information and insights concerning our theoretical framework and hypotheses development.

Given the complex nature of brand harm crises, a qualitative study is a natural approach to gain some insights and provide some preliminary answers to the aforementioned concerns (Shah and Corley 2006). According to Qualitative Research Consultant’s Association (2014), qualitative research is designed to reveal how people behave and why they behave as they do. Though descriptive in nature, this type of research can be very useful in testing alternative ideas as well as allowing new or unanticipated ideas to be explored (Green and Thorogood 2013). In addition, qualitative research study has been widely proved to be an effective preliminary method to facilitate the design of survey instruments in quantitative research (Hair et al. 2006). The purpose of the qualitative study in our research is to gain some insights about the inconclusive role of brand equity in a brand crisis context, to identify new contingent conditions, as well as to facilitate our hypotheses development and experiment design.
Focus group approach is used as the data collection method for our qualitative study. It is essentially an interactive group discussion on a predetermined topic by a small group of participants and guided by a facilitator (Bristol and Fern 2003). Unlike traditional group interviews, instead of the interviewer asking each participant to answer a question in turn, participants in a focus group are encouraged to discuss with each other regarding topics that interest the researcher. That is, focus group is based on group discussion and interaction rather than individual participant’s comments (Kitzinger 1995). And this “group effect” is the distinctive strength of focus group such that it helps researchers to tap into the group dynamics and generate richer and deeper data than one-to-one interviews. It makes a focus group more than the sum of separate individual interviews. This “group effect” is manifested by participants’ query and explanations to each other in a group setting, which offers valuable information about the consensus and diversity within the group (Morgan 1996). Therefore, focus group should be especially useful when addressing complex behaviors and motivations in a social context. And this is exactly the reason we choose focus group method in this research because negative brand publicity falls into this type of context. Consumers often have very conflicting beliefs and motivations when faced with negative information and the mass media coverage on brand crises renders the social dimension on this research topic particularly salient (Ahluwalia et al. 2000; Rhee and Haunschchild 2006). Therefore, focus group method fits our research context well and it’s considered as an appropriate method in this research.

Although Merton (1987) criticized that cause-effect relations cannot be made based on the evidence from focus group studies due to small sample size and unreliable results, and Bristol and Fern (2003) argued that focus group discussion may lead to a “polarization effect”– people’s attitude become more extreme after group discussion, the usage of focus group in our
research should be largely immune to these shortcomings. The application of focus group in this thesis is limited to early, exploratory stage such as hypotheses development and experimental design, so the verification on cause-effect relations as well as the measurement on attitude are left out from this focus group study and will be tested in the following experiment studies. Therefore, the potential problems of focus group method should not pose a serious threat to our research.

4.1. Focus Group Procedure

In this research, we conducted two focus groups with 19 participants, with each group consisting of ten and nine participants respectively. All respondents were recruited through an online research participation system or through flyers posted on campus at a Canadian university. Since the target is general consumers, there are no specific restrictions or criteria on the recruitment of participants. The participants were recruited through a four week period in the summer of 2014 and the two sessions were conducted over a two week period in a seminar room at a Canadian University during the same summer. The discussion lasted for approximately 1.5 – 2 hours for the two sessions respectively. After each session, subjects were debriefed. Participants either received $10 cash or extra course credit for introductory marketing courses as a token of compensation for their time. In addition, dinner is served after each session and a $20 valued gift card is also distributed to one of the participant within each group based on fair drawing as an additional incentive. The average age of the participants was 25.3 years, ranging from 19 – 51 years of age. In terms of gender, there were 10 females and 9 males in attendance. Participants also come from a diverse cultural background with 31% Canadian and 69% international students from seven different countries (see Table 1a and 1b).
The design of the focus group is in accordance with previously established “rules of thumb”. The number of participants in each session is within the suggested number between six and ten to ensure the group is large enough to gain a broad perspective as well as small enough to avoid disorder. Although it has been suggested to keep participants in each group with the same gender, age range and cultural backgrounds to ensure that participants feel comfortable discussing with each other, it should not be a serious problem that we randomly split participants into two groups because group homogeneity was expected to be maintained by using a student sample (Morgan 1997). As suggested by Morgan (1998), one moderator facilitated the discussion and one research assistant was present to help distribute materials along the discussion as well as taking notes. In conformity to Kitzinger’s (1995) suggestions on focus group design, a semi-structured question route with open-ended questions was developed to guide the focus group discussion covering topics such as participants’ reactions to various real and fictitious brand crisis scenarios; their experiences and thoughts in a brand crisis context; attributions they made in different brand crisis scenarios; and factors important in evaluating a brand crisis (see Appendix 1).

The study was approved by the university’s research ethic board, and all the participants signed informed consent prior to focus group participation. To the best of our knowledge, there were no evident conflicts of interest in regards with the planning, conduct, analysis, or the interpretation of the study results. In each session, participants were first welcomed and the moderator introduced the conventions of focus group study to participants. Then under the guidance of the moderator, they were encouraged to talk about their experiences and thoughts
about any brand crisis they can think of as well as some real and fictitious brand crises prepared by the researcher (see Appendix 2). The discussion lasted for about 2 hours in the first session and 1.5 hours in the second session. At the end of each session, participants were debriefed and were specifically directed to the fictitious crisis article and told that it was made up by the researcher.

The discussion for both groups were audio recorded and transcribed verbatim with the knowledge of the participants, resulting in a 212 minutes audiotape and a 21,836 words, 67 pages document as the basis for our analysis. The data was thematically coded and analyzed by the researcher (Boyatzis 1998). The transcript was then repeatedly reviewed to make sure all the themes and patterns in regards with our research interest are covered. Three major themes related to our research interest emerged upon analysis and the following discussion will proceed based on the three themes – brand equity, crisis type and crisis severity. Some peripheral findings are also discussed after the three major themes. To clearly illustrate the findings, verbatim anonymous quotes will be used in the discussion. Pseudo names are used for the quotes to protect participants’ privacy.

4.2. Focus Group Results

4.2.1. The Role of Brand Equity

Comparing participants’ responses towards similar crises happened to low- versus high-equity brands, the results strongly suggest that respondents reacted very differently towards
different brands in a brand crisis context. The “buffering” perspective is supported in the finding, such that participants are more likely to perceive the same crisis happened to a good brand as less severe and relevant, attribute the problem to external factors outside the crisis-associated brand and perceive the transgression as a one-time anomaly. In contrast with a low-end brand, respondents tend to defend a reputable brand and list more cogent counterarguments against the negative information. For example, when discussing about a potential fire hazard problem with Sony:

“And you don’t know whether it’s the electric circuit’s problem. I mean, it could be the TV’s fault, but the news doesn’t consider other factors such as the electric outlets plugged into. So, I guess it just looks at one side of the story.” (Olivia, 22)

“I think it’s just something unfortunate happened. It’s just an accident. I mean Sony is a fairly reputable brand. The bottom line is I don’t think their products are of poor quality. So I think it’s just a bad day for Sony.” (Alice, 51)

However, in another session where participants were exposed to the same fire hazard on a different brand – Insignia, they had very different responses:

“I’m not surprised at all cuz (because) I always think Insignia has crappy products. So it’s just getting another recall. I mean, they don’t even have a TV plant. They just outsource everything and have poor quality control.” (Jacob, 24)
This finding is within our expectations. As aforementioned in the literature review, literature on negative publicity has examined some related constructs such as brand commitment, consumer-brand identification, and reputation for quality as well as for corporate social responsibility, and a buffering perspective has been largely supported (Ahluwalia et al. 2000; Einwiller et al. 2006; Grunwald and Hempelmann 2010; Klein and Dawar 2004).

However, participants did not reach consensus regarding brand equity’s buffering effect. Our findings also indicate that there might be some boundaries constraining the buffering effect from high-equity brand. In some situations (e.g., BWM’s recall due to safety issues and Apple’s price fixing scandal), participants stopped defending strong brands and started express strong disappointments:

“It strikes me really hard that BMW also has this kind of safety problems. It is known as a German brand and German brands are known as superior to American brands. I mean their products are not cheap. We pay a huge premium price for the feeling of safety. I can understand if the problem happened to Toyota, but for BMW, it’s totally unacceptable.”
(Alex, 27) ¹

“I didn’t think Apple would do such a thing, to be honest. I think Apple is a(n) elite, reputable brand. You know, you pay good money for good quality, so I didn’t expect them to do something out of respect like this. I mean for a different company I can understand, but not Apple. I am very surprised.” (Ashley, 23)²

¹ This comment is based on a real news video about BMW’s recall. Video is accessible online https://www.youtube.com/watch?v=jJ0PRFHEhwo
² This comment is based on a real news video about Apple’s price fixing scandal. Video is accessible online https://www.youtube.com/watch?v=ckv5nBGJs8
In summary, based on the findings from focus group study, it turns out that overall brand equity does provide a safety cushion against the negative effects from a brand crisis to some extent. However, the buffering effect is not without limitations. The findings suggest that participants’ negative reactions may intensify for a good brand in some situations, indicating the existence of some important contingency variables (e.g., crisis severity and crisis type).

4.2.2. The Role of Crisis Severity

Crisis severity is one of the most commented topics in the discussion session. Participants tend to evaluate a crisis based on the seriousness of the wrongdoing. Consistent with intuition, participants have stronger negative responses and feelings when they perceive a crisis as more severe. This finding is also in accordance with previous literatures on service failure and relational transgressions in B2B environment (Hess Jr. 2008; Ganesan et al. 2010). More specifically, participants indicated that they perceived a crisis as especially severe when the crisis involves deaths:

“So I guess when it involves human lives, people take is more seriously.” (Olivia, 22)

“It’s kind of sad. I mean fatality always has a huge impact on me. I guess it’s just more eye-catching and more impactful.” (Emma, 21)

Another finding regarding crisis severity is that participants are less likely to defend any brand against a very severe crisis. They tend to attribute the problem exclusively to the involved company regardless of other contextual factors. This is also in line with prior literature. In
investigating the role of consumer-company identification in negative publicity context, Einwiller et al. (2006) also argued that extremely negative information can be highly diagnostic and people find highly diagnostic information difficult to counterargue even if they are motivated to do so. In addition, our finding suggests that even when participants can find some excuses for the crisis-associated brand, the defensive arguments can barely reverse their negative opinions:

“I don’t want this wield, mysterious meat from Maple Leaf after its listeriosis outbreak. It’s so disgusting and scary. Now I have very negative opinion even though I know that it happened to hundreds of companies before. But just knowing that, oh my god, I don’t want this chicken” (Thomas, 25)

To summarize, our findings suggest that consumers will have extremely negative opinions and feelings towards a brand when an extremely severe crisis happened, especially when it involves death. Under this situation, consumers are unlikely to defend the erring brand, and even they do, the defensive move may not be able to mitigate their negative responses. This indicates that crisis severity may serve as an important contingent condition in examining the role of brand equity in a brand crisis context.

4.2.3. The Role of Crisis Type

The scarcity of literature on value-related crisis is one of the major reasons that we conducted this exploratory focus group study. That is, one of the purposes of this study is to understand how consumers respond differently in a performance-related versus value-related
crisis. First, we found that participants perceive most value-related crises as less personally relevant and severe:

“If something affects me as a person, like Maple Leaf happened 8 or 9 years ago, or the cars, I think it was Toyota, they stay with you. But the copyright problem, that’s not gonna stay with me.” (Matthew, 24)

Second, unlike in performance-related crises, participants are unlikely to defend against the negative information in a value-related crisis. They tend to accept the negative information at face value and attribute the fault entirely to the involved brand. Folkes and Kamins (1999) also argued that ethical information is perceived as more diagnostic than product attribute information. In addition, some participants expressed a feeling of betrayal when a brand is involved in an unethical conduct:

“I remember when Common Beauty said they do not test on animals but actually they are lying. I felt like they betrayed us. It’s just so disgusting. They are full of lies, so dishonest. I just don’t want any products from this brand anymore.” (Sarah, 22)

Third, participants expressed that they expect more from a good brand than a low-end brand in regards with ethical conducts. Respondents believe that affluent firms should take more social responsibilities because they are able to do so. This is in accordance with the proverb “with greater power comes greater responsibility”. As a result, subjects expressed that they felt especially disappointed when a high-equity brand is involved in a value-related crisis:
“Well, although it is true that every company should stick to the same ethic criteria, I think in reality, it just comes natural that you will expect more from a premium brand like Sony. I mean if Sony cannot meet the ethic standard, I would not expect other brands to do it.”

(Ryan, 31)³

Overall, the findings suggest that consumers may respond to different types of crises differently. Whereas a buffering effect has been observed in performance-related crisis, this effect is no longer evident in a value-related crisis where people tend to blame an erring brand exclusively. This indicates that crisis type may serve as another contingent condition in examining the role of brand equity in negative publicity context.

4.2.4. Other Findings

First, participants indicate that a brand crisis almost always has a negative effect on their opinions. This is consistent with most previous literature that negative publicity is always devastating, damaging a variety of marketing measurements (Van Heerde et al. 2007). Although sometimes respondents started defending an erring brand and blamed other parties for the fault, they did mention that the involved brand should still be responsible for the problem:

“Yes, maybe the technology is not mature when they produced the products, maybe the media exaggerates the problem. But at the end of the day, they are the ones who produced the products, so I guess they should take responsibility after all.” (Megan, 19)⁴

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³ This comment is based on a fictitious newspaper article about Sony’s poor labor practice (see Appendix 2)
⁴ This comment is based on a real news video about BMW’s recall. Video is accessible online
https://www.youtube.com/watch?v=j0PRFHEhwo
Second, some participants questioned the validity of a product recall as a crisis. While a product recall is portrayed as a negative publicity in the focus group, respondents raised the concern that a product recall can also be perceived as positive in which a company handled a potential problem responsibly, especially when a recall is voluntary.

“Well, according to me, the time when they sell the cars they haven’t identified there are some faulty parts on the cars. Later on, they fixed the problem and recalled the cars. Well, it doesn’t sound like negative news to me. I would say this company is responsible.” (Tylor, 27)\(^5\)

Third, the more common a problem is perceived to happen in the whole industry, either performance or value-related, the less likely participants will blame the involved company and consequently the less negatively they will perceive the crisis information. Lei et al. (2013) have identified base-rate information (i.e., how common a focal behavior is among the population of interest) as an important factor in moderating consumers’ blame attribution in negative publicity context.

“I am not surprised at all. It’s just too common. I don’t even pay attention anymore. I guess every company is doing this, but Sony is the one who get caught. (Jessie, 24)\(^6\)

Another key factor influencing participants’ responses towards a brand crisis is the way a company addresses the problem. Very often, the responses matter more than the problems per se.

\(^5\) This comment is based on a real news video about GM’s recall. Video is accessible online https://www.youtube.com/watch?v=uFzk_MteN_U  
\(^6\) This comment is based on a fictitious newspaper article about Sony’s poor labor practice (see Appendix 2)
Post-crisis response and communication has long been established in product-harm crisis literature as a key driver in repairing tarnished brand evaluations (Siomkos and Kurzbard 1994; Pearson and Clair 1998).

“I don’t think the problem with BMW cars matters to me much. What really concerns me is the way they respond. I have very negative feelings because it seems like they are forced to issue the recall. I mean, it’s common that cars have problems and get recalled. You can’t just stop buying cars from a brand because it has defective cars. But it’s really important how they respond.” (Jordan, 30)⁷

Although these findings are not directly related to our specific research interests, they do provide valuable insights and some caveats for the following experimental design. For example, since we are interested in examining consumers’ responses towards a brand crisis regardless of response strategies, how to minimize the confounding effects from inferred firm responses becomes an important issue in our research design. Based on the findings from focus group, at least we know that product recall might not be the perfect crisis scenario since it implies a responsible firm response. Instead, a scenario with a more inconclusive firm response should be preferred in the experiments. In addition, since participants perceive a highly common problem as not at all diagnostic (e.g., poor labor practice), such a common problem may fail to serve as a valid brand crisis. As per our definition on brand crisis, a valid crisis context is achieved only if the incident is well-publicized and can seriously threaten a brand’s key propositions. Thus we should avoid using overly common problem as focal crisis in the following experiments.

⁷ This comment is based on a real news video about BMW’s recall. Video is accessible online https://www.youtube.com/watch?v=j0PRFHEhwo
4.3. Focus Group Discussion

Though preliminary in nature, the findings from our focus group study do provide us a better understanding on brand equity’s role in different brand crisis contexts. Two key potential boundary conditions – crisis severity and crisis type, have been identified based on the findings, and the insights gathered from this exploratory study also laid down the foundation for the following hypotheses development as well as the experimental design.

We found preliminary evidence supporting the “buffering” perspective, that is, brand equity does provide some protection against consumer negative responses in certain crisis contexts. However, this shield from brand equity is not without limitations. Our findings also indicate that in some situations, brand equity’s “halo effect” may disappear or even backfire. This suggests the existence of some overlooked yet important boundary conditions which can erase or even reverse the buffering effect from brand equity in a brand crisis context.

More importantly, we also identified two potential contingency variables deserve looking into – crisis severity and crisis type. According to our results, when confronted with an extremely negative brand crisis, consumers tend to have very negative responses and feelings, and the “halo effect” from a good brand seems to be no longer evident. This suggests that crisis severity might be one important contingent condition that moderates brand equity’s effect in a brand crisis context. In addition, we also observed that consumers are more likely to blame an erring brand and feel a sense of betrayal in a value-related crisis regardless of brand equity, indicating that crisis type maybe another important contingent condition, such that there might be qualitative difference in brand equity’s role in a performance- versus value-related crisis.

However, it is worth noting that no cause-effect relations or any generalizations can be reliably made solely based on the findings from this focus group study due to small sample size
(Merton 1987). Therefore, we strictly limit the application of the findings from this focus group study to hypotheses development and experimental design. Any conclusions about causal relationships or hypotheses verification will be based on following experiment studies.

5. HYPOTHESES DEVELOPMENT

It has been well documented that consumers are “cognitive misers”, and they tend to minimize their cognitive effort and resort to some mental shortcuts for effortless decision making and judgment (Lynch et al. 1988; Petty and Krosnick 1995; Schwartz et al. 2002). Based on this rationale, selective information processing literature suggest that people tend to simplify their judgment formation and evaluation process by selectively attend to and weigh heavily on information consistent with prior beliefs while counterarguing or neglecting challenging information (Frey 1986). In the same rationale, motivated reasoning theory also contends that people are motivated to reach conclusions that are consistent with their prior attitudes and they tend to engage into biased processing to formulate illusory justifications for their desired conclusions (Kunda 1990). This logic is essentially the same with anchoring and adjustment model of belief updating which suggests that initial impressions serves as an anchor to pull revised beliefs towards the existing end (Smith and Bolton 1998; Hogarth and Einhorn 1992). Based on this logic, Judd and Brauer (1995) further suggest that extreme attitudes are less susceptible to persuasion attempts than less extreme attitudes, indicating that people with more extreme attitudes are more likely to maintain their prior attitude by selectively processing consistent information and discounting challenging information. Recently, Pham and Muthukrishnan (2002) have explored the underlying mechanism for such biased processing and they found that when people encounter new information that challenge their existing attitude,
they first search in memory for the most diagnostic and relevant pro-attitudinal information to defend their prior attitude. Therefore, they suggest that readily accessible pro-attitudinal information should help to pull judgment towards existing belief and reduce the impact of the inconsistent challenging information.

Along with this rationale, because customer-based brand equity is conceptualized as positive and accessible brand-related knowledge in consumers’ memory, when a high-equity brand is under attack by negative information from a brand crisis, consumers’ prior direct or indirect experiences with the brand will allow them to retrieve pro-attitudinal information easily, which in turn will be used to dismiss the negative information from a brand crisis as much as possible. This defensive reaction will help to insulate a high-equity brand from consumer negative responses from a crisis. This logic is buttressed by most previous studies adopting the “buffering” perspective as we reviewed before (Dawar and Pillutla 2000; Cleeren et al. 2008; Brady et al. 2008). This is also consistent with the findings in the focus group study where participants tend to search for more excuses to counterargue the negative information when a high-equity brand is involved in a crisis.

Although this biased information processing mechanism is labeled differently in previous studies such as assimilation, defensive bias or confirmatory bias, the mechanisms are essentially the same, that is, when consumers encounter negative information about a good brand, they are motivated to retain their prior attitude and tend to counterargue the disconfirming message (Sherif and Hovland 1961; Edwards and Smith 1996; Kunda 1990; Jain and Maheswaran 2000).

However, we recognize that brand crises are not homogeneous events and the severity of different brand crises can vary significantly. Previous literatures as well as findings from our focus group study indicate that the buffering effect from a strong brand should reach its limits
when the magnitude of the severity of a crisis reaches certain breaking point (e.g., Einwiller et al. 2006; Germann et al. 2014). That is, even though consumers are motivated to defend against the negative information, this toleration is only up to a certain point. When the negativity of the information increases (i.e., a crisis becomes more severe), consumers will perceive the negative information as too diagnostic to counterargue and start to accept the negative information at face value. This is in accordance with motivated reasoning theory where Kunda (1990) denoted that motivated reasoning is not without constraint. She proposed that even when people are motivated to arrive at a particular conclusion, they still need to construct some justifications to maintain an illusory rationality for the desired conclusions. That is, biased processing is constrained by one’s ability to summon up necessary evidence to support desired conclusions. When this process fails, people will have to accept the undesirable conclusion at face value. Extremely negative information has been demonstrated to be highly diagnostic and thus it might be impossible for consumers to gather strong enough evidence to dismiss the extremely negative information (Herr et al. 1991).

Furthermore, we suggest that when faced with extremely negative information, not only will the immunizing effect from brand equity disappear, but the dark side of brand equity may show up. It is conceivable that consumers expect more from well-established brands due to prior direct or indirect positive experiences. Therefore, when a brand crisis occurs to a good brand, people may feel especially disappointed. On the other hand, a similar crisis on low-equity brands are likely to deviate away less from consumers’ relatively low expectations, thus they may be less upset than if they had encountered the same brand crises with high-equity brands. This rationale is consistent with expectancy-disconfirmation paradigm from satisfaction studies and gaps model of service quality (Oliver 1977; Parasuraman et al. 1985). Both theories imply that
customer satisfaction and perceived service quality level are negatively impacted by the gap between prior expectations and perceived performance. Social judgment theory also suggests a similar mechanism termed contrast effect in which a subject that is largely discrepant from a context will be evaluated as even more deviant in the context (Sherif and Hovland 1961). Brown and Dacin (1997) in their classical study observed such a contrast effect, finding that poor product performance will be evaluated even more negative when the product is produced by a good brand. Further supporting this logic, literature supporting an “amplifying” perspective also used the disconfirmation of expectation paradigm as their key arguments (e.g., Seo and Jang 2013; Rhee and Haunschild 2006).

Therefore, we suggest that crisis severity should moderate brand equity’s effect in influencing consumers’ responses in a brand crisis context. Specifically, we propose that brand equity can have both buffering and amplifying effects on consumer negative responses. While brand equity serves as a reservoir of goodwill in a low severity brand crisis, it should become a liability in a high severity brand crisis. One thing worth mentioning is that our arguments are essentially constrained to performance-related crisis context because previously reviewed literature is almost exclusively focused on performance-related crisis. Since the findings from our focus group study indicates that consumers may respond differently to value-related crisis, we will address value-related crisis context in the next section.

H1: Brand equity interacts with crisis severity in influencing consumer responses, such that (H1a) brand equity buffers negative consumer responses in a low severity performance-related crisis, but (H1b) brand equity amplifies negative consumer responses in a high severity performance-related crisis.
H2: The buffering effect of brand equity in H1a is likely to be mediated by counterarguments, and the amplifying effect of brand equity in H1b is likely to be mediated by disconfirmation of expectation.

6. EXPERIMENT 1

The purpose of Experiment 1 is to test the two hypotheses proposed above. Specifically, we aim to investigate the role of brand equity on consumers’ responses in a performance-related crisis context. We expect that brand equity will attenuate consumer negative responses in a moderately severe performance-related crisis, but in an extremely severe condition, brand equity is expected to intensify consumer negative reactions. Process explanations are also examined in this study.

6.1. Participants and Design

One hundred and thirty seven participants from a Canadian university participated in Experiment 1 for extra course credit. Subjects were recruited through an online research participation system and flyers posted on campus. Their mean age was 21.61 years with a range from 18 to 29 years. Gender was almost evenly split at 52% males and 48% females, respectively. The predominant ethnic origin was Caucasians at 60 percent, followed by South Asians, Asians, and African Americans. These demographic variables were also checked across different experiment conditions and no significant differences were identified. A 2 (brand equity: high versus low) × 2 (crisis severity: extremely severe versus moderately severe) between-subjects design was used in Experiment 1. Brand equity and crisis severity were manipulated. The manipulations were developed based on a series of pretests.
6.2. Stimuli Development and Pretest

A pretest was conducted to identify the target product category as well as the low- and high-equity target brand. Forty two students (M<sub>age</sub> = 20.83, 47.6% female) participated in a pretest to fill out a short questionnaire asking about their ownership of, and familiarity with various product categories. We also measured their perceived brand equity on various brands within each product category. The measurement on brand equity is adapted from existing scales (Yoo and Donthu 2001; Brady et al. 2008) (see Appendix 3). Based on the pretest, television was selected as the target product category, because students in the subject pool (introductory business class) were familiar with this category (M<sub>familiar</sub> = 4.90/7, t(41)<sub>diff from 4</sub> = 4.06, p < .001, 1 = Not At All Familiar to 7 = Very Familiar). Also, thirty nine out of the forty two respondents indicated that they currently own a television. Television was also chosen as the target product category in previous literature on product-harm crisis where the use of television was justified by stating that the respondents were fairly familiar with this product category (e.g., Ahluwalia et al. 2000). As for the brand equity manipulation, Sony was chosen as the high-equity brand and Insignia was chosen as the low equity brand (M<sub>Sony</sub> = 5.76, M<sub>Insignia</sub> = 2.93; p < .001).

Low and high severity performance-related crisis articles were developed through a series of pretests. The findings from our focus group suggest that a less common crisis should be used to ensure the validity of a crisis context. In addition, since our research is interested in understanding consumers’ responses to crisis information regardless of firm response strategies, the crisis article should not mention or infer any firm response strategies to avoid such confounding effect. Thus, the performance-related crisis scenario we used was portrayed as an incident in which a defective part in a television can overheat and catch on fire. This is a relatively uncommon problem and no information regarding crisis responses was mentioned in
the article, either explicitly or implicitly. Since participants in the focus group study indicated that a crisis is perceived as more severe when it involves deaths, we manipulated crisis severity by varying the number of deaths and injuries involved in the incident (see Appendix 14 and 15). In the final pretest, 24 participants ($M_{age} = 21.88$, 54.2% female) were asked to read a recent newspaper article on the Global and Mail regarding a fire hazard problem with Sony. Either a high severity or low severity article was randomly assigned to respondents. After reading the target article, participants were asked to fill out a short questionnaire assessing their attitude towards the target news article including crisis severity, whether they perceive the article as more related to product performance or ethical conduct, their familiarity with, attention paid to, and believability of the newspaper article (see Appendix 9, 11, 12, and 13). Crisis severity was rated considerably higher in high severity condition than in low severity condition as intended ($M_{high} = 6.03$, $M_{low} = 4.11$; $p < .01$). Also, all subjects identified the target article as related to product performance rather than ethical conduct. In terms of the negativity about the news message, participants were asked to indicate to what extent they perceive the news article as negative towards the brand described in the article (1 = Not At All Negative, 7 = Very Negative). The ratings were significantly higher than the theoretical midpoint 4 for both conditions ($M_{high} = 5.96$, $M_{low} = 5.50$; all $p < .001$) but does not differ in terms of extremity across the two severity conditions ($M_{high} = 5.96$, $M_{low} = 5.50$; $p > .37$), indicating that the target articles were successfully manipulated as negative information. Moreover, the articles in both conditions were also rated as equivalent in familiarity ($M_{high} = 2.08$, $M_{low} = 1.91$; $p > .73$), believability ($M_{high} = 5.08$, $M_{low} = 5.33$; $p > .64$), and participants’ involvement ($M_{high} = 4.88$, $M_{low} = 4.21$; $p > .18$).
6.3. Experimental Procedure

Subjects were randomly assigned to one of the four conditions in a 2 (brand equity: high versus low) × 2 (crisis severity: extremely severe versus moderately severe) between-subjects design. We ran participants in small groups (from one to four participants) in a research room. Upon arriving at the research facility, participants were informed that they were here to participate in a media study conducted by business school in collaboration with department of communication. The purpose of the study was to evaluate some recent newspaper articles (Ahluwalia et al. 2000). After signing the informed consent, participants were first asked to provide their evaluations on five TV brands (one target brand and four filler brands). The filler brands served to reduce the likelihood of excessive attention focused on the target brand.

Questions in the questionnaire included assessments on brand equity, brand attitude, brand trust and brand purchase intention, which were all adapted from existing scales (see Appendix 3 – 6) (Yoo and Donthu 2001; Brady et al. 2008; Ahluwalia et al. 2000; Dawar and Pillutla 2000; Puzakpva et al. 2013). Participants’ brand evaluations before exposure to target articles served as the baseline measurements. To control for position effects, the target brand was always in the third place (Mantonakis et al. 2009). The questionnaire was followed by a short filler task that involves some basic mathematic problems solving and it took approximately 5 minutes to complete (see Appendix 7). This filler task was intended to refresh participants’ working memory from the baseline brand evaluations to minimize one of the limitations in our study – close proximity between the pre- and post-test scores (Jamieson and Harkins 2011).

Upon finishing the filler task, participants were interrupted by the researcher and were asked to read the target newspaper article from one of the four manipulation conditions (Ahluwalia et al. 2000). In the high brand-equity condition, the target brand is Sony, whereas in
the low brand-equity condition, the target brand is Insignia. Televisions overheating and catching on fire was used as the crisis scenario and crisis severity was manipulated by varying the number of deaths and injuries associated with the incidents (see Appendix 14 and 15). After reading the news articles, participants were asked to finish another booklet assessing their cognitive responses about the target article, followed by the dependent variables measures and manipulation check variables measures (Ahluwalia et al. 2000; 2002; Roehm and Brady 2007; Pullig et al. 2006).

Finally, participants were administered a suspicion probe and none of the participants guessed the purpose of our study. The suspicion check combined with a between-subject design effectively reduced the likelihood of demand effect (Shimp, Hyatt and Snyder, 1991). After finishing a brief section on demographic information, participants were debriefed and a feedback form regarding our research purpose was provided. They were specifically directed back to the target article in the booklet and told it was made up by the researcher for research purpose only (Ahluwalia et al. 2000).

**6.4. Dependent Measures**

Brand attitude was measured using five seven-point semantic differential scales (good/bad, favorable/unfavorable, like/dislike, pleasant/unpleasant, and desirable/undesirable; \( \alpha_{\text{pre}} = .971, \alpha_{\text{post}} = .971 \)) adapted from previous scales (Ahluwalia et al. 2000; Puzakova 2013). A mean attitude score was computed to be used in the analysis. In accordance with Ahluwalia and her colleagues’ method, attitude change was computed as the difference\(^8\) between the baseline

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\(^8\) Measuring attitude change as a difference raises the issue of whether the difference scores are reliable. Recent research (e.g., Collins 1996) has revealed that difference scores are unreliable only when the pretest (x) and post-test
mean attitude and the post-crisis mean attitude for each subject. More specifically, attitude change was computed by subtracting post-crisis mean attitude from the baseline mean attitude. Specific scales are listed in Appendix 4.

Brand trust was measured using three seven-point semantic differential scales (reliable/unreliable, dependable/not at all dependable, and trustworthy/not at all trustworthy; \(\alpha_{\text{pre}} = .952, \alpha_{\text{post}} = .966\) (Dawar and Pillutla 2000; Puzakova 2013). Similar as the operationalization on attitude, a mean trust score was computed to be used in the analysis, and trust change was also computed by subtracting post-crisis mean trust from the baseline mean trust\(^9\). Specific scales are listed in Appendix 5.

Purchase intention was used to indicate the behavioral dimension on consumer responses. Though criticized in previous literatures as a flawed indicator on consumer actual buying behavior, it has always been one of the most commonly used proxies for measuring consumer behaviors. In this study, purchase intention was measured using two seven-point Likert scales (“Next time I buy a TV, I will take (brand name) into consideration”; “I can image myself buying a (brand name) TV”; \(1 = \text{Strongly disagree to} 7 = \text{Strongly agree}\); \(\alpha_{\text{pre}} = .958, \alpha_{\text{post}} = .979\) (Puzakova 2013). Same as the operationalization on brand attitude and trust, a mean purchase intention score was computed by subtracting post-crisis mean score from the baseline mean score\(^{10}\). Specific scales are listed in Appendix 6.

Cognitive responses were measured by using a thought listing task (see Appendix 8). That is, participants were given five minutes to list all the thoughts they had while reading the target newspaper article immediately after exposure to the target article (Ahluwalia et al. 2000).

\(^9\) Given our data, \(\lambda = 1.18\) and \(\rho_{xy} = 0.77\), the reliability of difference scores is not a serious concern for our research.

\(^{10}\) Given our data, \(\lambda = 1.08\) and \(\rho_{xy} = 0.81\), the reliability of difference scores is not a serious concern for our research.
All the thoughts were then coded into three broad categories: support arguments, counterarguments, and other thoughts. The coding was conducted by the researcher and one independent judge blind to the research hypotheses. There was 87% agreement between the judge and researcher, and the disagreements were resolved by discussion.

Disconfirmation of expectation measure was adapted from Ahluwalia et al. (2002). It consists of three seven-point semantic differential scales (consistent/inconsistent with expectation, not at all worse/worse than anticipated, and not at all worse/worse than expected; α = .829). Specific scales are listed in Appendix 10.

6.5. Results

6.5.1. Manipulation Checks

Brand equity was assessed with five seven-point semantic differential scales adapted from existing scales (Yoo and Donthu 2001; Brady et al. 2008) (brand loyalty, brand attitude, brand image, brand quality, and willingness to pay; α = .937). Specific items are listed in Appendix 3. Independent t-tests reveal that participants perceive the brand (i.e., Sony) in high-equity condition has significantly higher brand equity than the brand in low-equity condition (i.e., Insignia) (M_{Sony} = 5.48, M_{Insignia} = 2.54; p < .001). Thus, brand equity manipulation was successful.

Crisis severity was manipulated using the scenarios developed in the pretest. It was measured using three seven-point semantic differential scales (severe/not severe, major/minor, significant/not significant; α = .929) (Roehm and Brady 2007). Specific scales are listed in Appendix 9. Independent t-tests show that subjects perceive the crisis to be more severe in the
high severity condition than in the low severity condition ($M_{\text{high}} = 6.03$ $M_{\text{low}} = 4.40; p < .001$), indicating that the crisis severity manipulation was effective.

In addition, two seven-point Likert scales were used to check whether participants perceive the negative news as more strongly related to performance-related or value-related crisis. A paired-samples t-test reveal that subjects rated the crisis as more strongly related to product performance than general firm conducts ($M_{\text{performance}} = 5.90$, $M_{\text{value}} = 2.85; p < .001$). Same as in the pretest, participants were also asked to classify the news article as either performance-related or value-related crisis. All participants except four correctly identified the news article as talking about performance-related crisis. This suggests that the crisis was perceived as performance-related as we intended. The four participants who failed to recognize the target news as performance-related crisis were dropped out from further analysis. In addition, one sample t-tests show that participants did perceive all the crisis articles as providing negative information ($M_{\text{condition1}} = 5.95; t(28)_{\text{differ from 4}} = 9.94, p < .001; M_{\text{condition2}} = 5.57; t(33)_{\text{differ from 4}} = 7.94, p < .001; M_{\text{condition3}} = 5.96; t(33)_{\text{differ from 4}} = 11.05, p < .001; M_{\text{condition4}} = 6.10; t(35)_{\text{differ from 4}} = 11.64, p < .001$), proving the validity of our crisis scenarios. Also, participants’ involvement and perceived believability towards the news article do not statistically differ across the four conditions ($ps > .10$). Finally, the articles are of similar length across conditions and participants indicated that they were relatively unfamiliar with the news article they read in the study. Specific scales are listed in the Appendix 11, 12 and 13.

6.5.2. Hypothesis Tests

Our hypothesis that brand equity would buffer consumer negative responses in low severity crisis condition but amplify them in high severity crisis condition implies that there
should be an interaction effect between crisis severity and brand equity on consumer negative responses (i.e., brand attitude, trust, and purchase intention change). To test our prediction, we perform a MANOVA on attitude change, trust change, and purchase intention change. Brand equity and crisis severity are independent variables. Since brand familiarity and brand commitment were identified in previous literature as key moderators influencing consumer negative responses in a brand crisis context (Ahluwalia et al. 2000; Cleeren et al. 2008), they are included as covariates in the MANOVA. The Bartlett’s test of sphericity show a significant result (Chi-square = 152.48, df = 5, p < .001), indicating that the correlations among the three dependent variables are strong enough for a MANOVA. As expected, a multivariate interaction effect between brand equity and crisis severity is observed ($\lambda = .89, F (3, 125) = 5.32, p < .01$).

Since the multivariate main effect of brand commitment ($\lambda = .99, F (3, 125) = .28, p > .99$) and brand familiarity ($\lambda = .99, F (3, 125) = .04, p > .83$) are not significant, they are dropped out in the following analysis.

The individual ANOVAs verify that the interaction effect between brand equity and crisis severity manifest on all three dependent variables (attitude change: $F (1, 129) = 12.08, p < .01$; trust change: $F (1, 129) = 7.05, p < .01$; purchase intention change: $F (1, 129) = 13.96, p < .001$). To further explore the interactions, simple effect analyses were performed at each level of crisis severity. Contrary to $H_{1a}$, simple effect tests show that brand equity does not attenuate the dependent variables in a low severity crisis condition ($\lambda = .95, F (3, 59) = 1.13, p > .34$). The results suggest that in a low severity performance-related crisis, brand equity has no significant main effect on consumer negative responses. In another word, whether the involved brand has low or high brand equity, consumers would change their brand attitude, brand trust, and brand purchase intention to the same extent in a low severity condition. Therefore, the hypothesized
buffering effect from H1a is not supported. H1b proposed that in a high severity condition, brand equity will become a liability, amplifying consumer negative responses. This proposition is supported. In a high severity performance-related crisis, a significant multivariate main effect of brand equity is observed ($\lambda = .78$, $F (3, 66) = 6.06$, $p < .01$). Individual ANOVAs show that consumers downgrade their brand attitude ($M_{\text{high}} = 2.12$, $M_{\text{low}} = 1.19$; $F (1, 68) = 16.19$, $p < .001$), brand trust ($M_{\text{high}} = 2.41$, $M_{\text{low}} = 1.44$; $F (1, 68) = 12.98$, $p < .001$), and brand purchase intention ($M_{\text{high}} = 1.92$, $M_{\text{low}} = .87$; $F (1, 68) = 12.78$, $p < .001$) to a greater extent for a high equity brand compared with a low equity brand in a high severity condition. Therefore, H1b is supported. In conclusion, H1 is partially supported. Although no buffering effect from brand equity is identified in a low severity condition, the interaction effect between brand equity and crisis severity is supported. In particular, we find that brand equity will intensify consumer negative responses in a performance-related crisis but only when the crisis is of high severity.

6.5.3. Process Tests

We hypothesized that brand equity would have an attenuating effect on consumer negative responses in a low crisis severity condition, and we reasoned that consumers tend to engage in a defensive mode to discount the negative information. We anticipated that the counterarguments generated towards the negative news would account for the hypothesized buffering effect. Although such a buffering effect is not supported in our study, we do find that in a low severity condition, counterarguments are more prevalent for high equity brand than low equity brand ($M_{\text{high}} = 2.97$, $M_{\text{low}} = .59$; $t = -7.22$, $p < .001$). This preliminary result suggests that
the proposed mechanism may work. That is, consumers indeed engage in biased processing in a low severity condition, but for some unaccounted reasons, this defensive mechanism does not produce a significant main effect of brand equity (i.e., buffering effect). Therefore, we conducted the proposed mediation analysis for the low severity condition even there was no observed main effect from brand equity on consumer responses change\textsuperscript{11}. To test whether brand equity has an effect on consumer responses change through consumers’ biased information processing, we included the number of counterarguments as a mediator of the effect of brand equity on brand attitude, trust, and purchase intention change separately. Following Zhao et al. (2010), we tested the mediation by using the bias corrected bootstrap test of the indirect effect. We repeated the mediation analysis for all three dependent variables: attitude change, trust change, and purchase intention change. As expected, the results show that counterarguments significantly mediate brand equity’s effect on all three dependent variables. Using 5,000 bootstrap samples, the bias corrected 95% confidence intervals for the indirect effect through counterarguments do not include zero for all three dependent variables, suggesting that the estimates of the indirect effect from brand equity to consumer evaluations change through counterarguments are significant at $p < .05$ (attitude change: $ab = -1.0395$, 95% CI $= [-1.3647; -0.7588]$; trust change: $ab = -1.1253$, 95% CI $= [-1.5592; -0.7602]$; purchase intention change: $ab = -0.6415$, 95% CI $= [-1.1566; -0.1958]$).

Therefore, though implicitly, brand equity does buffer against consumer negative responses in a low severity condition through number of counterarguments, supporting H2a.

As for the high severity condition, we observed an amplifying effect from brand equity on consumer negative responses, and we reasoned that consumers tend to be especially

\textsuperscript{11} Although Baron and Kenny (1986) proposed that one of the premises of mediation effect is a zero-order effect of the independent variable on the dependent variable, it has been criticized recently by Zhao et al. (2010). Zhao et al. (2010) proposed that in a competitive mediation, the direct effect and indirect (i.e., mediation) effect both exist but work in opposite directions, resulting in no total effect (i.e., zero-order effect).
disappointed when a strong brand is involved in a severe crisis. Thus, we anticipated to see such negative disconfirmation of expectation to mediate the differences in consumer response change between high- and low-equity brands. We repeated mediation analyses by including disconfirmation of expectation as the mediator for the high severity condition. As expected, disconfirmation of expectation does emerge as a significant mediator for brand equity’s amplifying effect. Following the same procedure, we used 5,000 bootstrap samples and found that the bias corrected 95% confidence intervals for the indirect effect through disconfirmation of expectation do not include zero for all three dependent variables, suggesting that the estimates of the indirect effect from brand equity to consumer evaluations change through disconfirmation of expectation are significant at p < .05 (attitude change: ab = .5955, 95% CI = [.3487; .9810]; trust change: ab = .7496, 95% CI = [.4175; 1.2236]; purchase intention change: ab = .6185, 95% CI = [.2831; 1.0882]). Thus, consumers’ disconfirmation of expectation accounts for brand equity’s amplifying effect on consumer negative responses in a high severity condition, supporting H2b.

6.6. Discussion of Experiment 1

The purpose of Experiment 1 is to investigate the role of brand equity in a performance-related crisis. In particular, we examine how brand equity interacts with crisis severity in influencing consumer negative responses. The findings partially support H1. As hypothesized, a significant interaction effect between brand equity and crisis severity is observed. This is in accordance with the contingency view we discussed before. That is, the role of brand equity in a performance-related crisis is contingent on the severity level of a brand crisis. Supporting our hypothesis, we find that brand equity can become a liability in a highly severe performance-related crisis, exacerbating consumer negative responses, both attitudinally and behaviorally.
However, a buffering effect does not emerge in a moderately severe crisis as expected. The results indicate that in a low severity condition, consumers downgrade their evaluations towards an erring brand to the same extent regardless of a priori brand equity. This finding is in contrary to some previous studies where a good brand was advocated to provide some reservoir of goodwill amid negative publicity, possibly because though conceptually related with brand commitment or brand familiarity, brand equity reflects multiple facets of consumer knowledge (Keller, 1993), and thus it may work in a different way from those related constructs in a brand crisis context (Ahluwalia et al. 2000; Dawar and Pillutla; Cleeren et al. 2008). This also suggests that we should not generalize one attitude dimension to another without caution (Petty and Krosnick 1995). Overall, Experiment 1 identified crisis severity as an important contingent condition in brand equity’s effect on consumer negative responses. Specifically, brand equity will intensify consumers’ backlash in a performance-related crisis but only when the crisis is of high severity level.

Furthermore, current study also seeks to investigate the underlying mechanisms for brand equity’s effect in a performance-related crisis from a consumer-based perspective. Results from mediation analyses support H2. As expected, in a low severity condition, consumers tend to engage in biased processing, defending a high-equity brand from the negative information. Compared with a low-equity brand, consumers have more counterarguments against the crisis information for a high-equity brand. Although no main effect (i.e., buffering effect) was observed from brand equity on consumer responses in a low severity condition, the number of counterarguments still emerged as a significant mediator accounting for brand equity’s effect on consumer evaluations change. The significant indirect effect through counterarguments implies that brand equity can provide some protection against consumer negative responses in a low
severity condition, but only implicitly. The opposite signs of the direct and indirect effect from the mediation analyses indicate a competitive mediation\textsuperscript{12}. Therefore, there might be some other mechanisms causing brand equity to augment consumer negative responses which overshadowed the “counterarguments” mechanism. That is, an amplifying direct effect may work against the buffering indirect effect through counterarguments, resulting in a misleading no effect observation. As we reasoned in the high severity condition, one plausible explanation for the opposite direct effect is disconfirmation of expectation, that is, consumers may expect more from a good brand and this high expectation traps a strong brand in a crisis context. A follow-up mediation analysis using disconfirmation of expectation as the mediator was performed. Disconfirmation of expectation does not emerge as a significant mediator as expected in a low severity condition. The bias corrected 95\% confidence intervals for the indirect effect through disconfirmation of expectation include zero for all three dependent variables (attitude change: $ab = -.0169, 95\% CI = [-.1801; .1185]$; trust change: $ab = -.0196, 95\% CI = [-.2109; .0791]$; purchase intention change: $ab = -.0270, 95\% CI = [-.2677; .1814]$). Another possible explanation for the opposite direct effect is that in a crisis context, the negative information creates a ceiling effect on the low equity brand. In other words, because consumers have low expectation about a low end brand, a low-equity brand may have little to lose in a crisis context, obscuring a high-equity brand’s buffering effect. Though which mechanisms work in the opposite way warrants further analysis, our mediation analysis using counterarguments in a low severity condition still provide valuable insights about the phenomenon under investigation.

On the other hand, in a high severity condition, we hypothesized that the extremely negative information from a performance-related crisis becomes too diagnostic for consumers to

\textsuperscript{12} In a competitive mediation, the direct effect and indirect (i.e., mediation) effect both exist and but work in opposite directions, sometimes resulting in no discernable total effect (i.e., zero-order effect) (Zhao et al. 2010).
dismiss. In this situation, brand equity becomes a liability because consumers feel intensified
disappointment when a high-equity brand is involved in a severe crisis. Our findings demonstrate
that disconfirmation of expectation significantly mediates the amplifying effect from brand
equity, supporting our theorizing.

In summary, Experiment 1 provides some empirical support for both H1 and H2. However, our first study is constrained by its scope. That is, only performance-related crises are investigated in this experiment. How does brand equity works in a value-related crisis still remains to be known in the literature. Previous literature on brand negative publicity almost exclusively focuses on performance-related crisis due to its preponderance (Dawar and Pillutla 2000). With the increasingly sensitive public reactions to ethical issues and firms’ enthusiasm on CSR initiatives, there is a call for more research on firm unethical conducts (Folkes and Kamins 1999). We adopted a contingency view in examining brand equity’s effect in a crisis context and we propose that crisis type may serve as another key contingency variable. That is, the role of brand equity in influencing consumer negative responses may differ in value-related crisis as compared with performance-related crisis. Therefore, we conducted a second study to specifically examine brand equity’s effect in value-related crises.

7. HYPOTHESES DEVELOPMENT

Although the increasingly frequent brand crises have drawn extensive academic attention, previous studies almost exclusively attended to performance-related crises due to its preponderance (e.g., Ahluwalia et al. 2000; Dawar and Pillutla 2000; Cleeren et al. 2008; Chen et al. 2009; Darke et al. 2010). The scarcity of literature on value-related crises calls into the question that whether consumer respond to these two different types of crisis contexts in the
same manner. The limited extant literatures on value-related crisis as well as the findings from our focus group study shed some light that consumers may react differently in a value-related crisis, that is, buffering effect may not be evident in a value-related crisis (e.g., Cooksey and Kuchina-Musina 2010; Trump 2014). Trump (2014) found that the buffering effect from connected consumers no longer exist in a firm ethical transgression even when the misdeed is not personal relevant. This is in line with our focus group study findings that participants tend to perceive firm unethical conducts as especially diagnostic and are less likely to counterargue against such negative information, even when they expressed that the crisis was not considered as relevant or severe.

Therefore, we suggest that brand equity should not provide a reservoir of goodwill in a value-related crisis regardless of crisis severity. In addition, consistent with our discussion on a severe performance-related crisis, we propose that brand equity becomes a liability in a value-related crisis due to the heightened negative disconfirmation of expectation effect. This dark side of a good brand has been documented by literatures on philanthropy. For example, Dean (2003) investigated how consumers perceive different types of charitable donations made by companies with varying levels of reputation, and he found that the effect of conditional donation (i.e., the donation is tied with revenue-generating transactions) on corporate image is negatively associated with company reputation, such that a conditional donation would increase the image of an irresponsible firm but a scrupulous firm suffered a loss of image. Some anecdotal evidence has also supported such an amplifying perspective. For example, after the 2008 Wenchuan earthquake in China, many large corporates (e.g., Dell and Wanke) confronted strong criticism from the public due to their “small” charitable donations. The general public intuitively considers
these large firms as affluent and expects them to take more responsibilities, and this high expectation becomes a liability in a value-related crisis.

We draw from literatures on interpersonal relationships to explain why consumers respond differently in different crisis contexts. That is, unlike in a performance-related crisis, consumers tend to perceive even a low severity value-related transgression as highly diagnostic. Literatures on interpersonal trust revealed that people react differently towards competence versus integrity based trust violations because there may be some inherence differences in the way people make dispositional attributions about competence versus integrity (Kim et al. 2004; 2006, Reeder and Brewer 1979). For example, it has been demonstrated that people tend to perceive negative information as more diagnostic and weigh negative information more heavily than positive information in the domain of integrity, yet they tend to assign more weight to positive rather than negative information in the domain of competence (Kim et al. 2004, Martijn et al. 1992). Kim et al. (2004) investigated competence versus integrity based trust transgression in interpersonal relationship using a schematic model of dispositional attribution. Based on this model, people may intuitively believe that those with high competence can performance at various competence levels depending on their motivations and other external factors. For example, even a great baseball player may have a bad day and strike out. Therefore, a single failure is often discounted as a reliable signal of incompetence because both competent and incompetent person can have poor performance under certain situations. However, when it comes to integrity-based transgression, people seem to have a very different mechanism to assess the situation. They intuitively believe that those with high integrity would not engage in any dishonest behavior regardless of external situations and only those with low integrity will act

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13 Competence-based trust is defined as the trustor’s perception that the trustee is equipped with required technical and interpersonal skills to fulfill a task (Butler and Cantrell 1984). Integrity-based trust is defined as the trustor’s perception that the trustee will adhere to an acceptable ethical standards (Mayer et al. 1995).
dishonestly. Thus, one single integrity-based wrongdoing can be perceived as a reliable signal for low-integrity, just as the old proverb “once a thief, always a thief” indicates (Reeder and Brewer 1979). In their study, Kim et al. (2004) showed that people find integrity-based transgression harder to forgive than competence-based ones, and using denial is a better recovery strategy than apology for integrity based violations.

Based on this logic, we suggest that the same schematic model of dispositional attribution in interpersonal relationship literature should also apply to consumer-brand relationship. Therefore, we hypothesize that similar differential responses will be observed in a competence-based transgression (i.e. performance-related crisis) versus integrity-based transgression (i.e., value-related crisis). That is, although consumers may perceive a performance-related crisis as an anomaly and discount its diagnosticity in a low severity situation, it’s unlikely that they will discount the impact from value-related crisis regardless of crisis severity levels, given that consumers may intuitively believe one single unethical conduct is diagnostic enough to indicate that a company has low ethical standard. Thus, we put forward the hypotheses as follows:

H3: Brand equity will amplify negative consumer responses in a value-related crisis, regardless of crisis severity.

H4: The amplifying effect is likely to be mediated by disconfirmation of expectation of consumers in a value related crisis.
8. EXPERIMENT 2

Experiment 2 was conducted to test H3 and H4. In particular, we aim to investigate the role of brand equity on consumers’ responses in a value-related crisis context. Unlike in a performance-related crisis where crisis severity served as a moderator, we expect that brand equity would augment consumer negative responses in a value-related crisis, regardless of crisis severity. Process explanations are also examined in this experiment. In this study, the design, procedure, and measures are almost identical as in Experiment 1, except that we replace performance-related crises with value-related crises in the target newspaper articles.

8.1. Participants and Design

One hundred and twenty seven participants from a Canadian university participated in Experiment 2 for extra course credit. Subjects were recruited through an online research participation system and flyers posted on campus. Their mean age was 21.78 years with a range from 18 to 31 years. Gender was almost evenly split at 45% males and 55% females, respectively. The predominant ethnic origin was Caucasians at 63 percent, followed by Asians, South Asians, and African Americans. These demographic variables were also checked across different experiment conditions and no significant differences were identified. Same as in Experiment 1, a 2 (brand equity: high versus low) × 2 (crisis severity: extremely severe versus moderately severe) between-subjects design was used. Same television brands were also chosen to serve as high and low brand equity conditions (i.e., Sony and Insignia). The only exception was that different stimuli scenarios (i.e., value-related crisis) were used in Experiment 2. The new manipulation articles were developed based on another pretest.
8.2. Stimuli Development and Pretest

Moderately and highly severe value-related crisis articles were developed through another pretest. Though a poor labor practice scenario was used in our focus group studies, the discussion suggested that participants perceived labor practice problem as ubiquitous and less of a valid brand crisis context. Thus, this scenario was abandoned and we designed a racial discrimination scenario to serve as the target crisis. 25 participants (M_{age} = 21.24, 60% female) participated in the pretest for extra course credit. They were asked to read a recent newspaper article on the Global and Mail regarding a racial discrimination problem with Sony. Either a high severity or low severity article was randomly assigned to respondents. In the high severity condition, the article depicted a scene where employers use racial slurs and derogatory metaphors to insult African-American employees and a law suit had been filed in the court. In the low severity condition, African-American employees faced more strict requirements to get promoted and an investigation was filed by Fair Labor Association (see Appendix 16 and 17). After reading the target article, participants were asked to fill out a short questionnaire assessing their attitude towards the target news article including crisis severity, whether they perceive the article as more related to product performance or ethical conduct, their familiarity with, attention paid to, and believability of the newspaper article (see Appendix 11, 12 and 13). An independent sample t-test show that severity is rated considerably higher in high severity condition than in low severity condition as intended (M_{high} = 5.75, M_{low} = 4.33; p < .01). Also, all subjects identified the target article as related to firm conduct rather than product performance. In terms of the negativity about the news message, participants were asked to indicate to what extent they perceive the news article as negative towards the brand described in the article (1 = Not At All Negative, 7 = Very Negative). The ratings were significantly higher than the theoretical midpoint
4 for both conditions ($M_{\text{high}} = 6.17; t(12)_{\text{diff from 4}} = 8.99, \ p < .001; M_{\text{low}} = 6.19; t(13)_{\text{diff from 4}} = 8.76, \ p < .001$) but does not differ in terms of extremity across the two severity conditions ($M_{\text{high}} = 6.17, M_{\text{low}} = 6.19; p > .94$), indicating that the target articles were successfully manipulated as negative information. Moreover, the articles in both conditions were also rated as equivalent in familiarity ($M_{\text{high}} = 1.08, M_{\text{low}} = 1.00; p > .30$), believability ($M_{\text{high}} = 5.67, M_{\text{low}} = 5.31; p > .45$), and participants’ involvement ($M_{\text{high}} = 5.04, M_{\text{low}} = 4.92; p > .82$).

8.3. Experimental Procedure and Measures

The specific procedures were exactly the same as in Experiment 1. Subjects were randomly assigned to one of the four experiment conditions and they were run in small groups. The only exception was that participants read a different stimuli article in each condition (i.e., value-related crisis scenario). Same measures were used to collect dependent variables and manipulation variables. Based on a suspicion probe, none of the participants guessed the purpose of the study.

8.4. Results

8.4.1. Manipulation Checks

Independent t-tests reveal that participants perceive the brand (i.e., Sony) in high-equity condition has significantly higher brand equity than the brand in low-equity condition (i.e., Insignia) ($M_{\text{Sony}} = 5.49, M_{\text{Insignia}} = 2.71; p < .001$), indicating that brand equity manipulation is successful. Crisis severity was manipulated using the scenarios developed in the pretest. Independent t-tests show that subjects perceive the crisis to be more severe in the high severity
condition than in the low severity condition ($M_{\text{high}} = 5.84$, $M_{\text{low}} = 4.54$; $p < .001$), suggesting that the crisis severity manipulation is also effective. In addition, a paired-samples t-test reveals that subjects rate the crisis as more strongly related to firm general conduct than product performance ($M_{\text{performance}} = 1.89$, $M_{\text{value}} = 6.25$; $p < .001$). In addition, participants were also asked to classify the news article as either a performance-related or value-related crisis. All participants correctly identified the news article as talking about value-related crisis. This suggests that the crisis was perceived as value-related as intended. In addition, one sample t-tests show that participants do perceive all the crisis articles as providing negative information ($M_{\text{condition1}} = 6.36$; $t(32)_{\text{differ from 4}} = 18.55$, $p < .001$; $M_{\text{condition2}} = 6.23$; $t(30)_{\text{differ from 4}} = 14.42$, $p < .001$; $M_{\text{condition3}} = 5.94$; $t(33)_{\text{differ from 4}} = 11.34$, $p < .001$; $M_{\text{condition4}} = 6.22$; $t(30)_{\text{differ from 4}} = 14.84$, $p < .001$). Also, participants’ involvement and news article believability do not statistically differ across the four conditions ($ps > .10$). Finally, the articles are of similar length across conditions and participants indicated that they were unfamiliar with the news article they read in the study.

### 8.4.2. Hypothesis Tests

Our hypothesis that brand equity would amplify negative consumer responses in a value-related crisis regardless of crisis severity indicates the absence of an interaction effect between crisis severity and brand equity on consumer negative responses (i.e., brand attitude, trust, and purchase intention change). To test our prediction, we perform a MANOVA on attitude change, trust change, and purchase intention change. Brand equity and crisis severity are independent variables. Similar as in the first study, we include brand familiarity and brand commitment as covariates in the MANOVA because they were identified in previous literature as key...
moderators influencing consumer negative responses in a brand crisis context (Ahluwalia et al. 2000; Cleeren et al. 2008). They were dropped out in further analyses because the multivariate main effect of brand commitment ($\lambda = .97$, $F(3, 119) = 1.24$, $p > .30$) and brand familiarity ($\lambda = .96$, $F(3, 119) = 1.55$, $p > .20$) are not significant. The Bartlett’s test of sphericity show a significant result (Chi-square = 134.87, df = 5, $p < .001$), indicating that the correlations among the three dependent variables are strong enough to perform MANOVA.

As expected, unlike in performance-related crisis, the multivariate interaction effect between brand equity and crisis severity is not significant ($\lambda > .99$, $F(3, 121) = .08$, $p > .97$). This is consistent with H3 in that crisis severity no longer moderates brand equity’s effect on consumer negative responses in a value-related crisis. A significant multivariate main effect of brand equity (i.e., amplifying effect) is observed ($\lambda = .73$, $F(3, 121) = 14.86$, $p < .001$). The individual ANOVAs show that consumers change their brand attitude ($M_{\text{high}} = 2.17$, $M_{\text{low}} = .91$; $F(1, 123) = 39.68$, $p < .001$), brand trust ($M_{\text{high}} = 1.71$, $M_{\text{low}} = .99$; $F(1, 123) = 10.20$, $p < .01$), and brand purchase intention ($M_{\text{high}} = 1.39$, $M_{\text{low}} = .85$; $F(1, 123) = 4.20$, $p < .05$) to a greater extent for a high equity brand compared with a low equity brand in a value-related crisis, supporting H3. This suggests that brand equity amplifies consumer negative responses in a value-related crisis. Therefore, H3 is fully supported.

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8.4.3. Process Tests

Mediation analyses were performed to test H4 regarding the underlying mechanism for the observed amplifying effect from brand equity in a value-related crisis. Specifically, we argue
that consumers tend to perceive a value-related crisis as highly diagnostic regardless of crisis severity and may fail to defend a high-equity brand against the negative information. Thus, they may become especially disappointed when a strong brand is involved in any value-related crisis. Therefore, we anticipate that the negative disconfirmation of expectation to mediate the differences in consumer response change between high- and low-equity brands across crisis severity conditions. Though the interaction effect between brand equity and crisis severity was not significant in value-related crises, we also perform the mediation analyses separately for the low and high severity conditions because it is possible that the observed amplifying effect from brand equity may work through different mechanisms in low versus high severity conditions, just like in Experiment 1 in performance-related crises.

To test whether brand equity has an effect on consumer responses change through disconfirmation of expectation, we included the disconfirmation of expectation as a mediator of the effect of brand equity on brand attitude, trust, and purchase intention change separately. Following Zhao et al. (2010), we tested the mediation by using the bias corrected bootstrap test of the indirect effect. We repeated the mediation analyses for all three dependent variables: attitude change, trust change, and purchase intention change. As expected, the results show that disconfirmation of expectation significantly mediates brand equity’s effect on all three dependent variables across severity conditions. Using 5,000 bootstrap samples, the bias corrected 95% confidence intervals for the indirect effect through disconfirmation of expectation do not include zero for all three dependent variables, suggesting that the estimates of the indirect effect from brand equity to consumer evaluations change through disconfirmation of expectation are significant at p < .05 across severity conditions (attitude change: ab = .7056, 95% CI = [.4049; 1.0569]; trust change: ab = .4612, 95% CI = [.1404; .8673]; purchase intention change: ab
= .5805, 95% CI = [.2256; 1.0253]). Then following the same procedure, we repeated mediation analyses by including disconfirmation of expectation as the mediator for the low and high severity conditions separately. In the low crisis severity condition, we find the same result that disconfirmation of expectation significantly mediates brand equity’s effect on all three dependent variables (attitude change: ab = .4774, 95% CI = [.1878; .9805]; trust change: ab = .3551, 95% CI = [.0388; .8258]; purchase intention change: ab = .4481, 95% CI = [.1229; .9270]). The same result is also observed in high severity condition where the bias corrected 95% confidence intervals for the indirect effect through disconfirmation of expectation also do not include zero for all three dependent variables, indicating that the estimates of the indirect effect from brand equity to consumer evaluations change through disconfirmation of expectation are significant at p < .05 (attitude change: ab = 1.0037, 95% CI = [.5093; 1.6468]; trust change: ab = .6626, 95% CI = [.0188; 1.3513]; purchase intention change: ab = .7924, 95% CI = [.1015; 1.6546]).

Therefore, H4 is fully supported, that is, we demonstrate that consumers’ disconfirmation of expectation accounts for brand equity’s amplifying effect on consumer negative responses in a value-related crisis regardless of crisis severity.

**8.5. Discussion of Experiment 2**

The purpose of Experiment 2 is to investigate the role of brand equity in a value-related crisis. The findings fully support H3. As hypothesized, there was no significant interaction effect between brand equity and crisis severity. Unlike in performance-related crises, the role of brand equity in a value-related crisis is not contingent on the severity level of a crisis. Supporting the hypothesis, we find that brand equity has a significant multivariate main effect on consumer negative responses. More specifically, brand equity becomes a liability in any value-related crisis
regardless of crisis severity. When a value-related crisis happens to a good brand, the backlash from consumers exacerbates both attitudinally and behaviorally. Furthermore, we also seek to investigate the underlying mechanisms for brand equity’s amplifying effect in a value-related crisis from a consumer-based perspective. Results from mediation analyses fully support H4. As expected, consumers tend to perceive value-related transgressions as highly diagnostic and difficult to counterargue. In this situation, regardless of crisis severity, brand equity becomes a liability because consumers feel especially disappointed when a reputable brand is involved in a value-related misconduct. The findings demonstrate that disconfirmation of expectation significantly mediates the amplifying effect from brand equity in both severity conditions.

In summary, Experiment 2 provides some strong support for both H3 and H4, extending our understanding on the role of brand equity from performance-related crises into value-related crises. The results reveal that brand equity may have different effects on consumer negative responses through different mechanisms in a value-related crisis compared with in a performance-related crisis. This finding indicates that crisis type (i.e., performance- versus value-related crisis) is another important contingent condition impacting brand equity’s effect in a brand crisis context.

9. GENERAL DISCUSSION

Brand crises occur even more frequently in today’s marketplace, and they can seriously damage the valuable yet fragil brand equity (Dawar and Pillutla 2000). An important question to ask is – does the marketing investment made earlier in building a strong brand pay off in a non-routine crisis context? The objective of this research is to address this question by examining the role of brand equity in various brand crisis contexts. Traditional wisdom suggests that
building a strong brand can provide a reservoir of goodwill to protect the brand from its own
wrongdoings, yet through a focus group and two experiment studies, our findings have indicated
otherwise, dragging down brand equity from the shrine (Brady et al. 2008; Ahluwalia et al. 2000;
Ahluwalia 2002; Cleeren et al. 2008; Pullig et al. 2006; Dawar and Pillutla 2000).

Specifically, based on our focus group studies, we find that brand equity may buffer a
brand against consumer negative responses in a brand crisis, but this buffering effect is very
limited. The results suggest that crisis severity and crisis type may serve as important
contingency variables to direct brand equity’s effect on consumer negative responses. Thus,
whether a positive “halo effect” or a negative “love becomes hate effect” will emerge cannot be
easily predicted without consideration of the severity level and the domain of a brand crisis.

The findings from the focus group study were further tested quantitatively through two
laboratory experiments. Experiment 1 investigates brand equity’s effect in performance-related
crises. The results indicate that brand equity will intensify consumer negative responses but only
when the crisis is of high severity level. When the severity of a crisis attenuates, the amplifying
effect disappears. To explore the psychological mechanisms underlying brand equity’s
differential effect, mediation analyses were performed. Counterarguments generated against the
negative information are identified to account for the absence of amplifying effect in a low
severity condition, whereas disconfirmation of expectation is found to explain the observed
amplifying effect in the high severity condition. Although a hypothesized buffering effect is not
observed in a low severity performance-related crisis in Experiment 1, the significant mediating
effect of counterarguments indicates that brand equity does provide somewhat buffering effect
through the path of counterarguments. This suggests that the absence of brand equity’s main
effect (i.e., expected buffering effect) may be due to the overlook of other coexisting
mechanisms that work against the buffering effect from counterarguments. One possible explanation is that the negative force offsetting counterarguments’ buffering effect originates from a ceiling effect from the low equity brand. That is, because consumers have low expectation about a low-equity brand, such a brand may have little to lose in a brand crisis context, obscuring a high-equity brand’s buffering effect. Though which other mechanisms work in the opposite way to offset brand equity’s buffering effect warrants further research, our mediation analysis using counterarguments in a low severity condition still provide valuable insights about the phenomenon under investigation.

Experiment 2 extends Experiment 1 by looking into the role of brand equity in value-related crises. The results show that brand equity largely amplifies consumer negative responses in value-related crises regardless of crisis severity. Disconfirmation of expectation has been demonstrated to mediate the observed amplifying effect in both severity conditions. Therefore, the results from the two experimental studies support our theoretical framework, showing that crisis severity moderates brand equity’s effect in a brand crisis and this moderating role of crisis severity is further determined by crisis type (i.e., performance- versus value-related crisis).

9.1. Theoretical Implications

First, this research adds to the extant brand crises literature by examining the role of brand equity in influencing consumer negative responses in various crisis contexts. This is one of the few studies that specifically looked into the role of brand equity in affecting consumer responses to brand harm crisis. Though various consumer-, firm-, and/or crisis-related factors have been investigated in previous literature on negative publicity, limited research has specifically examined the role of brand equity in a brand crisis context (Ahluwalia et al. 2000;
Cleeren et al. 2008; Dawar and Pillutla 2000; Rea et al. 2014; Siomkos and Kurzbard 1994). Extant brand crisis literature often vaguely defined brand equity and used other constructs such as firm reputation as proxies for brand equity (Siomkos and Kurzbard 1994). Our research advances understanding in the brand crisis literature by distinguishing brand equity from other related constructs. Contrary to the mainstream literature on negative publicity that advocates a halo effect, our research findings uphold the contingency view with regard to the impact of brand equity. This indicates that though sharing substantial similarity, brand equity still work in very different ways from some similar constructs like brand reputation and commitment.

Second, our study advances the literature on negative publicity by demonstrating the effectiveness of the usage of contingency view in a complex situation such as in a brand crisis. This thesis addresses both buffering and amplifying theoretical perspective with regard to the impact of brand equity by understanding important contingent conditions in this context. Specifically, we found brand equity can have very complex effects on consumer responses to brand crises depending on the specific contextual factors such as crisis severity and crisis type. Previous literature on negative brand publicity has shed some insight into a buffering or an amplifying effect (e.g., Dawar and Pillutla 2000; Ahluwalia et al., 2000; Cleeren et al. 2008). Our findings suggest that a crisis phenomenon is intrinsically complex and a signaling role of brand equity might be better understood by adopting a contingency perspective in this stream of research (Dawar 1998).

Third, in turn, we developed a contingency-based theoretical framework by including crisis severity and crisis type as key contingency variables to examine brand equity’s effect on consumer negative responses in a brand crisis context. To the best of our knowledge, this is the first research that tapped into the moderating role of crisis severity and crisis type simultaneously.
in a brand crisis context. Specifically, we identified that crisis severity will moderate brand equity’s effect in a crisis context, and such moderating role of crisis severity is further determined by another contingency variable, crisis type. In addition, given a scarcity of literature on value-related crisis, this thesis also helps to enhance understanding on consumers’ experience and responses on firm unethical conducts.

Finally, our research also enriches the understanding on consumers’ processing of negative publicity information by delineating the psychological mechanisms underlying the effect of brand equity on consumer responses. Though previous researches have shed some lights on the underling mechanisms for both buffering and amplifying effects from certain psychological rent, building on extant literature, we found that multiple psychological mechanisms can coexist and the activation of certain mechanism is contingent on crisis severity and crisis type (Ahluwalia et al. 2000; Dawar and Pillutla 2000). Specifically, the results from our research suggest that in a moderately severe performance-related crisis, brand equity has no observed effect on consumer responses but counterarguments provide a significant buffering effect through mediation. This competitive mediation effect of counterarguments implies that a no effect phenomenon may be more complex than it appears. That is, multiple mechanisms may coexist and work against each other, obscuring the explicit effect. To our best knowledge, this thesis is one of the few studies that document such a competitive mediation effect in a brand crisis context and we contend that this phenomenon can provide a productive avenue for future research.
9.2. Managerial Implications

We started our research with one important managerial question in mind: Is building a strong brand an effective strategy in insulating the crisis-associated brands from consumer negative responses? In the end, our findings indicate that this question cannot be easily answered without specifying some important parameters such as crisis severity and crisis type. Specifically, our findings showed that consumer negative responses were exacerbated when a high-equity brand is involved in a crisis unless the crisis is related to product performance and is of low severity. Note that we do not suggest marketers to avoid building a strong brand just to avoid the amplifying effect in a brand crisis context. Our findings simply warn marketers to avoid the mental stereotype that they can rely on the reservoir of goodwill from a strong brand name to easily weather through a crisis (Hoeffler and Keller 2002).

Our research documents a dark side of brand equity in a value-related crisis or when a performance-related crisis is of high severity. Thus, managers from highly reputable firms should be cautious when their firms get involved in any kind of value-related crises or a severe performance-related crisis. In such situations, they may become the victims of their own good reputations. This “love becomes hate effect” has been well-documented in service encounter literature and is consistent with the logic of gaps model of service quality (Grégoire and Fisher 2008; Parasuraman et al. 1985). In addition, managers should be especially careful not to fall for the common sense of error that value-related crisis has no impact on consumer s’ evaluation on products per se. Though corporate social responsibility may not have a direct impact on consumer product evaluations, Brown and Dacin (1997) identified that corporate social responsibility exerts an indirect effect on product evaluations through its direct impact on overall
corporate evaluations. Based on our findings, value-related crises may be the worst nightmare for a well-known company and managers should be wary in addressing this type of brand crisis.

Furthermore, an understanding of consumer psychological mechanisms underlying brand equity’s differential effect on their responses would help practitioners to identify the most vulnerable post-crisis consumers and better design effective response strategies to retain their most loyal and profitable customers. Our findings suggest that when consumers attempt to generate counterarguments against negative information, the counterarguments become a source of brand equity’s buffering effect, which will help to constrain the negative side of brand equity by deactivating the disconfirmation of expectation mechanism. Therefore, practitioners should try to design their marketing strategies and post-crisis response strategies in a way to extract more counterarguments from consumers. For example, in a post-crisis response, marketers can include some reasonable excuses to hint consumers with more readily accessible counterarguments. Also, because biased processing is highly cognitive resource consuming, firm responses should be conveyed in a way with minimal background distractions to ensure consumers can exert enough cognitive ability to maximize the number of counterarguments (Ahluwalia 2000).

The dark side of brand equity in this thesis also indicates that a brand harm crisis can be a great opportunity for competitor companies to plunder market share from the industry leader. In a routine business situation, a strong brand benefits from numerous ways such as customer loyalty and more effective marketing initiatives. The accumulated brand equity becomes a barrier protecting a strong brand from the attacks from its competitors. Thus, small companies often find it extremely difficult to sway the status of an industry leader. However, a brand harm crisis provides a chance for small companies because consumers may perceive a similar
wrongdoing from a good brand as intolerable and defect to competitors, especially when a brand crisis is severe or related to ethical conducts. In addition, marketing effectiveness may severely suffer in a brand harm crisis, rendering the barrier from brand equity less effective (Van Heerde et al. 2007). Moreover, consumer scapegoating may occur in a systemic brand harm crisis where the most conspicuous crisis-associated company (i.e., a well-known brand) takes disproportionate blame and becomes a scapegoat for an industry wide crisis (Gao et al. 2012). However, managers should still be cautious and restrain their optimism when a brand crisis happened to the industry leader because the negative effects from a brand crisis may impact the whole industry and spillover to themselves even they are not involved in the crisis (Roehm and Tybout 2006; Lei et al. 2008)

Finally, our research takes a consumer-based perspective, and managers should keep this in mind. A brand crisis has been documented to impact a variety of stakeholders such as consumers, shareholders, and policy makers (Chen et al. 2009). Thus, managers should first decide which stakeholders are the most important to them, and then they can possibly design an effective response strategy. For example, from a consumer perspective, Dutta and Pullig (2011) proved that proactive response strategies were more effective than passive strategies in recovering consumer attitude because people will perceive firms react proactively as more responsible and truly caring about consumers. However, from a stock market perspective, Chen et al. (2009) found that passive strategies are superior to proactive response strategies in attenuating stock market price plummeting after a brand crisis. This is because stock market will make such an inference that only when a crisis is considered severe enough to seriously damage a brand will a company employ a responsive strategy because they are forced to do so. Thus, if
practitioners try to understand and evaluate brand equity’s effect on other stakeholders’ responses, they should be extremely cautious in interpreting the results from this thesis.

9.3. Limitations and Future Research

Like all the academic research, our study also suffers a few limitations and raises some opportunities for future research. First, our research only examined two contingency variables, crisis severity and crisis type. Though these two variables fit our theoretical framework well and have enhanced our understanding on the role of brand equity in a brand crisis context, this is by no means a comprehensive framework. For example, our focus group discussion implies that crisis relevance may serve as another important contingency variable. Crisis relevance has also been documented in previous literature to moderate the effect of consumer-brand connection and brand familiarity in a brand crisis context (Trump 2014; Dawar and Lei 2009). Thus, future research could delve deeper to explore other overlooked key contingency variables and include more boundary conditions in the theoretical model to provide a more comprehensive understanding on this phenomenon.

Second, our research was limited by some methodological constraints. Student sample was used for our focus group study and two main studies. Although the usage of student sample is justified by stating that students are familiar with the target product category (i.e., television), the generalizability of our findings is nevertheless threatened due to the homogeneity of a student sample (Dawar and Pillutla 2000). Future research should test our findings using a more representative population to increase the external validity of the results. Also, we only used one product category and one crisis manipulation in the main studies. Thus, our findings may be subjective to our specific research design and cannot be confidently generalized to other crisis
situations. To improve generalizability, future research can test brand equity’s effect in different product categories using different crisis scenarios. It is plausible that product category may impact brand equity’s effect in a crisis context. For example, it has been identified that consumers tend to be less forgiving and are more likely to attribute the blame to the associated brand when a brand crisis is related to a product category in which products are used on a daily basis and are closer to the body (Haas-Kotzegger and Schlegelmilch 2013). Moreover, our research used real television brands in our experiment as target brands. Though a pretest validated this operationalization on brand equity and potential confounding variables such as commitment and familiarity were controlled in the study, it is still possible that some overlooked confounding effects may emerge, jeopardizing the internal validity of our research design. Thus, future research should be more rigorously controlling for any other potential confounding effects such as endowment of product ownership (Tom et al., 2007) or consumer prior experience with the brand stimuli. Also, we used laboratory experiments in this research and therefore external validity is sacrificed for internal validity. One reason for using experiments is that brand crisis is a non-routine situation and does not happen on a daily basis. Therefore, it is relatively difficult to have access to real-life data regarding brand crisis. Though case studies have been used in the past, causal relationships cannot be confidently verified without a controlled environment (Cleeren et al. 2008). Even so, it would be desirable that future research can use field studies or critical incident method to improve the external validity of our findings (Bitner et al. 1990).

Furthermore, in our study, we collected consumer baseline brand evaluations and post-crisis brand evaluations across a relatively short time span. This may raise some issues for the reliability of our attitude change measurement. Although we included filler brands and a filler
task in the study to refresh consumer working memory and the results indicate that our brand evaluation change measures are reliable, it is desirable that future research can adopt a longitudinal study across a longer time span to increase the reliability of the measures (Collins 1996). In addition, the crisis severity manipulation in our study, though valid and significant, did not generate a very large severity difference. Especially in study 2, even the low severity crisis was perceived as significantly higher than the theoretical midpoint 4. Therefore, future research can use different manipulation materials to enlarge the crisis severity difference and test whether our findings still hold.

In this study, we hypothesized that brand equity’s effect on consumer negative responses was linear, and so was the moderating role of crisis severity. However, it is possible that a nonlinear relationship such as a U shaped relationship exists in this context. To test potential nonlinear relationship, at least three data points are needed (Meyers et al. 2006). Thus, our $2 \times 2$ design cannot be used to test nonlinear relationships. Future research can manipulate brand equity and crisis severity with three or more levels, or use measured variables to test any potential nonlinear relationships.

Alternative explanations may also exist for the consumer psychological mechanisms. For example, emotional and affective processes are gaining recognition in ethical decision making literature, implying that consumer emotions may provide another fruitful explanation (Vélez-Garcia and Ostrosky-Solís 2006). Since our research mainly used a cognitive-based perspective to explain the observed effects, future research or additional robustness checks should investigate whether this affective-based explanations can better address the phenomenon.

Finally, our findings that counterarguments worked as a competitive mediator in a low severity performance-related crisis provide a promising avenue for future research. That is, it
might be worthwhile to reexamine some of the no-effect situations in previous literature for coexistence of competing mechanisms. As such, future research could perform additional mediation analyses regardless of the existence of a zero-order effect. Agreeing with Zhao et al. (2010), we contend that mediation effect should be more of theory-driven than data-driven.

10. CONCLUSION

Altogether, our research enriches the understanding of brand crisis literature by developing a theoretical framework with respect to the role of brand equity in influencing consumer responses. Through a focus group study and two laboratory experiments, both the buffering and amplifying roles of brand equity are observed in a brand crisis context and the effect is shown to be contingent on crisis severity and crisis type. Consumers’ psychological mechanisms were also delineated. The finding, along with our theoretical framework, advances the brand crisis literature and directs promising avenues for future researchers. Our findings also provide practical guidance for practitioners in evaluating and managing the potential negative consequences from the prevalent brand crises.
11. REFERENCES


http://online.wsj.com/news/articles/SB10001424052748704145904575111341893725992


APPENDIX 1

Moderator’s Question Guide

1. Introduction (10 min)
   1.1. Welcome message
   1.2. Ground rules on focus group
   1.3. Consent forms collection

2. Warm up questions (10 min)
   2.1. Self-introduction
       a. To begin with, could you briefly introduce yourself: what’s your name, where are you from, which program you are in?
   2.2. Interest on the topic
       a. What comes to your mind when you think about brand crisis?
       b. Describe the phenomenon of a brand crisis

3. Probing questions (15 min)
   3.1. Can anyone recall one such brand crisis incident and share what you know about it with us?
   3.2. What do you think about this crisis? Is it severe? Does it bother you?
   3.3. Do you guys think such incidents happen a lot?
   3.4. What do you think are the major causes for such increasingly frequent crises?
   3.5. After hearing about the news, does it negatively impact your attitude and behavior?

4. Main discussion questions (60 min)
Participants will be shown various crisis scenarios (see Appendix 3 for the summary table) and be asked to discuss on each scenario based on the following probing questions.

   4.1. What do you guys think of the problem on (target brand name)?
   4.2. Do you think it is a severe problem?
   4.3. Does it surprise you when such a problem happened to (target brand name)? Is it within your expectation?
   4.4. What do you think are the major causes for the incident? Could you please explain a little bit more about what makes you think in this way?
   4.5. Who do you think should be responsible for the crisis? Why?
   4.6. Do you think this is a common practice in the industry? If so, do you think the crisis is justified? Does it mean the firm should not be the one to blame?
   4.7. How likely do you think (target brand name) will make similar mistakes in the future?
Do you guys think this is just an accident for (target brand name) or do you think it is very common for (target brand name)?

4.8. Does this incident affect the image of or your attitude towards (target brand name) in your mind?

If you had the chance to seriously consider purchasing a product from (target brand name), do you think this incident will actually influence your purchase decisions?

4.9. What do you think would be an acceptable response from (target brand name)?

4.10. What kind of responses do you think can eliminate the impact on your attitude and purchase decisions you indicated before?

4.11. How likely do you think (target brand name) will actually implement the response you suggested?

5. Closing (5 min)

5.1. Thank participants
5.2. Debrief participants
5.3. Distribute incentives
APPENDIX 2

Scenario 1.3

Sony Recalls 1.6 Million Bravia HDTVs Globally for Potential Fire Hazard

Reports are circulating this morning that Sony has officially issued a recall of 1.6 million 40-inch Bravia LCD HDTVs sold in Japan, U.S., Canada and England since 2010. A recent test by U.S. CPSC verified that a faulty component in the backlight system may overheat, potentially causing the television to melt or catch fire.

According to U.S. Consumer Product Safety Commission, the defective part is an inverter transformer used for LCD backlights; the inverter can sometimes overheat and occasionally ignite. And when that happens, it can create a hole in the cabinet of the set. So far, Sony has received 184 consumer complaints of TV malfunctions of this nature, among which 21 incidents involved consumer injury or property damage. And there have been several recent news reports about Sony Bravia TVs burning into flames. Pictures of some of the charred machines have also circulated on the Internet.

The U.S. Consumer Product Safety Commission advises consumers to check the detailed recall information on Sony’s website and stop using the recalled 40-inch Bravia LCD HDTVs immediately. Consumers should contact Sony for an in-home evaluation on the defective components.

Scenario 2.3

Insignia Recalls 1.6 Million HDTVs Globally for Potential Fire Hazard

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According to U.S. Consumer Product Safety Commission, the defective part is an inverter transformer used for LCD backlights; the inverter can sometimes overheat and occasionally ignite. And when that happens, it can create a hole in the cabinet of the set. So far, Insignia has received 184 consumer complaints of TV malfunctions of this nature, among which 21 incidents involved consumer injury or property damage. And there have been several recent news reports about Insignia TVs burning into flames. Pictures of some of the charred machines have also circulated on the Internet.

The U.S. Consumer Product Safety Commission advises consumers to check the detailed recall information on Insignia’s website and stop using the recalled 40-inch LCD HDTVs immediately. Consumers should contact Insignia for an in-home evaluation on the defective components.
Insignia is Accused of Using Sweatshops in Developing Countries

James K. Wilcox

Official reports have announced this morning that Fair Labor Association (FLA) has officially filed an investigation on work conditions on Insignia's manufacturing partners in China and Mexico. Recently, some independent sources indicate that nearly 34 percent workers in Insignia's Mexican plants do not receive fair compensation for unscheduled overtime work. And pictures of astoundingly poor working conditions at Insignia's manufacturing plants in China have also circulated on the Internet.

Wolfe Research, an equities research firm, recently has downgraded Insignia's brand equity in a new research report, criticizing its poor labor practice in developing countries, including understaffing, health and safety issues, and working hour issues, among other problems.

Insignia's CEO, Glen Dall, said the investigation is still underway, and has not confirmed any evidence of violations of FLA's Workplace Code of Conduct or labor laws in its manufacturing plants.

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Sony's CEO, Kazuo Hirai, said the investigation is still underway, and has not confirmed any evidence of violations of FLA's Workplace Code of Conduct or labor laws in its manufacturing plants.
APPENDIX 3

Brand Equity Measure

Five seven-point semantic differential scale (Yoo and Donthu 2001; Brady et al. 2008)

Pretest 1: $\alpha = .92$;
Experiment 1: $\alpha = .94$;
Experiment 2: $\alpha = .92$;

- How loyal are you to (target brand name)?
  “1 = not at all, 7 = very loyal”
- What kind of attitude do you have about (target brand name)?
  “1 = negative, 7 = positive”
- What kind of image do you have about (target brand name)?
  “1 = negative, 7 = positive”
- How would you rate the product quality delivered by (target brand name)?
  “1 = low quality, 7 = high quality”
- Would you be willing to pay more for (target brand name)?
  “1 = definitely not, 7 = definitely”
APPENDIX 4

Brand Attitude Measure

Five seven-point semantic differential scale (Ahluwalia et al. 2000; Puzakpva et al. 2013)

Experiment 1 Pre: $\alpha = .97$;
Experiment 1 Post: $\alpha = .97$;
Experiment 2 Pre: $\alpha = .96$;
Experiment 2 Post: $\alpha = .95$;

- To what extent do you think (target brand name) is good?
  “1 = bad, 7 = good”
- To what extent do you think (target brand name) is favorable?
  “1 = unfavorable, 7 = favorable”
- To what extent do you think (target brand name) is desirable?
  “1 = undesirable, 7 = desirable”
- To what extent do you like (target brand name)?
  “1 = dislike, 7 = like”
- To what extent do you think (target brand name) is pleasant?
  “1 = unpleasant, 7 = pleasant”
APPENDIX 5

Brand Trust Measure

Three seven-point semantic differential scale (Dawar and Pillutla 2000; Puzakpva et al. 2013)

Experiment 1 Pre: $\alpha = .95$;
Experiment 1 Post: $\alpha = .97$;
Experiment 2 Pre: $\alpha = .96$;
Experiment 2 Post: $\alpha = .94$;

- To what extent do you think (target brand name) is reliable?
  “1 = unreliable, 7 = reliable”
- To what extent do you think (target brand name) is dependable?
  “1 = not at all dependable, 7 = dependable”
- To what extent do you think (target brand name) is trustworthy?
  “1 = not at all trustworthy, 7 = trustworthy”
**APPENDIX 6**

**Purchase Intention Measure**

Two seven-point Likert scale (Puzakpva et al. 2013)

Experiment 1 Pre: $\alpha = .95$;
Experiment 1 Post: $\alpha = .98$;
Experiment 2 Pre: $\alpha = .95$;
Experiment 2 Post: $\alpha = .97$;

To what extent do you agree with the following statements?

"1 = strongly disagree, 7 = strongly agree"

- The next time I buy a TV, I will take (target brand name) into consideration
- I can imagine myself buying a (target brand name) TV
Filler Task

Please complete the following mathematical questions!

100 / 25 = __

10 / 25 = __

15 + __ = 3

__ + 35 = 234

69 + 19 = __

11 – 7 – 2 = __

40 × 5 = __

80 × 5 = __

100 / 4 = __

88 / 2 = __

102 / 2 = __

60 / 5 = __

12 + 13 + 1 = __

600 – 555 = __

456 + 19 = __

126 – 7 = __

200 × ½ = __

80 × ½ = __
APPENDIX 8

Thought Listing Task (Ahluwalia et al. 2000)

Please take 5 minutes to list all the thoughts you had while you were reading the newspaper article about (target brand name). If possible, please try to write out as many thoughts as possible.  *(There is no need to summarize the news article, please try to give your opinions on (target brand name) and the problem reported in the article)*

Please start a new line for each thought!
APPENDIX 9

Crisis Severity Measure

Three seven-point semantic differential scale (Roehm and Brady 2007)

Experiment 1: $\alpha = .93$;
Experiment 2: $\alpha = .92$;

I think the problem described in the newspaper article about (target brand name) is:

- “1 = not at all severe, 7 = very severe”
- “1 = a minor problem, 7 = a major problem”
- “1 = not at all significant, 7 = very significant”
APPENDIX 10

Disconfirmation of Expectation Measure

Three seven-point semantic differential scale (Ahluwalia et al. 2002)

Experiment 1: \( \alpha = .86 \);
Experiment 2: \( \alpha = .90 \);

I think the problem described in the newspaper article about (target brand name) is:

- “1 = consistent with my expectation, 7 = inconsistent with my expectation”
- “1 = not at all worse than I anticipated, 7 = worse than I anticipated”
- “1 = not at all worse than I expected, 7 = worse than I expected”
APPENDIX 11

Negativity Manipulation Check Measure

Two seven-point Likert scale (Pullig et al. 2006; Dutta and Pullig 2011)

Pretest 2: $\alpha = .83$;
Pretest 3: $\alpha = .81$;
Experiment 1: $\alpha = .77$;
Experiment 2: $\alpha = .86$;

To what extent do you agree with the following statements?
“1 = strongly disagree, 7 = strongly agree”

- The newspaper article provided negative information about (target brand name)
- The newspaper article provided unfavorable information about (target brand name)
Crisis Type Manipulation Check Measure

1. Two seven-point Likert scale (Pullig et al. 2006; Dutta and Pullig 2011)

To what extent do you agree with the following statements?
“1 = strongly disagree, 7 = strongly agree”

- The news report referred to a specific defect about (target brand name) products
- The news report referred to firm conduct instead of product performance about (target brand name)

2. One classification question about crisis type.

- Which aspect do you think the news article referred to?
  □ Product defect         OR         □ Conduct of the company
Familiarity, Involvement, and Believability Check Measure

Seven-point Likert scale (Pullig et al. 2006)

Please indicate your agreement or disagreement with the following statements.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

- I am familiar with the newspaper article before the study.
- I was very involved while reading the newspaper article.
- I paid a lot of attention while reading the newspaper article.
- I find the newspaper article about (target brand name) very believable.
APPENDIX 14

High Severity Performance-related Crisis Scenarios

Sony 40-inch Bravia HDTVs may Pose Potential Fire Hazard

Reports are circulating this morning that U.S. Consumer Product Safety Commission (CPSC) has filed an investigation on Sony's 40-inch Bravia LCD HDTVs sold in Japan, U.S., Canada and U.K. since 2010. Recently, some independent sources indicate that a faulty component in the backlight system may overheat, potentially causing the television to melt or catch fire. Specifically, the defective part is an inverter transformer used for LCD backlights; the inverter can sometimes overheat and occasionally ignite. And when that happens, it can create a hole in the cabinet of the set.

So far, there have been hundreds of reports of consumer complaints regarding TV malfunctions of this nature, among which 168 incidents involved consumer injury or property damage and 3 deaths are linked to incidents of this type. Yet some independent experts argue that even a perfectly good inverter transformer may overheat when the TV is kept on for a long time, blaming that consumers may be partially responsible for the incidents. And some other sources indicate that short circuit of old wiring may also be the cause of the fire.

Kazuo Hirai, Sony's CEO, said the investigation is still underway and they have not confirmed any conclusive evidence of such defective parts yet.

Insignia’s 40-inch HDTVs may Pose Potential Fire Hazard

Reports are circulating this morning that U.S. Consumer Product Safety Commission (CPSC) has filed an investigation on Insignia’s 40-inch LCD HDTVs sold in Japan, U.S., Canada and U.K. since 2016. Recently, some independent sources indicate that a faulty component in the backlight system may overheat, potentially causing the television to melt or catch fire. Specifically, the defective part is an inverter transformer used for LCD backlight; the inverter can sometimes overheat and occasionally ignite. And when that happens, it can create a hole in the cabinet of the set.

So far, there have been hundreds of reports of consumer complaints regarding TV malfunctions of this nature, among which 168 incidents involved consumer injury or property damage and 3 deaths are linked to incidents of this type. Yet some independent experts argue that even a perfectly good inverter transformer may overheat when the TV is kept on for a long time, blaming that consumers may be partially responsible for the incidents. Also, some other sources indicate that short circuit of old wiring may also be the cause of the fire.

Earlier this morning, Glen Doll, Insignia’s CEO, said the investigation is still underway and they have not confirmed any evidence of such defective parts yet.
APPENDIX 15

Low Severity Performance-related Crisis Scenarios

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So far, there have been reports of consumer complaints regarding TV malfunctions of this nature, among which a few incidents involved consumer injury or property damage.

However, some independent experts argue that even a perfectly good inverter transformer will overheat when the TV is kept on for weeks, which is often the case in the reported incidents. So it may be consumers’ misusage of the TV instead of defective parts that caused the fire. In addition, other sources indicate that short circuit of old wiring may also be the cause of the fire.

Kazuo Hirai, Sony’s CEO, said the investigation is still underway and they have not confirmed any evidence of such defective parts yet.

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So far, there have been reports of consumer complaints regarding TV malfunctions of this nature, among which a few incidents involved consumer injury or property damage.

However, some independent experts argue that even a perfectly good inverter transformer will overheat when the TV is kept on for a very long period, indicating that it may be consumers’ misusage of the TV instead of defective parts that caused the fire.

In addition, other sources indicate that short circuit of old wiring may also have triggered the fire.

At this morning’s press conference, Glen Dall, Insignia’s CEO, said the investigation is still underway and they have not confirmed any evidence of such defective parts yet.
High Severity Value-related Crisis Scenarios

Sony USA Inc. Sued for Alleged Racial Discrimination

Reports are circulating this morning that several African-American employees working at Sony USA Inc. have officially filed a class action lawsuit in federal court alleging that Sony had systematically engaged in illegal racial discrimination in the hiring and subsequent promotion of managers. The case is filed in New York State Supreme Court in Queens on behalf of 16 current and former black employees, charging that an "endemic culture of racism" runs through the company's management and executives at its New York headquarters.

An audio tape recording several Sony executives using repeated racial slurs and derogatory metaphors have been submitted to the supreme court as the main evidence. This recording has also circulated on the Internet and stirred up harsh criticism from the public. If confirmed on the court, this will constitute severe violation of the Employment Non-Discrimination Act and Sony USA Inc. will face an enormous payment to settle this lawsuit.

So far, the involved executives have not made public announcements about this issue, and Sony's CEO, Kazuo Hirai, said the case is still under investigation and there is no confirmed evidence that their executives are involved in the alleged racial discrimination.

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So far, the involved executives have not made public announcements about this issue, and Insignia's CEO, Glen Don, said the case is still under investigation and there is no confirmed evidence that their executives are involved in the alleged racial discrimination.
APPENDIX 17

Low Severity Value-related Crisis Scenarios

Sony USA Inc. Charged for Alleged Racial Discrimination

Reports are circulating this morning that several African-American employees working at Sony USA Inc. have filed a complaint to Fair Labor Association (FLA) in regards of Sony’s engagement in unethical racial discrimination in the hiring and subsequent promotion of employees. The case is filed on behalf of 3 current black employees, charges that some executives and senior managers have engaged in an ongoing pattern of race discrimination against African-American employees at the company’s New York headquarters.

The employees - technicians claimed that they were often assigned to comparatively more hostile work environment and they face more strict requirements to get promoted compared with their white counterparts. So far, the FLA has accepted the complaint and is still gathering more evidence. If the claim is confirmed to be true, FLA will file an official investigation on Sony USA Inc. And if any violation of the Employment Non-Discrimination Act is constituted, financial punishments and policy changes may be forced on Sony USA Inc.

At this morning's press conference, Sony's CEO, Kazuo Hira, said the case is still under investigation and there is yet no confirmed evidence about the racial discrimination claim.

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### TABLES AND FIGURES

Table 1a: Group 1 Descriptive Statistics

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<td>Scenario 1.2</td>
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<td>Video is accessible online: <a href="https://www.youtube.com/watch?v=ckv5nBGuJs8">https://www.youtube.com/watch?v=ckv5nBGuJs8</a></td>
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<td>Scenario 1.3</td>
<td>A fictitious newspaper article we made up regarding Sony’s TV catching fire and get recalled</td>
<td>(see Appendix 4)</td>
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<td>Scenario 1.4</td>
<td>A fictitious newspaper article we made up regarding Insignia’s poor labor practice in developing countries</td>
<td>(see Appendix 4)</td>
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<tr>
<td><strong>Group 2</strong></td>
<td>Scenario 2.1</td>
<td>A real news video about BMW’s recall due to mechanical failure and faulty fuel pumps.</td>
<td>Video is accessible online: <a href="https://www.youtube.com/watch?v=jJ0PRFHEhwo">https://www.youtube.com/watch?v=jJ0PRFHEhwo</a></td>
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<td>A real news video about Apple’s price fixing scandal.</td>
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Table 3: Means (Standard Deviation) of Dependent Variables in Experiment 1

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<tr>
<td>Brand Attitude</td>
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<td>3.26 (1.20)</td>
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<tr>
<td>Brand Trust</td>
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<td>3.46 (1.19)</td>
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<tr>
<td>Purchase Intention</td>
<td>5.49 (1.37)</td>
<td>3.00 (1.91)</td>
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Table 4: Difference Scores (Standard Deviation) of Dependent Variables in Experiment 1

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Table 5: Means (Standard Deviation) of Dependent Variables in Experiment 2

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<td>Brand Attitude</td>
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<td>Purchase Intention</td>
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<td>2.71 (1.64)</td>
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Table 6: Difference Scores (Standard Deviation) of Dependent Variables in Experiment 2

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Figure 1: Interaction Effect between BE and Crisis Severity on Attitude Change (Performance-related Crisis)
Figure 2: Interaction Effect between BE and Crisis Severity on Trust Change (Performance-related Crisis)
Figure 3: Interaction Effect between BE and Crisis Severity on Purchase Intention Change (Performance-related Crisis)
Figure 4: Interaction Effect between BE and Crisis Severity on Attitude Change (Value-related Crisis)
Figure 5: Interaction Effect between BE and Crisis Severity on Trust Change (Value-related Crisis)
Figure 6: Interaction Effect between BE and Crisis Severity on Purchase Intention Change (Value-related Crisis)