The role of brand equity and crisis type on corporate brand alliances in crises

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Abstract

Co-branding is regarded as a beneficial corporate branding strategy. Corporate crises can, however, result in one or both brands damaging customer-firm relationships. Research evidence in the area is sparse and shows that the non-culpable partner is negatively influenced by crises when perceived as being aware of the wrongdoing. Extending prior research, we investigate how brand equity of the non-culpable partner shapes consumers' post-crisis attitudes. We also examine boundary conditions to the brand equity effect. Drawing on expectancy violation theory, we show that high-equity of the non-culpable partner mitigates the negative effects of accidental crises, whilst low-equity can mitigate preventable crises. In preventable crises, non-culpable partner brands enjoying high equity suffer from negative attitudes accruing from the culpable brand in the alliance. The results suggest that managers should use corporate co-branding with caution, carefully evaluating the partner brand's equity and its effects when planning for and managing crisis situations.

Keywords: corporate co-branding; crisis types; brand equity; experiment

INTRODUCTION

Co-branding or brand alliance is a popular brand management strategy involving co-operative ventures between two or more corporate brands. Co-branding partnerships such as Dell and Intel, Barnes and Noble and Starbucks, Premier Inn hotels and Costa coffee, and Alexander Wang and H&M, are cases in point (Greenwald, 2014). Whilst largely recognized as an effective corporate brand management strategy (e.g., Rao and Ruekert, 1994; Rao *et al.*, 1999; Leuthesser *et al.*, 2003; Washburn *et al.*, 2004; Ueltschy and Laroche, 2011), corporate brand alliances often experience situations of crisis, which put the partner brands at risk of negative outcomes (Kahuni *et al.*, 2009). For instance, Accenture and Nike were drawn into a scandal and media hype surrounding the celebrity endorser Tiger Woods (Hughes, 2010). Similarly, Ford was boycotted in the wake of Firestone's tyre scandal (The Economist, 2001), and Pepsi was involved in a controversial advert featuring Kendall Jenner (BBC News, 2017). Amongst the detrimental consequences of corporate crises are negative publicity (Ahluwalia *et al.*, 2000), damaged corporate reputation (Dean, 2004), and lowered profitability (Thirumalai and Sinha, 2011). As marketing practitioners seek to benefit from this corporate branding strategy (Cleeren *et al*., 2017), advancing knowledge on corporate co-branding in crisis is crucial for informing decision-making.

Issues concerning the effect of crises on corporate brands in an alliance are discussed in two research domains, namely organizational crisis and brand alliance. Extant research on organizational crises examines consumers' perceptions toward crisis situations whereby an individual brand which is perceived as culpable of a wrongdoing (e.g., Cho and Gower, 2006; Utz *et al.*, 2013), and responds to the crisis (e.g., Claeys *et al.*, 2010; Dutta and Pullig, 2011; Carrillat *et al.*, 2013). The above studies do not account for situations where brands are in an alliance. The brand alliance literature largely focuses on the factors influencing consumers' attitudes toward alliances in general (e.g., Lafferty and Goldsmith, 2005; Singh *et al*., 2014).

A few studies examine crises in alliances whereby a brand enters a partnership with a celebrity (e.g., Carrillat *et al*., 2013; Thomas and Fowler, 2016). These studies demonstrate that negative publicity around the celebrity damages the image of the celebrity and can be a liability for the endorsing brand (e.g., Till and Shimp, 1998; Carillat *et al.*, 2014). Likewise, in buyer-seller alliances, crises have a detrimental effect on the non-culpable partner if perceived to be aware of the culpable brand's wrongdoing (Votolato and Unnava, 2006). In sum, existing studies concur that crises can be harmful for the non-culpable partner due to negative spillover, wherein negative information concerning the culpable brand spills over to the non-culpable partner.

We contend that the type of corporate crisis and the equity of the non-culpable brand play a crucial role in influencing the occurrence of negative spillover. In the brand extension literature, brand equity is shown to mitigate the brand's risk in entering a new product category (Aaker, 1996), and to signal superior quality of products (Rao and Ruekert, 1994). In a brand alliance, the equity of the allied brands is found to engender positive alliance evaluations (Washburn *et al*., 2000), which in turn further enhance the perceived equity of the partner brands (Washburn *et al*., 2004). Whilst the culpable brand is typically expected to actively respond to the crisis, we propose that brand equity can show an insurance-like effect by abating the negative effects of crises for the non-culpable partner.

The psychological process underlying the effect of brand equity on post-crisis attitudes toward the partner brand in the alliance can be explained through the lens of expectancy violation research (Burgoon and Le Poire, 1993), which postulates that parties involved in an interaction hold expectations about their communication behavior. The violation of such expectations triggers an appraisal process, which ultimately influences behavioral outcomes (Burgoon and Hale, 1988). In the appraisal process, the characteristics of the target (or the 'interactant') are taken into consideration (Burgoon and Le Poire, 1993).

In brand alliances, the brand represents the target and brand equity is a target's characteristic. While crises violate expectations concerning the quality of the relationship, a key brand characteristic such as equity might influence consumer evaluations of expectancy violations. The above effect is shown in service research wherein high equity is found to partially offset the negative effects of service failures (e.g., Brady *et al*., 2008). In a similar vein, we posit that high equity of the non-culpable partner limits the negative effects of crises.

Further, we propose that the effect of brand equity is contingent upon the type of corporate crisis experienced. The literature distinguishes between preventable and accidental crises, based on perceived controllability and intentionality of the culpable brand (Coombs, 2006). Whilst preventable crises are high on controllability and intentionality, accidental crises are low on the same dimensions, as the latter imply that the brand inadvertently caused damage. Crucially, the implications of crises can differ in terms of consumer perceptions. Accidental crises can be perceived as anomalies due to operational mishaps (Coombs and Holladay, 1996), whereas preventable crises can indicate a stable, recurrent problem in the company's operations (Coombs, 2007). Due to the nature of preventable crises, brand equity might fail to offset the negative consequences of such crisis type. Further, negative attitudes toward the culpable brand might make such crises particularly detrimental, even for the non-culpable partner in the alliance.

The focus of our study on *corporate* co-branding is consistent with research emphasizing the omnipresence of corporate brands in people's everyday lives (e.g., Balmer and Gray, 2003; Balmer, 2006; Knox and Bickerton, 2003). The interface between corporate branding and consumers is common, as supported by Balmer (2006) who refers to the corporate landscape being increasingly a corporate *brandscape* (p. 34). Combining the ubiquity of corporate branding and evidence from past research documenting the pivotal role of brand equity in reducing potentially detrimental consequences of negative events (Brady *et* *al*., 2008), we examine the role of brand equity in influencing consumer evaluations of the non-culpable partner in an alliance experiencing a crisis. In doing so, we put forward a customer-based model of corporate co-branding in crises and test the model adopting a psychological perspective on corporate branding (Aaker, 1991, 1996; Dolbec and Chebat, 2013), as compared to a sociocultural (e.g., Schroeder, 2009, 2017) or experiential perspective (Brown *et al.*, 2003). By employing an experimental method, our study extends knowledge in corporate co-branding literature. We investigate how brand equity helps to protect the allied non-culpable corporate partner from the negative effects of crises, as well as the conditions under which the brand equity effect occurs.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Co-branding in situations of crisis

Co-branding (or brand alliance) denotes a branding strategy whereby *'two or more brands are presented simultaneously to consumers'* (Simonin and Ruth, 1998, p. 30). The terms co-branding and brand alliances are often used interchangeably. Brand alliances include, for instance, two brands featured in joint promotions, physically integrated in a product, or partnering to create a new product. Our study focuses on alliances between two corporate brands that enter into a partnership in order to create a new product (i.e. a *product combination* alliance). Alliances are powerful strategies encouraging consumers to associate allied brands in their mind (Votolato and Unnava, 2006), and sending cues (or signals) about product quality (Rao and Ruekert, 1994). From a signaling perspective, the alliance provides greater assurance about the quality of a product than the brand alone (Wernerfelt, 1988; Rao *et al.*, 1999). Beyond signaling quality, brand alliances enhance consumer evaluations of the individual brands (Washburn *et al.*, 2000), product choice and preference (Park *et al.*, 1996).

There are, however, risks associated with co-branding as a brand management strategy due to the potential wrongdoing of an allied brand (Zhou and Whitla, 2013). A wrongdoing of one brand can, in fact, lead to negative outcomes for the partner brand in a process known as negative spillover effect (Carrillat *et al*., 2014). As evidenced by the literature on crises in celebrity-brand alliances (see Table 1 for a summary), past studies support the idea that negative information concerning a brand representative, whether a spokesperson or a celebrity, influence consumer evaluations of the seemingly non-culpable, endorsing brand (e.g., Till and Shimp, 1998; Carrillat *et al*., 2013). Other studies show that crises concerning the endorsing brand negatively impact the celebrity involved in the endorsement co-branding initiative (e.g., Thomas and Fowler, 2016). Prior research has focused on celebrity endorsements as a form of brand alliance, and the effect of crises concerning either the celebrity or the brand on consumer perceptions. However, knowledge on whether and how the characteristics of allied brands influence consumers' post-crisis attitudes, is so far lacking.

[insert Table 1]

Extant literature identifies alliance features, pre-alliance attitudes and company characteristics as antecedents to consumers' attitudes toward newly formed alliances (see Table 2 for a summary of relevant literature). Examples of company characteristics include the company's CSR activities (Singh, 2016) and brand equity (Washburn *et al.*, 2000; 2004). When compared with low-equity allied brands, high-equity ones are, for instance, found to both signal quality and lead to positive alliance evaluations (Washburn *et al*., 2000). Consistent with the view that quality signals reduce consumer uncertainty regarding a purchase decision, high-equity brands in alliances are also found to enhance product trial and purchase intentions (Washburn *et al*., 2004). The above studies examine brand equity as a fundamental brand characteristic which exists a priori, regardless of crises. A key issue that merits investigation relates to whether the above-described positive effect of brand equity holds in situations of corporate crises, especially when the non-culpable partner is considered. Seeking to advance knowledge in the area, we investigate how brand equity of the non-culpable corporate partner influences consumer post-crisis evaluations.

[insert Table 2]

The effect of brand equity for the non-culpable corporate partner

Brand equity is commonly referred to as *'the incremental utility or value added to a product by its brand name'* (Yoo *et al*., 2000, p. 195). Adopting a customer perspective, Keller (1993) propounded the popular concept of *customer-based brand equity*, which denotes *'the differential effect of brand knowledge on consumer response to the marketing of the brand'* (p. 1). Consistent with Aaker's seminal work in the area (Aaker, 1991; 1996), brand equity captures consumers' knowledge and favorable associations about the brand. There is general agreement amongst scholars that high-equity brands increase a firm's profits by signaling high-quality offerings (Aaker and Jacobson, 1994; Erdem and Swait, 1998). Strong, high-equity brands are also likely to be less vulnerable to the detrimental effects of crises (Aaker, 1996).

Prior research suggests that brand equity acts as a buffer against product-harm crises (e.g., Liu and Shankar, 2015; Hsu and Lawrence, 2016) and innovation failures (Liao and Cheng, 2014). The above studies, however, do not examine crises affecting a corporate brand alliance. In a corporate brand alliance context, crises may interfere with the insurance-like protection typically created by strong brand equity. Given the alliance context, the negative effects of crises might spillover from the culpable brand to the non-culpable partner, such that the latter also experiences negative customer outcomes (Thomas and Fowler, 2016). A key question is whether strong equity attached to the non-culpable corporate partner brand can mitigate the negative effects of crises.

Brand equity creates expectancies, which in turn influence consumers' perceptions, attitudes, and behavior. Research on expectancy violation (Burgoon and Le Poire, 1993) and disconfirmation of expectations (Oliver, 1980) suggests that expectancies are ubiquitous. In interpersonal encounters, expectancies play a pivotal role in shaping information processing, as well as perceptions and behavior (Burgoon and Le Poire, 1993). Expectancies are assimilated if matching information are presented (Darley and Gross, 1983). Expectancies are, by contrast, disregarded and overridden if new, non-matching information are presented. A crucial issue concerns the circumstances under which expectancies are overridden. Theories of communication identify the target's (or communicator's) characteristics as a key factor in explaining how communicators evaluate and interact with each other, and the conditions under which their expectancies are overridden (Burgoon and Jones, 1976; Burgoon and Hale, 1988; Burgoon and Le Poire, 1993).

We contend that brand equity, as a characteristic of the target (i.e. the brand), could override expectancies violated at the time of a crisis. Whilst perceptions of low-equity brands are malleable and easily influenced (Shimp *et al*., 1991), those for high-equity brands are fixed and unlikely to change (Washburn *et al.*, 2004). Although consumers commonly try to assign blame for negative events and will likely attribute responsibility to the culpable brand causing damage (Weiner, 2000), they are less likely to assign any blame if the allied brand enjoys high-equity and is not culpable (Laczniak *et al*., 2001). High brand equity might allow the non-culpable partner to supersede expectancy violations linked to the corporate crisis and accruing from the allied culpable brand. It is therefore logical to expect that, in crisis situations, positive perceptions associated with high-equity are advantageous to the non-culpable party in the alliance. In crises, the high-equity, non-culpable corporate partner could leverage on existing positive associations in order to mitigate negative spillover effects linked to the crisis and transferring via the alliance partnership. Accordingly, we hypothesize that:

H1: Consumers will show positive post-crisis attitudes toward a high-equity non-culpable corporate partner more than toward a low-equity non-culpable partner.

The role of crisis types on consumer evaluations

Prior studies acknowledge that brand equity alone can positively influence consumer evaluations more than the direct experience with the brand (Machleit and Sahni, 1992; Simonin and Ruth, 1998), whilst also highlighting that *contextual* factors such as information related to the crisis encounter are influential in altering consumer evaluations. Contextual factors determine the extent to which information available to consumers are diagnostic, and should therefore be trusted (Feldman and Lynch, 1988). Contextual information can, therefore, impact the brand equity effect. Buchanan *et al*. (1999), for instance, show that disconfirmed expectations about retail display structure and precedence negate the equity of the brand, encouraging consumers to revisit their evaluations of high-equity brands.

The nature of a corporate brand crisis represents a key contextual factor in explaining perceptions of a high-equity non-culpable corporate partner. Crises entail *"unexpected events that threaten a brand's perceived ability to deliver expected benefits"* (Dutta and Pullig, 2011, p. 1281). The literature distinguishes between three main crisis types (Coombs, 2006; 2007), namely; 1) preventable, 2) accidental, and 3) victim. *Preventable* crises denote acts whereby the brand knowingly breaches the law, thus causing damage to consumers. *Accidental* crises involve unintentional acts causing damage to consumers. *Victim* crises entail wrongdoings by a third-party agent, leading the brand to unknowingly cause damage to consumers. From the perspective of attribution theory (Coombs and Holladay, 1996; Weiner, 2000), both preventable and accidental crises entail internal control, as the company is held responsible. However, the same crisis types include different levels of intentionality, with preventable crises being high in intentionality and accidental crises being low in intentionality. Victim crises, on the other hand, are low in both intentionality and control, as an agent external to the company causes the crisis, while the brand is simply unaware (Coombs and Holladay, 1996). As we focus on corporate crises wherein one of the allied brands is culpable, we consider preventable and accidental crises only.

We posit that the effect of brand equity attached to the non-culpable partner varies according to whether preventable or accidental crises occur. In crises, negative signals about the culpable brand, and by transfer, about the non-culpable partner in the alliance, are sent to consumers (Till and Shimp, 1998; Votolato and Unnava, 2006). Such negative signals lead consumers to question the credibility of pre-crisis information signaled, for instance, via brand equity (Connelly *et al.*, 2011). This is especially the case in preventable crises, wherein consumers are particularly suspicious of the culpable brand and possibly, of the high-equity non-culpable partner in the alliance, for misallocating efforts that could have prevented the alliance as a whole from undergoing a crisis (Kim *et al.*, 2009).

It follows that a high-equity non-culpable partner will be at risk in the event of preventable crises, more than a low-equity one. On the other hand, consumers might be more willing to forgive the high-equity non-culpable partner in accidental crises, which are low in controllability and intentionality. Our proposition is consistent with prior research on supplier-buyer relationships showing that consumer perceptions differ depending on the nature of the crisis event. For instance, moral crises are found to lead to negative consumers' attitudes toward the host and partner brands more than competence crises, which are perceived as expected and likely to occur as part of ongoing company operations (Votolato and Unnava, 2006). Similarly, Carrillat *et al*. (2014) show that in celebrity endorsements, personal crises arising from socially unacceptable comments of the celebrity can lower attitudes toward the endorsed brand. The above authors also suggest that personal crises, which are preventable in nature, are especially detrimental given that the celebrity is perceived as responsible for the wrongdoing and lacking in moral principles. Further, Dutta and Pullig (2011) show that preventable crises pertaining to social and ethical issues (value-based) or to the performance of the brand (performance-based), are responsible for lowering perceived (utilitarian and psychological) benefits of the brand. Based on the above, we hypothesize that:

H2: Crisis type will interact with brand equity in shaping consumers' post-crisis attitudes toward the non-culpable corporate partner, such that high (low) equity will lead to positive attitudes toward the non-culpable corporate partner if accidental (preventable) crises occur.

Boundary conditions to the effect of high brand equity

The above discussion focuses on the role of crisis type in explaining the brand equity effect. By accounting for crisis type, we suggest that high and low equity of the non-culpable partner have a differential effect depending on whether the alliance has undergone a preventable or accidental crisis. As we hypothesize, high equity of the non-culpable corporate partner will diminish the negative effects of accidental, instead of preventable crises. Following on the above argument and related hypothesis, we expect that for the preventable crises specifically, consumers will be particularly negative about the culpable brand in the alliance for having intentionally caused damage; such negative perceptions will spill over to the non-culpable high-equity partner. Accordingly, we test how post-crisis attitudes toward the culpable brand shape perceptions of the high-equity non-culpable partner following preventable crises.

We posit that post-crisis evaluations of the culpable brand will influence attitudes toward the high-equity non-culpable corporate partner, given the negative attitudes toward culpable brand and their transfer via the alliance context. Consistent with the expectations-evidence framework, objective evidence is interpreted differently depending on previously held expectations (Oliver and Winer, 1987; Dawar and Pillutla, 2000). In particular, consumers tend to engage in a biased processing of new information to yield predetermined conclusions (Jain and Maheswaran, 2000). Objective evidence that unambiguously disconfirms pre-existing expectations tends to be discarded if expectations are firmly held (Olson and Dover, 1979; Smith, 1993). By contrast, objective evidence leads consumers to update perceptions when existing expectations are not firmly held (Dawar and Pillutla, 2000).

Consistent with the expectations-evidence framework, brand equity creates expectations concerning the non-culpable partner and its role in the crisis affecting the alliance as a whole (Dean, 2004). Such expectations might interact with evidence emerging from both the crisis, and the behavior of the culpable brand in the alliance. The above effect is plausible in a preventable crisis, where culpability of the allied brand is evident, and intentionality of the crisis is high. When the culpable brand is blamed for the wrongdoing, yet enjoys largely positive post-crisis attitudes, the high-equity non-culpable partner might still be favorably regarded. However, if the culpable brand is disapproved following the crisis, as it is likely in preventable crises, the high-equity non-culpable partner might experience a loss of favor, in line with a negative spillover effect (Thomas and Fowler, 2016). In this sense, attitudes concerning the culpable brand appear to be more firmly held than expectations set by the equity of the non-culpable partner, such that consumers report a loss of favor of the non-culpable partner (Dawar and Pillutla, 2000). Crucially, the alliance context would act as a catalyst in enabling such process.

Given the above background, it is logical that high equity concerning the non-culpable partner fails to offset the consequences of preventable crises if post-crisis attitudes toward the culpable brand are highly negative. Thus, we hypothesize that:

H3: In preventable crises, high equity influences post-crisis attitudes toward the non-culpable partner, when post-crisis attitudes toward the culpable brand are positive (vs negative).

The above hypothesized effects are summarized in Figure 1 below.

[insert Figure 1]

Methodology

Research design and stimuli

To test our research hypotheses, we employed a 2 (brand equity of the non-culpable partner: high vs. low) x 2 (crisis type: accidental vs. preventable) between-subjects design. We first selected two real-life brands – a toys manufacturer and an entertainment conglomerate well-known for its cartoon characters. The use of real brands activated genuine brand equity perceptions and post-crisis attitudes and was consistent with prior studies in co-branding (e.g., Simonin and Ruth, 1998; Washburn *et al*., 2004; Singh, 2016). We then created a brand alliance scenario, where the two brands collaborated to produce a new range of toys based on the entertainment brand's movie franchise. We selected the preventable and accidental crises based on crises that occurred with the selected brands in the recent past. Participants were randomly assigned to one of four versions of the questionnaire describing the brand alliance and the crisis caused by one of the two allied corporate brands (i.e. the culpable brand, brand A)[1].

Pre-tests

[1] Given the purpose and nature of our study, we withhold the names of the two brands in the paper.
At the end of the questionnaire, participants were debriefed with a disclaimer that the scenario situations were hypothetical and did not represent reality, and the experimental nature of the research was reiterated.

We ran a first pretest (n=29) to select the high/low-equity non-culpable partners. We asked participants to rate brand equity for the partner brands with a four-item measure anchored on a seven-point scale, used by Hsu (2012) and Yoo and Donthu (2002). We refer to the non-culpable partner brand as brand B and use $B_{low\ equity}$ and $B_{high\ equity}$ to distinguish between the low-equity and high-equity corporate partners. One sample t-tests confirmed that participants perceive the $B_{low\ equity}$ partner brand as low on the equity scale (M = 3.56, SD = 1.37, t (28) = 13.955, p = .000), and the $B_{high\ equity}$ partner brand as high in equity (M = 6.24, SD = 0.80, t (28) = 43.040, p = .000).

In a second pre-test (n=31), we asked participants to rate several hypothetical alliances involving corporate brands in terms of brand and product fit (measures adapted from Simonin and Ruth, 1998). Alliances featuring an entertainment brand as the culpable ally (hereafter 'brand A') showed good fit ($M_{Brandfit}$ = 4.85-5.55; $M_{Productfit}$ = 4.80-5.55, all above the scale mid-point of 4)[2]. These alliances were therefore retained in the main study.

Data collection and sampling

For data collection, we used an online self-completion questionnaire. We presented the participants with the allied brands (the culpable brand and the non-culpable partner) and asked them to rate their brand commitment to each brand. They were then presented with the brand alliance (see Appendix A) and the experimental stimuli involving a crisis caused by the culpable brand (see sample experimental stimuli in Appendix B). An unrelated filler question was included next in order to create temporal separation between the measurements of variables, thus minimizing common method bias (e.g., Schuman and Presser, 1996; Podsakoff *et al*., 2003). Following the filler material, participants' attitudes toward the individual corporate brands, namely the culpable brand and the non-culpable partner, were

[2] Alliance brand A-$B_{high\ equity}$ ($M_{Brandfit}$ = 4.85, SD = 1.55, t (30) = 20.149, p = .000; $M_{Productfit}$ = 4.80, SD = 1.35, t (30) = 19.704, p = .000); alliance brand A-$B_{low\ equity}$ ($M_{Brandfit}$ = 5.55, SD = 1.02, t (30) = 29.042, p = .000; $M_{Productfit}$ = 5.55, SD = 0.96, t (30) = 30.923, p = .000).

measured. As part of the manipulation checks, participants were asked to rate the nature of the crisis, and the realism of the scenarios. Results confirmed that the alliances were perceived as realistic (mean values ranging from 4.86 to 5.09) and the crisis manipulations function as desired, with participants perceiving the preventable crisis as due to the brand knowingly putting consumers at risk ($M_{preventable}$ = 4.74 vs $M_{accidental}$ = 2.14), and the accidental crisis as being caused by an unexpected fault on the part of the brand ($M_{preventable}$ = 3.00 vs $M_{accidental}$ = 4.23, see also Appendix C). Participants included a sample of the UK population recruited from an established consumer panel (Prolific Academic), with verified sample representativeness in terms of age, gender and education. A screening question at the start of the questionnaire confirmed whether participants were residents in the UK at the time of the study. Altogether, 220 valid responses were obtained and used for analysis (55 responses per condition); 53 percent of the participants were females, and 66 percent were between the ages of 18 and 54.

Measures

We adapted and contextualized established multi-item scales; three items from Simonin and Ruth (1998) for brand attitude, three items from Beatty *et al*. (1988) for brand commitment, and three items from Grégoire and Fisher (2008) for crisis severity (see Table 3 for reliability estimates), measured on a seven-point Likert-type scale. Brand commitment and crisis severity were covariates in the analysis (crisis severity = 6.17; non-culpable brand commitment = 4.17). Correlations between our conceptual model constructs are reported in Appendix D. Results from Harman's one factor test to assess common method bias (CMB) show that a four-factor solution explains 80.81 per cent of the variance, confirming that CMB is not an issue for concern.

[Insert Table 3]

Results

Univariate ANOVA tests show a significant main effect of brand equity on post-crisis attitudes toward the non-culpable corporate partner (F (1, 214) = 4.517, p = .035, *ηp2=.021*). However, the direction of the effect is contrary to our expectations. Post-crisis attitudes toward the non-culpable partner are positive in the low-equity condition (M = 4.86, SD = 0.95) more than in the high-equity condition (M = 4.57, SD = 0.95). The non-culpable partner seems to benefit when it has low, rather than high, equity. H1 is, therefore, partially supported. The analysis further shows that, as hypothesized, there is a significant interaction effect between brand equity and crisis type in relation to post-crisis attitudes toward the non-culpable partner (F (1, 214) = 32.78, p =.000, *ηp2 = .133*). The effect of brand equity varies according to the type of crisis encountered. As illustrated in Figure 2, post-crisis positive attitudes toward the high-equity non-culpable partner are greater following accidental crises (M = 5.47, SD = 0.95) than in preventable crises (M = 3.82, SD = 1.15). Thus, H2 is supported. Crisis type also shows a significant main effect on post-crisis attitudes toward the non-culpable corporate partner (F (1, 214) = 4.40, p = .037, *ηp2 =.020*).

[Insert Figure 2]

In order to advance understanding on the effect of high-equity in the context of preventable crises (H3), we conducted moderation analysis with PROCESS 3.0 and 10,000 resamples for the estimation of confidence intervals using bias-corrected and accelerated bootstrap (Model 1, Hayes, 2018). The two covariates (crisis severity and brand commitment) were also included. The moderation analysis enabled us to explore how post-crisis attitudes toward the culpable brand influence evaluations of the high-equity non-culpable partner. Results show significance of the overall moderation model (F (5, 104) = 23.21, p = .000, R^2 = .53). The moderation effect is significant (.53, t (104) = 3.52, p = .006). The effect of high-equity is significant when post-crisis negative attitudes toward the culpable brand are weak (-1.87, CI = -2.43 to -1.31) or average (-1.16, CI = -1.51 to -.81), but not significant when negative attitudes toward the culpable brand are strong (-.45, CI = -.96 to .05). The above provides support for H3.

GENERAL DISCUSSION

Theoretical Contributions

Despite the pervasiveness of corporate co-branding partnerships, consumer evaluations of alliances in the context of crises represent a largely under-researched area. In particular, there is scant research addressing consumer evaluations of the non-culpable partner following crises. Drawing upon an experimental study, we examined the effect of brand equity on consumers' post-crisis evaluations of the non-culpable partner in the alliance. Further, we investigated the boundary conditions to the brand equity effect. Below we discuss our findings and related theoretical contributions.

Prior research suggests that brand equity is an important brand characteristic offering an insurance-like protection against negative events (e.g., Liao and Cheng, 2014; Liu and Shankar, 2015; Hsu and Lawrence, 2016). Yet, research evidence on the effectiveness of brand equity in minimizing the impact of corporate crises for brands in an alliance is so far lacking. Our study is the first to develop theoretical understanding on the role of brand equity in alliances in crisis, with a focus on a hitherto overlooked party in the alliance, namely the non-culpable partner. The results from our study show that the non-culpable partner in the alliance is evaluated unfavorably following corporate crises if enjoying high equity. Such evidence contravenes research in services marketing suggesting that high brand equity offers a buffer against negative events, such as service failures (e.g., Brady *et al*., 2008).

Following the expectancy violation theory (Burgoon and Le Poire, 1993), and the disconfirmation of expectations perspective (Oliver, 1980), we find that expectancies built via strong (high) brand equity are disregarded and somehow overridden by new, non-matching information concerning the crisis. Such process even applies in situations when strong equity relates to partner brands without culpability for the wrongdoing. High brand equity does not, in fact, seem to supersede expectancy violations concerning the corporate crisis. The above indicates that, for non-culpable partner brands in alliances undergoing a crisis, the positive effect of strong equity only holds to an extent. Our first contribution, therefore, lies in extending prior brand alliance literature by advancing knowledge on the role of brand equity in mitigating the negative consequences of crises for the non-culpable partner.

Extending the above contribution, we further demonstrate the interplay between brand equity and crisis type. High-equity alone does not seem to offer any insurance-like effect for the non-culpable partner, as discussed above. However, such finding applies if the type of crisis is not taken into consideration. An inspection of the brand equity effect across individual preventable and accidental crisis types reveals that, in practice, high-equity of a non-culpable partner can offset the negative effect of accidental crises. The same high-equity effect however does not hold following a preventable crisis.

The above results underscore the vulnerability of high-equity corporate partners in preventable crises, whereby the culpable brand in the alliance is perceived to have intentionally breached the law. The evidence from our study extends prior research suggesting that preventable crises (analogous to moral crises) are perceived as highly unacceptable and insuperable, and likely to negatively affect consumers' attitudes toward the non-culpable partner in the alliance as well (Aaker *et al.*, 2004; Votolato and Unnava, 2006; Huber *et al.*, 2010). Our study, for the first time, demonstrates the differential role of brand equity in crises engendered by a corporate brand's moral laxity versus crises that are beyond the brand's control.

Consistent with the perspective from signaling theory (Spence, 1973), when corporate brands undergo a crisis, consumers seem to question the credibility of pre-crisis signals sent by the individual brands, and by the alliance. Consequently, they re-assess existing perceptions, attitudes, and behavioral intentions (Connelly *et al.*, 2011). Such re-assessment is predominant in preventable crises. As one of the corporate brands in the alliance is held accountable for the crisis and is likely to have intentionally caused damage, consumers seem doubtful of the signals conveyed by the alliance as a whole, including the non-culpable partner enjoying strong equity (Kim *et al*., 2009). Hence, another contribution of our study relates to the identification of a crucial contextual factor, namely crisis type, in explaining post-crisis attitudes toward high-equity non-culpable partners. In doing so, we provide a theoretical explanation on the circumstances under which brand equity plays a role in 'protecting' the non-culpable partner from the negative effects of crises.

Our third contribution lies in advancing our understanding of a boundary condition to the role of brand equity in preventable crises, wherein high equity of the non-culpable partner fails to curtail negative effects. Our findings show that, in preventable crises, consumer perceptions of a high-equity non-culpable partner are influenced by post-crisis attitudes toward the culpable party in the alliance. High equity does help the non-culpable partner in an alliance that suffers a preventable crisis, especially if consumers hold highly negative post-crisis attitudes toward the culpable ally. High equity, however, seems effective when negative attitudes toward the culpable brand are weak.

Consistent with the expectations-evidence framework, brand equity generates expectations concerning how the allied brands, both the culpable brand and non-culpable partner, will deal with crises (Dean, 2004). Such expectations are assessed in the light of not only 'new' evidence emerging from the crisis, but also from the response of the culpable brand, leading to biased processing of information (Jain and Maheswaran, 2000). While individuals discount new evidence if holding strong expectations, they update their attitudes when expectations are weak (Dawar and Pillutla, 2000). We demonstrate that ‘new evidence’ regarding the culpable brand, as manifested with post-crisis attitudes, influences the high-equity effect concerning the non-culpable partner. In this sense, post-crisis attitudes toward the culpable brand are diagnostic and impact perceptions of the non-culpable partner enjoying strong equity.

Managerial Implications

Our study demonstrates that brand equity is an important brand characteristic in explaining consumer perceptions of brand alliances undergoing a crisis. Specifically, we show that the equity of the non-culpable corporate partner affects post-crisis attitudes. From a managerial perspective, our finding confirms that brand equity represents an important decision factor for corporate brands seeking to enter an alliance. In situations of crisis, the culpable brand’s focus is often on providing a timely and apposite response to the crisis. For the non-culpable partner, by contrast, brand equity matters. Low-equity can, in fact, provide ‘a protection’ against the negative consequences of crises. High-equity alone, on the contrary, can result in a negative spillover. When high in equity and likely to suffer from negative spillover, the non-culpable partner should be ready to engage in alternative strategies such as distancing itself from the crisis, and potentially, even terminate the partnership. Similar alternative efforts should be sought in order to somewhat inoculate the negative consequences of the crisis.

Further, our findings suggest that managers should take cognizance of the crisis type. Notably, high-equity can actually be beneficial for the non-culpable partner but only in the event of accidental crises. In such circumstances, whereby the culpable brand is attributed low controllability and intentionality for the crisis, high-equity can mitigate the crisis’ negative effects on the non-culpable partner. The above finding underscores the need for managers to be aware that the nature of crises impacts the extent to which the non-culpable partner can leverage on the equity of their corporate brand. Whilst crises are often unpredictable, brand managers are advised to consider the likely consequences of crises as part of their corporate brand management strategy. This could mean, for instance, conducting research on the most recurrent crises affecting the sector in which the alliance product is likely to compete. The occurrence rate of accidental and preventable crises could, along with other considerations, contribute to informing decisions regarding whether and how to create an alliance. For instance, if preventable crises are most recurrent in the given sector, the option to partner with a high-equity brand can be re-assessed.

Lastly, we find that post-crisis attitudes toward the culpable brand matter in explaining the extent to which high-equity can help to minimize the negative effects of preventable crises. Specifically, we show that high-equity fails to 'protect' the non-culpable partner in preventable crises if post-crisis attitudes toward the culpable brand are particularly negative. Whilst endeavoring a crisis response strategy is typically under the remit of the culpable brand, it is still in the interest of the non-culpable partner to encourage the allied culpable party to provide a crisis response that can elevate consumer post-crisis attitudes.

LIMITATIONS AND AVENUES FOR FUTURE RESEARCH

Our study has limitations that provide fruitful avenues for further research. We focus on testing whether the equity of the non-culpable partner can mitigate the negative effects of crises. Future research might consider the role of other brand characteristics, such as reputation, commitment, trust, or brand performance, in explaining consumer responses to alliances in crisis. Another avenue for future studies relates to the role of consumer character in explaining the effect of brand equity. For example, stable differences in individuals' resistance to negative information might contribute to explaining the conditions under which brand equity does (or does not) offset the negative effect of crises for the non-culpable partner.

In addition, future research could enhance the generalizability of findings by replicating our study across different product and service sectors. Another study could examine crises across different types of brand alliances, for instance, alliances between a brand and a social cause (e.g., the recent Oxfam's crisis), thereby advancing knowledge in the domain of crises in cause-related marketing. Likewise, it would be interesting to investigate whether domain-specific crises (e.g., textile industry and sweat shop labor) are exclusively ascribed to one of the allied brands, thus the non-culpable partner is exempted from any negative consequences regardless of the equity attached to its corporate brand. Moreover, the crisis response strategy endeavored by the culpable brand in the alliance could affect consumer evaluations of the non-culpable partner. Future research could, therefore, explore how the interplay between the culpable brand's response strategy and the equity of the non-culpable partner affects consumer evaluations.

Lastly, we adopt a well-established cognitive perspective on branding (Brown *et al.*, 2003). Accordingly, we consider the brand-consumer dyad and the efficacy of marketing interventions aimed at building brand equity through an inspection of consumer psychological processes. Future studies might adopt a brand culture perspective (Schroeder, 2009) on issues related to corporate co-branding in crisis. This would mean, for instance, considering how consumers attribute meaning to crises through the lens of their culture, personal history and belongingness to brand communities.

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Figure 1: Conceptual Model

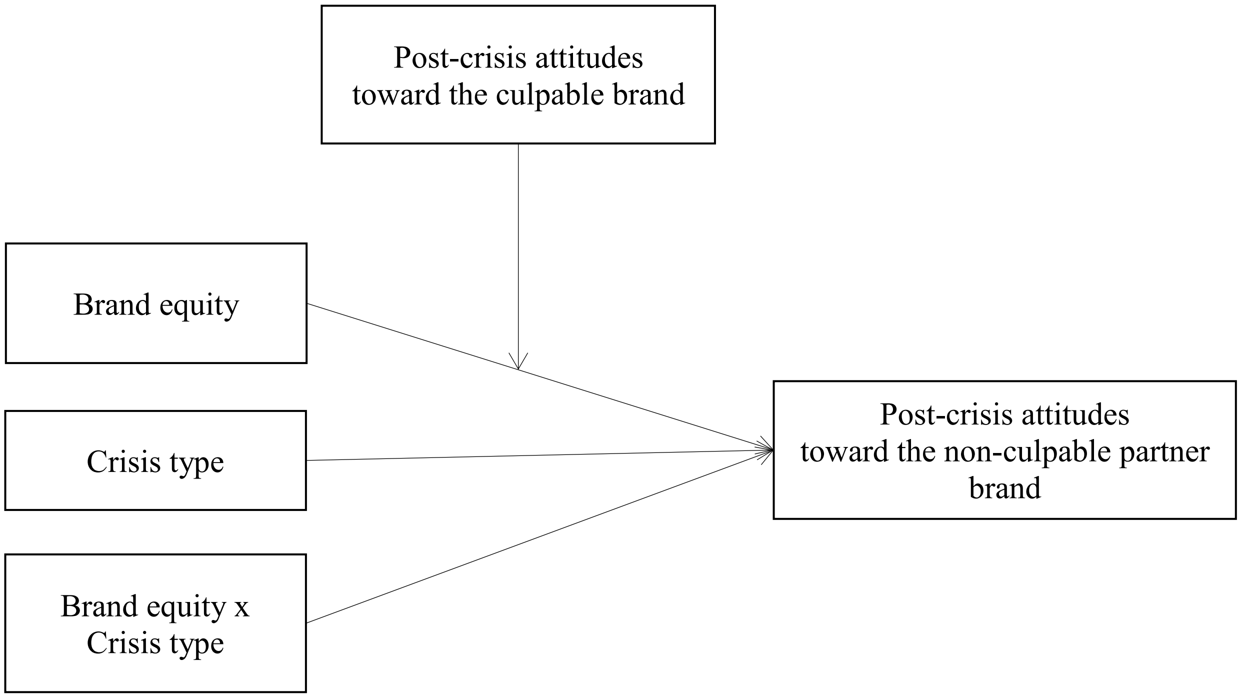

Figure 2: Interactions between brand equity and crisis type on post-crisis attitudes toward the non-culpable partner

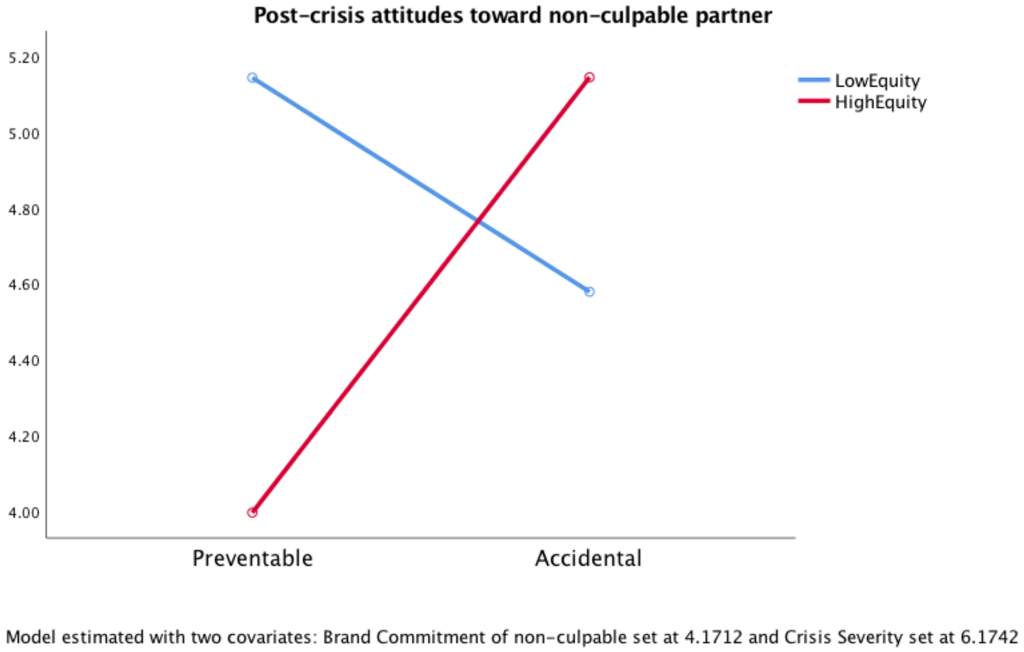

Table 1: Summary of relevant literature on brand alliance crises

Study	**Context(s)**	**Construct(s) examined**	**Key Finding(s)**
Till and Shimp (1998)	Celebrity endorsement scandal	- Association set size (brand and celebrity) - Strength and timing of negative information - Attitude to endorsed brand	Negative information about a celebrity lowers attitude toward the endorsed brand. Negative information presented prior to the brand/celebrity partnership has a greater effect on the endorsed brand.
Votolato and Unnava (2006)	Spokesperson & Supplier alliance scandal	- Attitude to host brand - Attitude to partner brand - Culpability - Crisis type	Negative spill-over from the partner brand to the host brand occurs when the host brand is viewed as equally culpable for the offense.
Kahuni, *et al.* (2009)	Sponsorship scandal	- Case study-based	Negative image of the culpable brand spills over to the non-culpable brand. Passive response from the non-culpable brand is effective at deflecting media attention.
Carrillat *et al*. (2013)	Celebrity endorsement scandal	- Attitude to endorsed brand - Brand/endorser congruence - Endorser response - Brand response	Consumers question the sincerity of the endorser when the scandal is denied; this results in lowered attitudes toward the endorsed brand, and lowered purchase intentions.
Zhou and Whitla (2013)	Celebrity endorsement scandal	- Attitude to endorsed brand - Attitude to celebrity - Attitude to other celebrity endorsers - Moral reputation - Attribution - Perceived societal damage	Negative attitudes toward the celebrity endorser spills over to consumers' attitudes toward the endorsed brand.
Carrillat *et al*. (2014)	Celebrity endorsement scandal	- Attitude to endorsed brand - Attitude to direct competitor	Scandals about the endorser lower attitudes toward the endorsed brand and competitor brands, especially in personal (vs. professional) crises.
Thomas and Fowler (2016)	Celebrity endorsement scandal	- Corporate response strategy - Celebrity response - Celebrity expertise - Perceptions of responsibility - Moral reputation - Attitude to celebrity	Transgressions committed by a brand negatively impact consumers' attitudes toward the endorsing celebrity. Excuse and repentance strategies effectively mitigate the negative effects of a brand transgression on celebrities.

Table 2: Summary of relevant literature on the antecedents to brand alliance attitudes

Focus	Study	Context(s)	Antecedent(s) examined	Key Finding(s)
Alliance characteristics	Park *et al.* (1996)	Food	- Attribute performance, salience, complementarity - Attitudinal favorability	Attribute-level complementarity leads to greater effectiveness of the alliance than attitudinal favorability.
	Vaidyanathan & Aggarwal (2000)	Food	- Private brand - National brand for ingredients	Quality perceptions and attitude toward a private-brand are positive when a brand name ingredient is used.
	Dickinson & Barker (2007)	Non-profit; commercial brands	- Brand alliance fit	Brand familiarity toward the partnering brands impact on perceived brand alliance fit, which moderates original brand attitude impact on evaluations of the co-brand alliance.
Alliance characteristics & pre-attitudes	Rodrigue & Biswas (2004)	Food	- Pre-attitudes to host & ally - Exclusivity - Dependency	Pre-attitudes influence alliance evaluations, and in turn quality, willingness to pay premium if ally brings a scarce resource and enters an exclusive contract.
Pre-attitudes	Simonin & Ruth (1998)	Car; micro-processors	- Pre-attitudes to partner brands - Product & brand fit	Pre-alliance attitudes toward the partner brands affect attitudes toward the alliance. Both product fit and brand fit significantly affect attitudes toward the alliance.
	Lafferty *et al.* (2004)	Human services	- Pre-attitudes to cause & brand - Product & brand fit	Pre-existing attitudes to the cause and the brand, plus fit influence alliance success. Cause-brand alliance modifies attitudes to the cause and the brand.
	Bluemelhuber *et al*. (2007)	Car; stereo	- Product & brand fit - Country of origin fit - Pre-attitudes to brands	All antecedents positively influence attitudes to the alliance. Differential effects across high and low brand familiarity groups.
	Helmig *et al.* (2007)	Food	- Pre-attitudes to partner brands - Product & brand fit	All antecedents positively influence attitudes to the alliance, and in turn intentions to buy co-branded product.
Company characteristics	Washburn *et al*. (2004)	Toiletries	- Brand equity of partner brands - Product trial	Pairing two brands, regardless of equity level, positively affects brand equity rating of the partner brands.
	Besharat (2010)	Sunglasses; cell phones	- Brand equity of partner brands	Attitudes do not change if one high-equity brand is included. No differences in attitudes, quality and purchase intentions when comparing co-branding and extensions.
	Singh (2016)	Beverage; fashion; technology	- CSR perceptions of partner brands - CSR & product fit	CSR perceptions to allied brands, CSR and product fit have positively influence attitudes to cobrand, when ethical self-identity is low.

Table 3: Measures

Constructs	Measurement items	Sources	α	P_c
Brand Attitude	• I think favorably of [brand name] • I like [brand name] • I think [brand name] is a good brand	Simonin and Ruth (1998)	0.791[1] 0.852[2]	0.778[1] 0.902[2]
Brand Commitment	• I consider myself to be loyal to [brand name] • If a [brand name] product or service were not available at the store, it would make little difference to me if I had to choose another brand (r) • When another brand is on sale, I will generally purchase it rather than a [brand name] product or service (r)	Beatty *et al.* (1988)	0.688[1] 0.718[2]	0.793[1] 0.630[2]
Crisis Severity	• The crisis caused: ○ A minor problem – A major problem ○ A small inconvenience – A big inconvenience ○ A minor aggravation – A major aggravation	Grégoire and Fisher (2008)	0.650	0.707

Note: *Items for Brand Attitude, Brand Commitment were measured on a 7-point Likert-type scale, anchored at 1='strongly disagree' and 7='strongly agree'. Crisis severity was measured on a 7-point, bipolar scale. [1]= the culpable brand, [2]= the non-culpable partner.*

APPENDIX A: Alliance scenarios

Low-equity condition

Recently, brands A and $B_{\text{low equity}}$ formed an alliance to create a range of toys based on Brand A's movie franchise. The new alliance is also tied to future movies and projects.

High-equity condition

Recently, brands A and $B_{\text{high equity}}$ formed an alliance to create a range of children shoes, based Brand A's movie franchises. The new alliance is also tied to future movies and projects.

APPENDIX B: Experimental stimuli

Preventable crisis scenario

The Observer

NOVEMBER, 2017

Children toil for 76 hours a week: Brand A accused of employing underage staff

Brand A is facing accusations of underage labour violations and workplace safety at its factories in China. The allegations involve two factories making Brand A products that employ children between the ages of 14 and 16.

According to a report by China Labour Watch, Brand A knowingly employed children to work 12-hour days, which is in breach of local labour laws and the entertainment giant's own code of conduct. The 25-page report into the company's practices details the unacceptable conditions the staff endured. It is alleged that children worked from 8am to 10pm, handled chemicals without protection, and were fed food laden with cockroaches.

These allegations are not the first for Brand A who has been investigated in the past for workplace violations and safety issues. According to the China Labour Watch, the investigations showed "the old problems with Brand A remain: child labourers are still hired in factories, and labour conditions are still unacceptable". It called on Brand A to publish details of its supplying factories and open them up for some independent inspections.

Accidental crisis scenario

The Observer

NOVEMBER, 2017

Boy 5 hospitalised after accident at Brand A's Paris attraction

A five-year old boy was seriously injured when he was crushed by a boat after falling out of the Pirates of the Caribbean ride at Brand A's Paris attraction.

According to a police report, the ride which is slow-moving does not require wearing safety belts. During the ride, the boy accompanied by his father, leaned back and fell out of his boat and was hit by another boat behind. He found himself stuck under the boat in the water before his father jumped into the water and managed to free him.

A police inquiry has been opened to work out the cause of the accident. Despite its popularity, there have been a number of accidents in the past five years

For example, in December 2014, a 12-year-old boy was paralysed from the neck downwards after going on The Twilight Zone Tower of Terror free fall ride. He had suffered a spine and bone contusion. In January 2016, four people were injured when two coaches collided after becoming uncoupled in a rail ride.

APPENDIX C: Manipulation check results

	Preventable		***Accidental***		
	Mean	**SD**	**Mean**	**SD**	***t*-value**
Knowingly violate	4.74	1.46	2.14	0.88	10.261**
Unexpectedly affected	3.00	1.21	4.23	1.42	3.744**

	Realism check		
	Mean	**SD**	***t-value***
Accidental crisis	5.09	1.17	5.48**
Preventable crisis	4.86	1.08	4.66**

Note: **p<.01

APPENDIX D: Constructs correlations

	Attitudes toward culpable brand	Attitudes toward the non-culpable partner
Attitudes toward the culpable brand	1	.549**
Attitudes toward the non-culpable partner	.549**	1

Note: ***p*<.01