# An experimental study into the effects of self-disclosure and crisis type on brand evaluations – the mediating effect of blame attributions

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## Abstract

**Purpose** – Brands facing a crisis have to decide whether to disclose crisis-related information themselves or to wait and take the risk that a third party breaks the news. While brands might benefit from self-disclosing the information, it is likely that the impact of crisis communication on customers' evaluation of the brand depends on the type of crisis. This study aims to investigate the influence of type of crisis on the relationshp between disclosure and brand outcomes.

**Design/methodology/approach** – A 2 × 2 between-subjects experiment with 180 Dutch participants was conducted.

**Findings** – Results show that self-disclosure of a negative incident positively affects consumers' attitude, trust and purchase intention compared to third-party disclosure. Additionally, disclosure and crisis type interact. In times of a product-harm crisis, self-disclosure does not represent an advantage to third party disclosure, while in times of a moral-harm crisis disclosure by the brand is able to maintain customers' positive attitude towards and trust in the brand compared to disclosure by a third party. Moreover, blame attribution mediates the effect of crisis type on brand evaluations.

**Originality/value** – Recent research indicates that self-disclosing crisis information instead of waiting until thunder strikes has beneficial effects for a brand in times of crisis. However, these studies use the context of product-harm crises, which neglects the possible impact of moral-harm crises. Furthermore, this study adds the impact of blame attributions as a mediator in this context.

**Keywords** Disclosure, Brand attitude, Purchase intention, Crisis management, Brand trust, Blame attribution

**Paper type** Research paper

## Introduction

While brands are valuable assets for any company, they also are vulnerable to the scathing effects of a crisis. Any crisis can disturb an organization's process, and when inadequately handled, might damage the value of a brand (Benoit, 1997; Coombs, 2007; Davies *et al.*, 2003; Dawar and Pillutla, 2000; Hegner *et al.*, 2014). Research shows that the reputational damage of a crisis is minimised if the brand is the first to inform its stakeholders of the crisis instead of the media exposing it (Fennis and Stroebe, 2014). Successful management of a crisis largely depends on how a brand acts after the crisis hits, and this strongly confirms the strategic value of effective crisis management (Benoit, 1997; Brown and White, 2011; Coombs, 2007; Souiden and Pons, 2009). When something goes wrong, the brand may decide to be the first to fully admit that something with potentially harmful consequences exists (self-disclosure), just as it can also opt to stay hushed about the incident until a third party (e.g. the media) discloses it.

The idea of a company making its wrongdoing public may seem counterintuitive at first (Coombs, 2014). Brand managers might feel uneasy at the thought of becoming the focus of negative news reports (Fennis and Stroebe, 2014). But in an age when crisis information spreads rapidly (Palen *et al.*, 2009), due to the possibility for people to constantly connect with one another using social media, being taciturn when something goes wrong is not an option for a company anymore. Hence, it is imperative for that company to sufficiently respond to a crisis to set itself apart from its competitors (Vassilikopoulou *et al.*, 2009).

The impact of crisis disclosure has received little research attention so far (Claeys *et al.*, 2013, 2016; Fennis and Stroebe, 2014). Initial research in communication literature explored the effects outside of any situational context (Arpan and Pompper, 2003; Arpan and Roskos-Ewoldsen, 2005). Recent studies include interacting variables such as the initial reputation of a company (Fennis and Stroebe, 2014), crisis response strategy (response strategy vs. objective information only) (Claeys and Cauberghe, 2012) and message framing (Claeys *et al.*, 2013). However, these studies were carried out in the context of a functional crisis not including any moral harm. Consulting research comparing the effects of different crisis types leads to the conclusion that consumers respond

differently (Hegner et al., 2016). A growing body of research emphasises the inclusion of the type of crisis into crisis research frameworks (Dutta and Pullig, 2011; Jeon and Baeck, 2016; Pullig et al., 2006). As such, determining how crisis disclosure impacts customers' judgement of the brand needs an analysis within a specific context.

Literature on crisis management broadly categorises any crisis to be either product-harm or moral-harm. Although both types of crises can potentially harm a brand's reputation, we argue that consumers' reaction to any of the two would significantly vary. On the one hand, a product-harm crisis occurs when products that have reached the market are eventually discovered to be defective, unsafe, or hazardous to be consumed or used (Dawar and Pillutla, 2000; Dutta and Pullig, 2011). On the other hand, a moral-harm crisis "does not directly involve the product, but involves social or ethical issues surrounding the values espoused by the brand" (Dutta and Pullig, 2011, p. 1282). Hegner et al. (2014) call for the inclusion of crisis type in the stream of research into disclosure. Additionally, Jeon and Baeck (2016) and Souiden and Pons (2009) point out that a proactive timing strategy is an essential element in effective crisis management. Nevertheless, the impact of the interplay between self-disclosure and crisis type on brand attitude, brand trust and behavioural intention (e.g. readiness to engage in a post-crisis exchange with a brand) is not yet adequately understood.

Furthermore, a large stream of research on product-harm crises shows how crisis information trigger cognitive processes like blame attributions (Carvalho et al., 2015; Cleeren et al., 2013; Lei et al., 2012; Xie and Keh, 2016). Nevertheless, studies focussing on how consumers deal with negative publicity surrounding a moral-harm crisis and how consumers are influenced by blame attributions in this type of crisis remain inadequately understood. Thus, the attribution of blame will be introduced as a mediating factor into this study.

The current research looks into the impact of the relationship between self-disclosure and crisis type on consumers' brand attitude, brand trust and purchase intention and the mediating role of blame by means on an experimental design.

Brand attitude, brand trust and purchase intention were selected as they represent significant elements of consumer-brand relationships that play an important role in crises situations (Fennis and Stroebe, 2014; Hegner et al., 2014; Jeon and Baeck, 2016; Mishra, 1996). As long lasting relationships with consumers can result in solid benefits and financial gains for companies or brands, more research into the effects of brand crises on consumer–brand relationships is needed (Huber et al., 2010). In particular, consumers exhibit unfavourable brand attitudes towards and reduced trust in brands susceptible to crises (Dawar and Pillutla, 2000; Klein and Dawar, 2004; Xie and Keh, 2016; Xie and Peng, 2009). Thus, a brand crisis can damage a brand's reputation (Davies et al., 2003; Klein et al., 2004). Brand trust, defined as the willingness to be vulnerable to the action of the brand (Mayer et al., 1995), plays a pivotal role in any crisis situation (Hegner et al., 2016; Mishra, 1996). Furthermore, exploring the effects of brand crises on purchase intention as a behavioural outcome variable will give an indication of crises' impact on the economic situation of the brand (Huber et al., 2010). As purchase intention might be directly impacted by a brand crisis,

it is also perceived as an intended behavioural performance influenced by the level of trust and attitude consumers display (Chaudhuri and Holbrook, 2001; Hegner and Jevons, 2016). Thus, this study additionally examines the indirect effect of a brand crisis on purchase intention via brand attitude and brand trust.

## Theoretical framework

### Brand crisis and self-disclosure

A crisis is an abrupt and unexpected event that could threaten both a brand's reputational and financial value (Benoit, 1997; Coombs, 2007; Hegner et al., 2014; Huang, 2006). The resulting negative publicity has the potential to damage a brand's image due both to the high credibility of negative publicity and the salience of negativity effect, which refers to the tendency for negative information to be weighed more than positive information from people (Dean, 2004; Mizerski, 1982).

The disclosure of crisis-related information is a tactic within a brand's control that might help to combat the negative effects of a crisis or an event that has the potential to become a crisis. In crisis literature, self-disclosure is very much similar to the notion of "stealing thunder", which refers to the decision of a brand to be the first to admit a weakness before it will be exposed by an external party (Arpan and Pompper, 2003; Arpan and Roskos-Ewoldsen, 2005). In this scenario, the brand assumes the burden of disclosing the crisis to mitigate its devastating consequences. Despite the possible negative effects of self-disclosing a negative incident (e.g. magnification of the crisis' relevance), it is deemed more advantageous than running the risk of third party disclosure, as the former enables the brand to influence how the media represents the crisis by selecting the issues to highlight and managing how the brand will be viewed (Murphy, 1989).

If the negative information was released by an established news entity instead of the brand, this mode of transmission would heighten the crisis' credibility and would put the brand in a defensive position, hence possibly enhancing the damaging effects of the crisis (Arpan and Roskos-Ewoldsen, 2005; Murphy, 1989). As Fennis and Stroebe (2014) underscore, a brand's decision to self-disclose negative information about itself has the potential to reduce the information's damaging effects on consumer judgment and decision-making.

Results of a study by Arpan and Roskos-Ewoldsen (2005) indicated that brands that self-disclose the existence of a problem to the public are regarded credible since consumers expect that brands would never report negative information about themselves. While the amount of blame consumers attribute towards a brand can be expected to be on an equivalent level regardless of who discloses the information, nevertheless, by releasing crisis-related information, the brand will gain control over the crisis to a certain extent. It can influence timing, framing, and the medium through which the crisis message is released. Indeed, Fennis and Stroebe (2014) conclude that when a brand shares information that apparently counters its self-interest, consumers will be inclined to view such a gesture as an indication of the brand's integrity, resulting in positive brand evaluations. Thus, the following hypothesis is proposed:

*H1.* Self-disclosure of negative information has a less negative effect on brand attitude, brand trust and purchase intention compared to third-party disclosure.

## Crisis type

When looking at the impact of disclosure on brand evaluations, the contextual effects of the crisis setting should not be discounted. Literature on crisis management identifies two types of crises: product-harm crisis and moral-harm crisis. Klein and Dawar (2004, p. 205) argued that "the increasing complexity of products, more demanding customers, and more vigilant media are making product-harm crises an even more visible occurrence". A product-harm crisis can shatter a brand's positive reputation, just as it can have unwanted long-term performance implications (Van Heerde *et al.*, 2007). High profile examples of moral-harm crises include the use of child labour for the production of goods, workplace sexual harassment and racial discrimination against employees (Pullig *et al.*, 2006).

While both crisis types can have detrimental effects for brands, we argue that those effects result in varying consumers' perceptions. There is no doubt that instances of labour exploitation and environmental harm resulting from the production of goods could instigate consumers to ostracise a brand embroiled in one of the two ethically compromising actions (or both). Nonetheless, as a product-harm crisis could directly harm the consumer, when compared to a moral-harm crisis, it could be expected that negative emotions would be more intense among customers exposed to the first crisis type compared to the second type (Beldad *et al.*, 2017). The notion that personal safety concerns outweigh concerns for other people's welfare is predicated on the precept that individual safety is a basic human need and much more indispensable than the human need for self-actualisation (Maslow, 1943), which could be realised in several ways including the decision to act out of moral considerations (Reiss and Haverkamp, 2005). Thus, we argue that a product-harm crisis increases negative emotions and attitudes more towards the brand compared to a moral crisis. Furthermore, to prevent any harm from oneself, people's purchase intention would also be lower than in the case of a moral crisis issue. Based on these points. The second hypothesis is proposed:

*H2.* A product-harm crisis has a stronger negative effect on blame attributions, brand attitude, brand trust and purchase intention compared to a moral-harm crisis.

## Disclosure and crisis type

To the best of our knowledge, previous research into stealing thunder or disclosure of crisis information employed either a moral-harm crisis (e.g. fraud; Claeys and Cauberghe, 2014) or a product-harm crisis such as the presence of a toxic ingredient in a soft drink (Arpan and Roskos-Ewoldsen, 2005) and overheating of laptop batteries (Rea *et al.*, 2014) as a context for the experiment. So far, little is known about the effects of self-disclosure on consumers' attitude and behavioural intention in relation to a crisis type.

Given the various response strategies that brands can employ when a crisis hits, taking the crisis type into account when selecting a response strategy matters (Coombs, 2007; Stephens *et al.*, 2005). Dutta and Pullig (2011) report that when a company is faced with a product-harm crisis, it would be beneficial for that company to use a corrective action, which primarily means that it should accept responsibility for the crisis and promise remedial and, possibly, preventive actions. However, for a moral-harm crisis, both corrective actions and strategies to reduce a crisis' offensiveness by de-emphasising consequent damage are effective. This prompts the question on whether the impact of disclosure on customers' attitude and trust and on their behavioural intention would also depend on crisis type.

Drawing on customer satisfaction literature, distinctions with regards to product attributes have been established. For example, a number of researchers (Herzberg *et al.*, 1959; Kano *et al.*, 1984; Venkitaraman and Jaworski, 1993) distinguish between product factors that are taken for granted (called hygiene, must-be or flat attributes) and factors that provide additional satisfaction when fulfilled (called motivators, attractive or value-added attributes). The first set of factors usually involved the flawless functionality of a certain product, while the second set of factors involved symbolic attributes such as ethical contributions the brand provides. As a product-harm crisis involves the functionality of the product, which can be classified as a must-be attribute or hygiene factor, it is assumed that external stakeholders would expect a full disclosure from a brand. Thus, self-disclosure would not lead to a better evaluation of the brand, as it just confirms customers' expectations. However, in the case of a moral-harm crisis, self-disclosure might be an unexpected action that could lead to a differentiation in consumer reactions.

Moreover, unveiling a product-harm crisis is almost not preventable, as consumers can easily find out about the functional deficits of a product, while knowing about the existence of a moral-harm crisis is relatively difficult. Thus, the self-disclosure of a product-harm crisis might lead to a more positive evaluation as the brand clearly argues against its own self-interest (Fennis and Stroebe, 2014). Following this argumentation is the premise that self-disclosure would be more effective in influencing customers' attitude, trust and purchase intention in a moral-harm crisis than in times of a product-harm crisis. Thus, we propose the following hypothesis:

*H3.* During a moral-harm crisis, self-disclosure has a stronger positive effect on brand attitude, brand trust and purchase intention compared to third-party disclosure instead of during a product-harm crisis.

## Blame as mediator

Ulmer and Sellnow (2000) have identified three important issues during a brand crisis. First, the crisis is a threat to the brand's social legitimacy in case the brand's actions are perceived as being irresponsible, dishonest, illegal or antisocial. Second, the crisis will result in a mostly lengthy legal scrutiny. Questions of evidence are often so complex that consumers rely on the media to interpret the findings (Dean, 2004). Third, the question of blame needs to be answered. The attribution process presents a spontaneous mechanism to explain

consumers' reactions to negative events and their evaluation of the involved brands (Klein and Dawar, 2004; Xie and Keh, 2016). When exposed to brand crises, consumers tend to wonder about the *locus* of causality (Lei *et al.*, 2012; Weiner, 1985). Thus, blame functions as a direct attribution variable in predicting consumers' evaluations (Klein and Dawar, 2004; Xie and Keh, 2016). The attribution of blame is said to be directly proportional to the severity of the incident (Benoit, 1995). Attribution theory (Kelly, 1973) suggests that consumers act like naive scientists, seeking underlying causes for events they observe in their environment. By doing so, consumers are trying to get a sense of control over their lives (Dean, 2004).

Three determinants of consumer attributions exist: motivations, information and prior beliefs (Folkes, 1988). Prior beliefs include any preexisting hypotheses, suppositions and expectations that affect consumers' attributions, such as blame in the context of a brand crisis (Laufer *et al.*, 2009). The more consumers blame a brand to be responsible for a certain incident, the more they will lose their faith in the brand (Klein and Dawar, 2004; Whelan and Dawar, 2016). Thus, we expect a mediating effect of blame attribution between the relationship of crisis factors and crisis outcomes like brand attitude, brand trust and purchase intention.

More specifically, blame attributions can have serious consequences for a company because they can lead to anger towards the company, negative word-of-mouth and a decrease in future purchase intentions (Cleeren *et al.*, 2013; Folkes, 1984). Nevertheless, acknowledging and, thus, disclosing a crisis will not be advantageous in terms of blame attributions. Thus, we do not expect an influence of self-disclosure on blame attribution.

Despite a vibrant stream of research on blame attribution in product-harm crises (Carvalho *et al.*, 2015), previous research has not fully examined how consumers attribute blame in different crises situations such as product-harm in contrast to moral-harm crises. In line with our previous argumentation, we expect that product-harm crises elicit stronger negative emotions based on personal safety concerns, thus stimulating consumers to search for attributions of blame (Cleeren *et al.*, 2013; Lei *et al.*, 2012). In the absence of other explanations, consumers attribute the negative incident to the brand and hold it liable for the outcome. While consumers might fully attribute crisis responsibility to a company during a product-harm crisis, they might find alternative explanations for the occurrence of a moral-harm crisis. For instance, some customers might be inclined to view child labour practices in some factories from a more nuanced standpoint (e.g. that although child labour is morally deplorable, the practice enables children to earn something to finance their basic needs). Consumers might also shift blame upstream to the manufacturing partners of a brand and their ethical standards or blame economic and political environments and systems in place.

Concluding, that the effect of crisis type on the brand outcome variables is mediated by the level of blame attribution. As such, we propose the following hypothesis:

*H4.* Blame attributions mediate the effect of crisis type on brand attitude, brand trust and purchase intention.

## Methodology

### Design
The authors conducted an experiment using a $2 \times 2$ between-subjects full-factorial design. The experimental manipulations involved two disclosure types (self-disclosure by the brand vs third party disclosure) and two crisis types (product-harm crisis vs moral-harm crisis).

Respondents were randomly assigned to one of the four experimental conditions. For the stimulus material, a fictitious mobile phone brand was employed, as it belonged to a product category that is recognisable and familiar for almost research participants. Additionally, the aforementioned product was also selected as a mobile phone-related crisis was used in previous contexts (Kim and Cameron, 2011) and recently reported product-harm crises involved defective mobile phones. As we wanted participants to be unfamiliar or to have no prior experience with a specific mobile phone brand to control for memory effects or prior information about a brand, a fictitious brand was used.

The authors presented the crisis situation as a news report printed in a Dutch newspaper. Disclosure was manipulated by either having the CEO of the fictitious brand or an independent consumer association announcing the incident. The product-harm incident refers to a technical software problem of the smartphone, which causes the display to turn black frequently. The moral-harm crisis addresses the issue of child labour in one of the brand's factories abroad. A pretest confirmed the correct manipulation of our independent variables. Furthermore, the respondents had to judge their involvement with the incident as well as the credibility of the article. No significant differences between the four manipulated scenarios were found.

### Sample
The participants for the experiment consisted of 180 Dutch customers, of which 77 were women (43 per cent). Data were collected using the snowball sampling approach. Graduate students of marketing communication were asked to distribute the link to an online questionnaire to members of their social networks. Participants were randomly assigned to one of the four scenarios. The mean age of the participants was 29.0 years (SD = 9.43). In total, 45 per cent of the participants are highly educated (see Appendix 1 for demographic information of respondents). Fisher's exact test for cross tables was used to analyse whether respondents were successfully randomised in accordance to their demographic characteristics. The results proved that randomisation was successful.

### Measures
Data were collected via an online survey. The respondents first read the newspaper article before requesting them to respond to items measuring the manipulation check, control questions, and dependent variables (see Appendix 2 for the measures). The outcome variable "brand attitude" was measured with three items by MacKenzie and Lutz (1989), the brand trust scale (three items) was retrieved from Klein and Dawar (2004), and purchase intention was measured with four items by Kim and Cameron (2011). The degree of blame attribution was measured with three items by Klein and Dawar (2004).

The manipulation check measures consisted of respondents' perceptions of the crisis type based on two items by Dutta and Pullig (2011), while disclosure was measured with two originally formulated items.

The t-tests were conducted to assess the manipulations. The manipulations for disclosure ($t = 8.93$, $p < 0.01$) and crisis type ($t = 10.86$, $p < 0.01$) indicate that the manipulation were perceived as intended. As control questions, we measured the respondents' involvement with the crisis (Dutta and Pullig, 2011) and the credibility of the news article (Kim and Cameron, 2011). All scales were reliable with Cronbach's alphas between 0.70 and 0.95. All items were measured on a seven-point Likert scale or semantic differential scale.

## Results

To test for homogeneity of variance in the multivariate analysis of variance (MANOVA), we examined whether the population variance-covariance matrices of the different groups in the analysis are equal by using Box's test. The results show equality of the matrices (Box' M = 22.58, $p = 0.24$). Homogeneity of variances in the ANOVAs is assessed by Levene's test. All values of significance are higher than 0.10, thus homogeneity of variance can be assumed. Furthermore, respondents' involvement with the crisis and the credibility of the news article were not significantly different across the four scenarios, which confirmed the equality of our manipulations. Before testing our hypotheses, MANOVA was conducted to assess the relationship between the independent variables and the dependent variables. Including the control variables in the MANOVA shows no influence of the control variables' credibility (Wilks lambda = 0.99, $F = 0.38$, $p = 0.77$) and involvement (Wilks lambda = 0.98, $F = 0.84$, $p = 0.48$) on the dependent variables nor any interactions with the independent variables. Thus, we excluded them from our analyses.

Our findings show that both independent variables significantly impact the dependent variables. These findings suggest that assessing our hypotheses is justified (Teas and Agarwal, 2000). The assumed relationships focussing on the prediction of brand attitude, brand trust, purchase intention and blame were tested via ANOVA procedures (an overview on the results can be found in Table I). Then, we utilised the Preacher et al. (2007) bootstrapping approach to mediation as a test of indirect effects. First, we tested the mediating effect of blame on brand attitude, brand trust and purchase intention.

Second, we modelled the mediating effects via brand attitude and brand trust on purchase intention.

### Disclosure

The results indicate for disclosure a significant main effect on brand attitude, brand trust, and purchase intention. The disclosure of a crisis by the brand (M = 3.05, SD = 1.08) significantly leads to a more favourable brand attitude than a disclosure by a third party (M = 2.72; SD = 0.91; F = 6.41; $p = 0.01$). Disclosure by the brand (M = 3.07, SD = 1.13) significantly leads to more brand trust compared to third party disclosure (M = 2.71; SD = 0.99; $F = 8.06$; $p < 0.01$). Additionally, disclosure by the brand (M = 2.44, SD = 1.00) leads to significantly higher purchase intention compared to third party disclosure (M = 2.05; SD = 0.81; $F = 9.84$; $p < 0.01$), while disclosure has no significant main effect on blaming the brand ($F = 1.34$; $p = 0.25$), which was expected. Thus, hypotheses H1a, H1b and H1c are supported.

### Crisis type

The results show for crisis type a significant main effect on brand attitude, brand trust, purchase intention, and blame attribution. A moral-harm crisis (M = 3.05, SD = 1.07) leads to a low level of positive brand attitude than a product-harm crisis (M = 2.73; SD = 0.93; $F = 5.45$; $p = 0.02$). A moral-harm crisis (M = 3.31, SD = 0.99) also leads to significantly more brand trust compared to a product-harm crisis (M = 2.52; SD = 1.01; $F = 30.52$; $p < 0.01$). Furthermore, a moral-harm crisis (M = 2.40, SD = 0.98) leads to significantly higher purchase intention when compared to a product-harm crisis (M = 2.10; SD = 0.86; $F = 5.97$; $p = 0.02$), while a product-harm crisis (M = 5.57, SD = 1.14) leads to more blame attribution than a moral-harm crisis (M = 4.83; SD = 1.34; $F = 16.64$; $p < 0.01$). Thus, our hypotheses H2a, H2b, H2c and H2d are supported.

### Disclosure x crisis type

Additionally, two interaction effects were found. While in times of a product-harm crisis, self-disclosure (M = 2.76, SD = 0.99) does not represent an advantage to third party disclosure (M = 2.70, SD = 0.87), in times of a moral-harm crisis disclosure by the brand (M = 3.41, SD = 1.09) does retain a higher brand attitude compared to disclosure by a third party (M = 2.73, SD = 0.95; $F = 4.40$; $p = 0.03$). The same interaction effect holds true for brand trust. While during a product-harm crisis, self-disclosure (M = 2.59, SD = 1.08) and third party

**Table I** Analyses of variance

| Independent variables | MANOVA | | | ANOVA | | | |
| | Wilks | Df | F-value | Brand attitude F-value | Brand trust F-value | Purchase intention F-value | Blame F-value |
|---|---|---|---|---|---|---|---|
| Disclosure (D) | 0.93 | 3; 174 | 4.09** | 6.41* | 8.06** | 9.84** | 1.34 |
| Crisis Type (CT) | 0.83 | 3; 174 | 11.57*** | 5.45* | 30.52*** | 5.97* | 16.64*** |
| D × CT | 0.97 | 3; 174 | 1.77 | 4.50* | 3.96* | 2.35 | 3.05 |
| Mean square explained | | | | 4.70 | 12.71 | 4.47 | 10.09 |
| Mean square residual | | | | 0.95 | 0.96 | 0.80 | 1.51 |
| F | | | | 4.97** | 13.31*** | 5.57** | 6.68*** |

**Notes:** *$p < 0.05$; **$p < 0.01$; ***$p < 0.00$

disclosure (M = 2.46, SD = 0.94) do not differ in their effect on brand trust, during a moral-harm crisis disclosure by the brand (M = 3.68, SD = 0.88) does restore more brand trust compared to disclosure by a third party (M = 2.98, SD = 0.98; $F$ = 3.96; $p$ = 0.04). These findings support hypotheses *H3a* and *H3b*, while *H3c* is not supported.

The assumed mediation effect of blame was tested via the bootstrapping approach proposed by Hayes (2013). Mediation analyses were performed to test the indirect effects of the independent variables, disclosure and crisis type on the three dependent variables – brand attitude, trust and purchase intention – via the mediator blame. An overview of the mediation results can be found in Table II.

The results show that the influence of disclosure on the dependent variables is not mediated by blame. In line with our expectations, blame fully mediates the effects of crisis type on brand attitude ($b$ = 0.24, BCa CI [0.12; 0.42]), brand trust ($b$ = 0.19, BCa CI [0.09; 0.35]), and purchase intention ($b$ = 0.13, BCa CI [0.05; 0.24]). The significance of the indirect effects is confirmed by using the Sobel test. The results show that the Sobel tests are significant, thus it means our predictor crisis type significantly affects the outcome variables brand attitude ($z$ = 3.29, $p$ < 0.01), brand trust ($z$ = 2.93, $p$ < 0.01) and purchase intention ($z$ = 2.46, $p$ = 0.01).

Moderation mediation analyses were performed to test the interaction effect of disclosure and crisis type on the outcome variables brand attitude ($b$ = −0.02, BCa CI [−0.49; 0.02]), brand trust ($b$ = −0.15, BCa CI [−0.38; 0.01]), and purchase intention ($b$ = −0.10, BCa CI [−0.28; 0.00]) via blame. The results show that the analyses are not significant, as the 95 per cent confidence intervals include 0. Testing the moderated mediation effects with a 90 per cent confidence interval show marginal significance of the mediation of the interaction between disclosure and crisis type on brand attitude (BCa CI [−0.44; −0.01]), brand trust (BCa CI [−0.36; −0.02]) and purchase intention (BCa CI [-0.24; -0.01]) via blame.

Testing the mediating effects via brand attitude and brand trust on purchase intention shows that the influence of our proposed independent variables disclosure, crisis type, as well as the interaction of disclosure and crisis type on purchase intention is mediated by brand trust, not by brand attitude (Table III).

The main results of the analyses are displayed in Figures 1 to 3. This overview illustrates that while disclosure has an effect on all three brand-related outcome measures, crisis type additionally has an effect on blame attribution. The interaction between disclosure and crisis type has a significant influence on brand attitude and trust. In line with that, our second figure shows that only crisis type is mediated by blame. Our third figure illustrates

the mediating effect of brand trust, not brand attitude, on purchase intention for disclosure, crisis type, and the interaction thereof.

## Discussion

As mentioned, more complex products, more demanding customers and more vigilant media are making brands increasingly vulnerable to crises situations. Regardless of the type, a crisis can have deleterious ramifications for a brand's reputation and its financial assets (Hegner *et al.*, 2014; Raithel *et al.*, 2010; Rea *et al.*, 2014). The negative implications of a crisis for the brand increases the significance of research into ways to soften such a blow (Fennis and Stroebe, 2014; Hegner *et al.*, 2014). A small number of studies have indicated that self-disclosing instead of staying silent has beneficial effects for a brand in times of crisis. However, it remains to be investigated whether or not the impact of self-disclosure holds true for any kind of crisis. Hence, the purpose of this study is to address the research question pertaining to the relationship between disclosure of a crisis and the crisis type on customers' evaluation of a brand.

Furthermore, recent studies emphasise the impact of cognitive processes like blame attribution and their influence on consumers' evaluations of a brand in a product-harm crisis. However, the influence of the nature of the crisis represents a neglected research area. Thus, the attribution of blame was introduced as a mediating factor into this study.

Results indicate that self-disclosing a crisis can influence the evaluation of a brand in a positive way compared to a third party disclosure of an incident. This finding is in line with previous research on stealing thunder (Arpan and Pompper, 2003; Fennis and Stroebe, 2014; Williams *et al.*, 1993). A brand that discloses crisis-related information is deemed credible as its action could indicate a high sense of responsibility (Arpan and Roskos-Ewoldsen, 2005; Spence *et al.*, 2014; Wigley, 2011). As the crises situation used in the scenario highlighted that the company was primarily responsible for the crisis, consumers would expect that the company would assume full responsibility for what happened. A suitable crisis management approach requires a company or a brand to handle the crisis situation in a way that addresses the concerns of the consumers. Such a full disclosure of negative information could maintain consumers' positive evaluation of the brand.

Furthermore, this study shows that a product-harm crisis leads to a more negative evaluation of a brand compared to a moral-harm crisis, though this result is mediated by the extent to which customers blame the brand for the onset of the crisis. Interestingly, the study from Jeon and Baeck (2016) shows the

**Table II** Mediation analyses and moderated mediation via blame on brand attitude, brand trust, and purchase intention

| Dependent variable | Indirect effects of disclosure (D) via blame | | | | Indirect effects of crisis type (CT) via blame | | | | Indirect effects of D × CT via blame | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | $b$ | 95% BCa CI | Z | p | $b$ | 95% BCa CI | Z | p | $b$ | BCa CI 95% | BCa CI 90% |
| Brand attitude | −0.05 | [−0.19; 0.07] | −0.80 | 0.42 | 0.24 | [0.12; 0.42] | 3.29 | 0.00 | −0.20 | [−0.49; 0.02] | [−0.44; −0.01] |
| Brand trust | −0.05 | [−0.18; 0.07] | −0.80 | 0.43 | 0.19 | [0.09; 0.35] | 2.93 | 0.00 | −0.15 | [−0.38; 0.01] | [−0.36; −0.02] |
| Purchase intention | −0.03 | [−0.12; 0.04] | −0.77 | 0.44 | 0.13 | [0.05; 0.24] | 2.46 | 0.01 | −0.10 | [−0.28; 0.00] | [−0.24; −0.01] |

**Table III** Mediation analyses and moderated mediation brand attitude and brand trust on purchase intention

| Mediator | Indirect effects of disclosure (D) on purchase intention | | | | Indirect effects of crisis type (CT) on purchase intention | | | | Indirect effects of D × CT on purchase intention | |
|---|---|---|---|---|---|---|---|---|---|---|
| | b | 95% BCa CI | Z | p | b | 95% BCa CI | Z | p | b | BCa CI 95% |
| Brand attitude | 0.01 | [−0.05; 0.07] | 0.18 | 0.86 | −0.01 | [−0.07; 0.05] | −0.17 | 0.86 | 0.02 | [−0.07; 0.14] |
| Brand trust | −0.18 | [−0.36; −0.05] | −2.03 | 0.04 | 0.42 | [0.25; 0.64] | 3.57 | 0.00 | −0.30 | [−0.62; −0.09] |

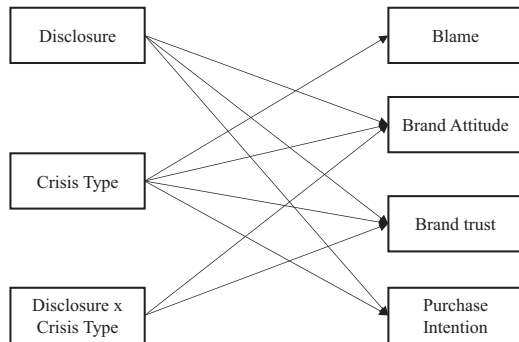**Figure 1** Summary of results from ANOVA



**Figure 2** Summary of results of mediation analyses via blame
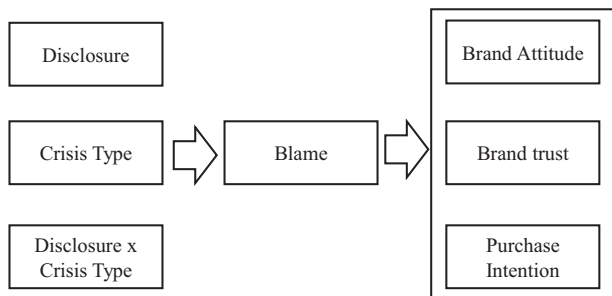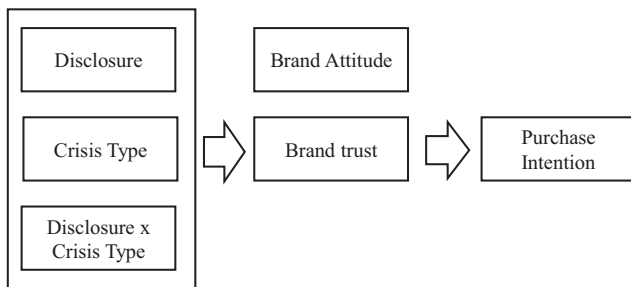


**Figure 3** Summary of results of mediation analyses via brand attitude and brand trust



opposite effect of crisis type on brand evaluations. Their results indicated that consumers' responses were more favourable in a corporate ability crisis than in a corporate social responsibility crisis.

Nevertheless, the conceptualisations of the implemented crisis types in our study differ from Jeon and Baeck's. While they define a corporate ability crisis in terms of the quality of a product (negative corporate ability information was manipulated by "suspicions about the coffee-producing origin" and negative corporate social responsibility information was manipulated by "tens of millions in slush funds, outflow suspicions", p. 557), we follow the definition of Dawar and Pillutla (2000) perceiving a product-harm crisis as going beyond a possible quality reduction. In a product-harm crisis, a product is discovered to be defective, unsafe, or hazardous to be consumed or used.

Additionally, the results reveal a significant interaction effect between disclosure and crisis type on brand attitude and brand trust. While during a product-harm crisis, self-disclosure could lead to a more positive customer attitude towards a brand; during a moral-harm crisis, disclosure by the brand is not more advantageous than waiting until a third party reveals the crisis. These findings show that the effect of self-disclosure is not unconditional but depends on consumers' expectations and attributions (Eagly et al., 1978; Fennis and Stroebe, 2014). Therefore, this study extends previous findings on self-disclosure by including a new and yet untested contextual setting.

Moreover, we predicted that blame attributions would act as a mediator between crisis information and brand evaluations. Results show that blame mediates the relationship between crisis type and brand evaluations, while blame is not reduced by the timing of crisis-related information disclosure. As blame attributions are not reduced by self-disclosure, there is still a strong main effect of disclosure on brand evaluations. Interestingly, a product-harm crisis results in stronger blame attributions compared to a moral-harm crisis. This result is consistent with attribution theory. In the absence of further justifications, consumers attribute the negative incident to the brand and hold it responsible for the event. While consumers might fully blame a company during a product-harm crisis, they might find alternative explanations for the occurrence of a moral-harm crisis.

## Practical implications

Our findings show that in case of a moral-harm crisis self-disclosing a certain incident seems to be an advantageous strategy. Although we were not able to validate the utility of self-disclosure when used during a product-harm crisis, we still want to argue in favour of this strategy. First, self-disclosing a negative event leaves fewer arguments to discuss and conflict about to third parties. Second, as consumers do not expect that brands would act against their self-interest and report negative information, brands can create an image of honesty. This might aid in protecting a brand's reputation (Fennis and Stroebe, 2014; Tomlinson and Mayer, 2009). Additionally, brands that

self-disclose information can acquire a degree of control over the information compared to merely reacting to accusations from the media. Thus, brands are able to frame the information they give to the public and influence consumers' processing of the information (Arpan and Pompper, 2003).

Although our findings showed that product-harm crises have a greater negative effect on brand evaluations, the effects of a moral-harm crisis on a brand's standing should not be neglected. This is especially troubling as the potential for consumers to express their anger about brands has grown significantly with the ubiquity of the internet and social media (Grégoire *et al.*, 2009). This consumer empowerment is exemplified by the increasing number of brand hate websites (Krishnamurthy and Kucuk, 2009; Kucuk, 2008, 2016). A permanent control of interactions consumers have with front line employees, the customer service or complaint department, and social media is inevitable. Having internal and external systems in place which monitor those interactions is a crucial step in effectively and efficiently managing consumer's relationships with the brand and taking appropriate actions.

## Limitations and future research

This is one of the few studies that look into the extent to which the impact of disclosure on customers' attitude, trust, and purchase intention depends on the type of crisis. Nonetheless, there are still several points that should be considered for future research. First, future research should consider the interaction between disclosure, crisis type and the brand's pre-crisis reputation. As Fennis and Stroebe (2014) propose, investigating the interaction between pre-crisis reputation and disclosure in relation to a specific crisis type would be an interesting research agendum. Further, we decided to use a fictitious brand to control for memory effects of prior information. Nevertheless, consumers' previous experiences with a brand shape their perception when a crisis strikes. How crisis information is interpreted and evaluated by consumers depends on their relationship with the brand. Additionally, the management of a brand in times of crisis is influenced by the relational capital to alleviate the effect of harmful news. Thus, varying brands and their relational capital would be an interesting research opportunity.

Second, future research should consider the impact of the framing of the crisis-related message to be disclosed. Advertising research shows that rationally and emotionally framed ads cause consumers to form their attitude toward the brand in different ways (Yoo and MacInnis, 2005). Kim and Cameron (2011) manipulated emotional framing by letting the organisational spokesperson express sadness. They claimed that emotions affect information processing and are key predictors of attitudes and intentions toward the brand. Thus, considering the interaction between disclosure and message framing might be another relevant research focus.

Third, though we checked carefully for successful randomisation of respondents, our findings might be limited due to the use of a convenience sample. Thus, it would be important to replicate our findings in different samples, cultures and also based on different product categories and crisis situations.

Furthermore, the present findings indicate a buffering effect of self-disclosure to confine the damaging effects of a crisis for a brand's reputation. Nevertheless, our research does not shed light on whether or not self-disclosure can really reduce the harm caused by the crisis. Future research might consider studying the long-term effects of certain crisis types and self-disclosure. The question on which of the crisis types last longer in the memory of consumers and which strategy should be used to protect a brand's image in the long run certainly merits a definitive answer.

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## Further reading

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# Appendix 1

**Table AI** Respondents' demographic information

| Demographics | N | (%) | M | SD |
|---|---|---|---|---|
| *Gender* | | | | |
| Male | 103 | 57.2 | | |
| Female | 77 | 42.8 | | |
| Age | | | 29.0 | 9.43 |
| | | | | |
| *Education* | | | | |
| Low | 99 | 55.0 | | |
| High | 81 | 45.0 | | |
| *Total* | 180 | 100 | | |

# Appendix 2. Measures

1  Control Variables:
   • *Involvement with the incident* (Dutta and Pullig, 2011):
      - Not at all serious - Very serious; and
      - Not at all relevant - Very relevant.
   • *Credibility of the message* (Kim and Cameron, 2011):
      - Unbiased – Biased;
      - Accurate – Inaccurate;
      - Unconvincing – Convincing;
      - Trustworthy – Untrustworthy; and
      - Not telling the whole story – Telling the whole story.
2  Manipulation checks:
   • *Crisis type* (Dutta and Pullig, 2011):
      - The incident is related to the quality of the company's products.
      - The incident is related to the values of the company.
   • *Disclosure* (self-developed):
      - The incident is announced by the company.
      - The incident is announced by a research company.
3  Outcome variables and mediators:
   • *Blame attribution* (Klein and Dawar, 2004; Malhotra and Kuo, 2009):
      - The brand should be blamed for the incident.
      - The brand should be held accountable for the incident.
      - This incident is the fault of the brand.
   • *Brand attitude* (MacKenzie and Lutz, 1989):
      - Good – Bad;
      - Favorable – Unfavourable; and
      - Pleasant – Unpleasant.
   • *Brand trust* (Klein and Dawar, 2004):
      - The brand is trustworthy;
      - The brand is reliable; and
      - The brand is concerned about its customers.
   • *Purchase intention* (Kim and Cameron, 2011):
      - I would consider the brand in the future;
      - I would purchase the brand's products if I have the opportunity in the future;
      - I would invest in the brand if I have the opportunity in the future; and
      - I would recommend the brand's products to a friend if I have the opportunity in the future.

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