

## **When Accidents are Good for a Brand**

### **Tarje Gaustad\***

Associate professor of Marketing  
Kristiania University College,  
Kirkegaten 24-26, 0107 Oslo, Norway  
Phone: +47 97724807, E-mail: tarje.gaustad@kristiania.no

### **Jakob Utgaard**

Associate professor of Marketing  
Kristiania University College,  
Kirkegaten 24-26, 0107 Oslo, Norway  
Phone: +47 91829259, E-mail: jakob.utgard@kristiania.no

### **Gavan J. Fitzsimons**

R. David Thomas Professor of Marketing and Psychology  
The Fuqua School of Business, Duke University  
100 Towerview Drive, Durham, NC 27708  
Phone: 919 660 7793, E-mail: gavan@duke.edu

\*Corresponding author

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## **When Accidents are Good for a Brand**

### **Abstract**

In this research we demonstrate that negative press about accidents caused by users can counterintuitively improve brand evaluations. In two studies, we find an interaction between the brand diagnosticity of the user accident and the degree to which consumers identify with the brand. Following negative press about a user accident, low brand identifiers decrease their brand liking and high brand identifiers increase their brand liking, but only when the accident is brand diagnostic (e.g., a fast car brand in a speed-related accident).

**Keywords:** User accidents; negative press; brand diagnosticity; brand identification

## WHEN ACCIDENTS ARE GOOD FOR A BRAND

### 1 INTRODUCTION

Accidents, scandals, and other crises can have serious consequences for firms' reputation and brand equity. A key insight in the literature on the effects of negative brand information is that consumers' reactions are determined by the nature of the negative event and consumer-brand relationships. Negative events that are more brand diagnostic as they relate to the brand's core associations have a stronger negative effect on brand evaluations (Dutta & Pullig, 2011; Roehm & Tybout, 2006). Consumers with a strong positive bond toward a brand generally react less to negative news (Ahluwalia, Burnkrant, & Unnava, 2000; Cheng, White, & Chaplin, 2012; Trump, 2014; Pullig, Netemeyer, & Biswas, 2006).

In the current work, we provide a more nuanced picture of these effects by arguing and demonstrating that, at times, negative events that are diagnostic of a brand can increase some consumers' brand evaluations, depending on their degree of identification with the brand. This highlights a different role of diagnosticity than that demonstrated in previous research, which shows diagnosticity decreases brand evaluations (Dutta & Pullig, 2011; Roehm & Tybout, 2006).

We hypothesize that a match between a negative event and brand associations (i.e., a brand-diagnostic event) may lead to increased evaluations among consumers who identify strongly with the brand. For this consumer group, a diagnostic event may emphasize the core brand associations they identify with. A diagnostic threat to the brand may, therefore, be interpreted as a threat to themselves (Lisjak, Lee, & Gardner, 2012), leading to defensiveness and overcompensation, resulting in improved brand evaluations. For consumers who do not identify with the brand, a negative diagnostic event will not be perceived as a personal attack, and brand evaluations will be reduced. Thus, the effects of a negative diagnostic event will vary with the degree of identification with the brand.

To test these ideas, we use a type of negative event that has received scant attention in the literature, namely consumer-generated accidents. At times, brands unavoidably become involved in negative events caused by the consumer rather than the firm. Consumers may use too much of a product with negative consequences (for instance in the case of alcohol), use a product to achieve negative purposes (for instance, weapons used for violent acts), or use a product incompetently or unfortunately (as in car accidents, often caused by drivers). Recent examples reported in the media include consumers overdosing on caffeine found in well-known energy drink brands such as Red Bull, Monster Energy, and 5-Hour Energy (Meier, 2013), and the tragic death of Hollywood actor Paul Walker after being involved in a Porsche Carrera GT speeding accident (Fitzsimmons, 2013). We expect such negative exposure will impact the implicated brands, even if the manufacturers of the brands have no direct responsibility for such exposure.

The current research makes several contributions to the literature. We demonstrate that negative media exposure, where the brand is not actively involved and clearly not to blame (e.g., user accidents), can impact brand evaluations. Furthermore, we show that consumer response to such accidents depends on how diagnostic the incident is of the implicated brand, as well as consumers' degree of brand identification. For high brand identifiers, diagnostic user accidents increase brand evaluations. This is a new insight and a contribution that challenges conventional wisdom; accidents can actually be good for the brand.

In the next section, we develop a theoretical framework for understanding consumers' responses to negative press about user accidents. We then describe the results of two studies testing our predictions. Finally, we summarize the results and discuss the contributions and implications.

## 2 NEGATIVE PRESS ABOUT USER ACCIDENTS

Negative press can significantly hurt a company's reputation and brand equity (Chen, Ganesan, & Liu, 2009). An important factor influencing the extent of damage is whether consumers' attribute the blame to internal brand-related factors or external factors beyond the brand's direct control (Folkes, 1984). Most research on brand scandals has investigated factors influencing such attributions of blame (Folkes, Koletsky, & Graham, 1987; Hess, Ganesan, & Klein, 2003) or other factors determining the impact on brand evaluations in situations where the brand is perceived as culpable (Ahluwalia, Burnkrant, & Unnava, 2000; Pullig et al. 2006; Swaminathan, Page, & Gürhan-Canli, 2007). Less research has been done to investigate how negative press might affect brand evaluations in situations where the brand is somehow involved, but clearly not culpable.

The current research investigates a specific situation in which the brand is associated with a negative event without being actively involved or culpable, namely user accidents. Such accidents are low culpability situations in which the brand is only passively and indirectly involved. Nevertheless, negative press about user accidents has the potential to activate the brand in consumers' minds and spark inferences about the users and uses of the brand, and as these are secondary sources of brand meaning (Keller, 1993), finally the brand itself. Indeed, previous research has found that even if the brand is not directly responsible for a negative incident the consequences can still be serious and negative for the brand. Marcus and Goodman (1991) show that in the case of corporate accidents (compared to other corporate crises, such as scandals and product safety incidents), when management can plausibly claim there are mitigating circumstances and factors beyond its control, conflict can arise between the interests of shareholders and crisis victims. Knittel and Stango (2014) find that negative events associated with a sponsorship object (e.g., an athlete) might spill over and hurt sponsoring brands, even if the sponsors are not responsible for the negative event at

all. Similarly, the negative effects of brand scandals involving one company spill over to other brands in the same industry when the brands are perceived to be similar or representative of the category (Roehm & Tybout, 2006; Dahlén & Lange, 2006). Based on a similar mechanism, we suggest that negative press about user accidents also will spill over and impact consumer judgments and brand evaluations.

## **2.1 Brand Diagnosticity**

Research on brand scandals suggests that the brand relevance and diagnosticity of the crisis modulates the impact on consumers' judgments. Negative press about a scandal pertaining to attributes and/or associations central to the implicated brand is perceived as more brand diagnostic and to have a stronger negative impact on consumers' brand evaluations (Dawar & Lei, 2009). Furthermore, the negative responses can spill over from the culpable brand to other non-culpable brands in the same industry, given that the culpable brand or the scandal itself is perceived as diagnostic of competitors and/or the industry (Roehm & Tybout, 2006).

Based on the insights from research on brand scandals, we propose that the impact of user accidents on brand evaluations depends on the degree to which the accident matches consumers' existing brand perceptions, i.e., how diagnostic the accident is of the brand. We suggest some user accidents are more brand diagnostic as they are closely related to the brand's core associations, while other accidents are not brand diagnostic and might just as well have happened to other brands in the market. We refer to diagnosticity as the degree to which the accident matches the existing network of associations linked to the brand, and therefore is perceived as related and relevant to consumers' associations and beliefs about the brand.

Spreading activation theory posits that brand associations reside in a network and can activate one another when the link between them is strong (Collins & Loftus, 1975). Negative

press about a user accident is likely to activate the brand and the associative network linked to the brand in consumer memory. However, the accessibility-diagnostics framework (Feldman & Lynch Jr., 1988) would suggest that only diagnostic user accidents should impact brand evaluations. Research on impression formation has shown that the greater the shared associations between two targets, the more diagnostic information about one target is for making judgments about the other (Skowronski & Carlston, 1987). In the context of user accidents, this suggests that as the shared associations between the user accident and the brand increases, so does the diagnosticity of negative press about the accident for making judgments of the brand. Hence, accidents that confirm consumers' expectations and beliefs about the brand due to how and why they happened are perceived as diagnostic of the brand.

If a user accident does not match consumers' beliefs and associations linked to the brand (not diagnostic of the brand), negative press about the user accident is not perceived as brand relevant and diagnostic information. Therefore, we do not expect a non-brand diagnostic user accident to influence brand evaluations, as the brand is not perceived as directly culpable and carries little or no blame for the accident.

If the user accident is diagnostic of the brand, we expect different results. In such situations, the brand is still not directly culpable for the user accident, but the incident matches and activates consumers' existing beliefs about the brand. A brand diagnostic user accident activates the brand in consumer memory and is fluent with existing associations and beliefs about the brand. We will argue that the downstream consequences of diagnostic user accidents depend on how consumers feel about the brand, and especially how self-relevant the brand is to the consumers and their identities.

## **2.2 Brand Identification**

People buy products not only for what they do, but also for what they symbolize (Levy 1959). The symbolic meaning of a brand derives from the associations between the

brand, its typical users, and its uses.

When consumers use brands in their identity projects, a link bridges the brand and the self, such that consumers sometimes incorporate the brand image in the mental representation of themselves, and the brand becomes part of their identity (Escalas & Bettman, 2003).

Central to consumer-brand identification is the felt “me-ness” of the brand, the congruence between the self and the brand (Escalas & Bettman, 2003).

Park et al. (2010) demonstrated that consumers’ brand identification increases brand attachment and encourages pro-brand behaviors, such as recommending, always buying the new model, and defending the brand. The bond a consumer feels toward a brand can safeguard the brand from the consequences of failure, negative information, and other transgressions (Ahluwalia, Burnkrant, & Unnava, 2000; Hess, Ganesan, & Kleine, 2003). Brand scandals have less impact on consumers who have strong brand bonds compared to consumers who have weaker brand bonds (Ahluwalia, Burnkrant, & Unnava, 2000; Swaminathan, Page, & Gürhan-Canli, 2007). We argue that the degree to which consumers identify with a brand also influences how they process and respond to negative press about user accidents, even if the brand is not responsible.

For consumers who do not identify with the brand, a diagnostic user accident provides negative and relevant brand information that is congruent with existing associations and beliefs about the brand. Even when an accident is not the brand’s fault, if the characteristic of the accident matches consumers’ perceptions toward, and expectations of, the brand, such accidents are processed as brand relevant and diagnostic. Since consumers are known to perceive negative information as more informative and weight it heavily in their judgments (Herr, Kardes, & Kim, 1991), we expect consumers who do not identify with a brand to respond negatively and decrease their brand evaluations in response to negative press about brand diagnostic user accidents.



**H1:** Brand diagnostic (vs. non-brand diagnostic) user accidents negatively affect brand attitude among consumers who do not identify with the brand.

Previous research has shown that consumers who feel a strong commitment toward a brand tend to neutralize the impact of negative press by questioning the validity of the source or counter-arguing the information (Ahluwalia, Burnkrant, & Unnava, 2000; Swaminathan, Page, & Gürhan-Canli, 2007). We suggest that another mechanism comes into play when brand identifiers are exposed to negative press about a diagnostic user accident. Extending previous research, we not only believe that brand identification buffers and safeguards the brand from negative press about user accidents, but that it actually can increase brand evaluations. Since consumers who identify with the brand have incorporated the brand into their self and use the brand to signal their identity, negative information about the brand is self-relevant and can be felt as a threat to the self (Cheng, White, & Chaplin, 2012). Cheng, White, and Chaplin (2012) show that after learning about a brand failure, those consumers who identified with the brand reported lower self-esteem. This demonstrates that for brand identifiers, negative information about a brand is perceived as a threat and reflects poorly on the self.

Hence, we expect that for consumers who identify with the brand, a diagnostic user accident is not only brand relevant but also self-relevant. A diagnostic user accident is relevant to the very brand associations and beliefs consumers identify with. People are highly motivated to preserve self-integrity (Steele, 1988), and thus are prone to defensive responses to protect the brand and thereby the self (Lisjak, Lee, & Gardner, 2012). When faced with negative self-relevant information, people tend to engage in defensive reasoning and cope by spontaneously emphasizing certainty and conviction about attitudes, values, personal goals,

and identifications (McGregor & Marigold, 2003). People have been shown to respond to self-threats by becoming offensive-defensive and more zealous about social attitudes and groups (i.e., going to extremes) and/or emphasizing a self-consistent set of values and personal goals (i.e., being oneself) (McGregor et al., 2001). For example, one study found that after undergraduates were asked to ruminate about difficult personal dilemmas, they spontaneously exaggerated their conviction about social issues, values, goals, and identifications (McGregor et al., 2001).

Similarly, as people are prone to compensatory conviction about value-relevant topics when the self is threatened, we argue that consumers overcompensate in their brand judgments when faced with negative press about a brand diagnostic user accident. We thus hypothesize that negative and diagnostic information about the brand is self-relevant and threatens the self among consumers who identify with the brand. In response, these consumers become defensive and respond by overcompensating in subsequent brand evaluations in order to maintain self-integrity.

**H2:** Brand diagnostic (vs. non-brand diagnostic) user accidents positively affect brand attitude among consumers who identify with the brand.

### **2.3 Self-affirmation**

Self-concept is concerned with how we think about ourselves: who we once were, who we are, and who we may become. Self-concept is our theory of our own personality and our answer to the basic question, “Who am I?” (Markus & Cross, 1990). According to self-affirmation theory, people have a strong motivation to protect their self-integrity (Steele, 1988). When faced with potential threats to the self, people can satisfy this motivation directly by defensiveness or other self-protecting reactions (Kunda, 1987). Alternatively,

people can satisfy the self-affirmation motivation indirectly. They can engage in fluid compensation processes and draw upon alternative sources of self-integrity by affirming some unrelated aspect of the self (Sherman & Cohen, 2002). If people are given the opportunity to restore the self by focusing on an important personal value unrelated to the original inconsistency, self-protecting reactions to threatening circumstances tend to diminish (Cohen, Aronson, & Steele 2000; Correll, Spencer, & Zanna, 2004; Steele & Liu, 1983).

In the user accidents context, the self-affirmation framework would predict that if brand identifiers experience negative press about a brand diagnostic user accident as a threat to the self, the opportunity to self-affirm would relieve the threat and mitigate defensive responses. Hence, we propose that when brand identifiers get the opportunity to self-affirm following negative press about a brand diagnostic user accident, the positive effect on brand attitude diminishes.

**H3:** Self-affirmation moderates the effect of brand diagnostic user accidents among consumers who identify with the brand (but not those who do not identify with the brand). When brand identifiers can self-affirm, the positive effect on brand attitude in response to negative press about a brand diagnostic user accident is mitigated.

## 2.4 Summary of Theoretical Contributions

Table 1 summarizes the literature most relevant to our conceptualization, and highlights (in italics) key areas in which the current research has unique features that contribute to existing knowledge.

- - Insert Table 1 about here - -

The current research contributes to the extant literature in at least three significant ways. Firstly, previous research has investigated transgression and brand failure (such as

product-harm crises, service failures, and brand extension failures). We investigate a different type of negative brand press: user accidents.

Secondly, we propose that the consequences of being “guilty by association” are not straightforward. Beyond Cheng, White, & Chaplin (2012) and Lisjak, Lee, & Gardner (2012), we expect that only negative press relevant to the very brand associations and beliefs with which consumers identify would lead to defensive responses, not negative press involving the brand in general. Hence, we hypothesize an interaction between brand diagnosticity and brand identification.

Thirdly, we posit that brand identification not only buffers the brand from the consequences of negative information, but that due to consumers’ defensiveness, it actually can increase brand evaluations in certain instances

### **3 STUDY 1**

Study 1 aimed to investigate whether an interaction between brand identification and the perceived match between the accident and the brand (diagnosticity) might influence consumers’ brand evaluations.

In the first study, we use a specific type of user accidents, namely car accidents. Car accidents are very common, and while no complete statistics exist, between 20 and 50 million accidents with serious personal injury take place globally every year (WHO, 2013). In 2013, almost three-and-a-half million serious road accidents took place in Europe and North America alone (UNECE, 2015). Consumers are frequently exposed to these accidents in the media or on the road.

#### **3.1 Stimuli Development**

We developed two newspaper article scenarios describing a car accident. The articles were similar, except for the description of the cause of the accident. In one article, the car

accident was described as caused by reckless driving at high speed. We chose this scenario to fit existing stereotypes about BMW drivers. In addition to being associated with high quality, expensive, and luxurious cars, BMW is often associated with young male drivers, high performance, and speeding (Davies, 2009). The other article described a car accident caused by the car driving in the wrong lane. In both cases, the accidents were portrayed as the driver's fault. In the stimuli development, we did not mention the brand involved in the accidents.

We conducted two pretests to develop stimuli for the experiments. The objective was to manipulate the degree of brand diagnosticity. First, we did a one-factor pretest (accident due to speeding vs. accident due to driving in the wrong lane) among undergraduate business students ( $n = 32$ ) to determine how serious the scenarios were perceived. The participants read the scenario according to the condition and answered three scale items about how serious they perceived the accident to be ("How would you characterize the incident described in the newspaper article...?", three scales anchored 1 = Not serious at all to 7 = Very serious; 1 = Not negative at all to 7 = Very negative; 1 = Not critical at all to 7 = Very critical,  $\alpha = .65$ ). The results revealed that the accidents were perceived as equally serious ( $M_{\text{speed}} = 4.6$ ,  $M_{\text{wronglane}} = 4.3$ ,  $t(30) = .858$ ,  $p = .40$ ).

Next, we did another one-factor pretest (accident due to speeding vs. accident due to driving in the wrong lane) with the likelihood of different car brands being involved as the dependent measure. Undergraduate business students ( $n = 43$ ) read the accident scenarios and evaluated several car brands (BMW, Toyota, and some other brands) on how likely they thought it was that this car brand was involved in the accident. The results showed that BMW was perceived as significantly more likely to be involved in the speeding accident compared to the wrong lane accident ( $M_{\text{speed}} = 5.95$ ,  $M_{\text{wronglane}} = 4.95$ ,  $t(41) = 2.35$ ,  $p < .03$ ). This was not the case for Toyota ( $M_{\text{speed}} = 3.41$ ,  $M_{\text{wronglane}} = 3.76$ ,  $t(41) = .63$ ,  $p = .53$ ). Also, most

participants anticipated that a BMW car was involved in the speeding accident, both when comparing with Toyota and when comparing with an index of the other brands measured ( $M_{\text{BMW}} = 5.95$ ,  $M_{\text{Toyota}} = 3.40$ ,  $t(41) = 4.53$ ,  $p < .01$ ;  $M_{\text{BMW}} = 5.95$ ,  $M_{\text{other brands}} = 3.50$ ,  $t(41) = 6.90$ ,  $p < .01$ ). In conclusion, the high-speed racing accident was perceived as diagnostic for BMW and not diagnostic for Toyota.

*Manipulation of accident diagnostic of BMW (high-speed accident):*

**Two injured in BMW (Toyota) high-speed racing crash**

A car accident on Staten Island has left two persons injured, police said.

According to authorities, the crash happened around 10 pm on Sunday, when two BMWs (Toyotas) were racing each other on Highway 201. One of the cars tried to overtake the other, when the driver lost control and crashed into the other car, police said. Officers witnessing the accident said the cars drove at a very high speed. "I saw the two BMW (Toyota) cars maneuvering like it was a car chase from the movies. They were cutting corners at extreme speed and driving like it was a Formula 1 race," an eyewitness said. The injured persons were transported to Staten Island North University Hospital.

According to hospital sources their injuries are not life threatening.

*Manipulation of accident not diagnostic of BMW (wrong lane accident):*

**Two injured in BMW (Toyota) head-on crash**

A car accident on Staten Island has left two persons injured, police said.

According to authorities, the crash happened around 10 pm on Sunday, when a BMW (Toyota) crossed over into the opposite lane on Highway 201. The driver lost control of the car and crashed into a car coming from the opposite

direction, police said. Officers who witnessed the accident said the car had been driving at a normal speed. “I saw the BMW (Toyota) car driving in the wrong direction on the highway; it felt like a scene from the movies. The car was driving straight towards oncoming traffic,” an eyewitness reported. The injured persons were transported to Staten Island North University Hospital. According to hospital sources their injuries are not life threatening.

The descriptions of “high-speed racing” and “a Formula 1 race” in the brand diagnostic accident condition could potentially be interpreted as a signal of high performance and thus likely had a positive influence on brand attitudes (attribute explanation). For this to be the case, these descriptions would need to be a positive performance signal for those identifying with any car brand (whether or not the accident is diagnostic of the brand) and similarly negative for those who do not identify with the brand. By varying the car brand involved in the accident to be either BMW or Toyota (control group), we can test for this alternative explanation. The design resulted in four versions of the newspaper article (scenario  $\times$  brand).

### **3.2 Procedure**

US-based members of the MTurk online panel participated in the survey for a nominal fee. The participants were randomly assigned to one condition in a 2 (type of accident: wrong lane vs. high-speed accident)  $\times$  2 (brand: BMW vs. Toyota)  $\times$  brand identification (measured) design.

All participants followed the same procedure. First, we measured participants’ attitude (“Is your impression of (brand name)...?” three scales anchored 1 = Bad to 7 = Good; 1 = Negative to 7 = Positive; and 1 = Unfavorable to 7 = Favorable,  $\alpha = .94$ ) to BMW, Toyota, and some filler brands (counterbalanced) and brand identification with the target brand

(BMW or Toyota, according to condition). Brand identification was measured with a two-step procedure adapted from Malär et al. (2011). First, participants were instructed to take some time to think about their own personalities. Next, they were told to think about human characteristics they associated with the brand. Then participants evaluated the extent to which they felt congruence between themselves and BMW and Toyota (“The personality of (brand name) is consistent with how I see myself,” and “The personality of (brand name) is a mirror image of me,” Spearman-Brown = .93) on 0-100 sliding scales anchored 0 = Disagree to 100 = Agree.

Since the data were collected on an online panel, we included Oppenheimer, Meyvis, and Davidenko’s (2009) instructional manipulation procedure to identify careless participants. After some unrelated filler tasks, respondents read a newspaper article about a BMW or Toyota car crash as described earlier. We manipulated the accident to be diagnostic (racing at high speed) or non-diagnostic (crossing over into the wrong lane) of BMW. None of the accident scenarios was diagnostic of Toyota, as demonstrated in the pretests.

Finally, we measured change in brand attitude (“To what degree does the article influence your impression of (brand name) to be...?”) on three 1-7 scales anchored 1 = Worse to 7 = Better; 1 = More negative to 7 = More positive; 1 = More unfavorable to 7 = More favorable,  $\alpha = .95$ ).

### **3.3 Results**

Two hundred and eighty-seven participants completed the survey. After we removed those who failed the instructional manipulation procedure (89 participants, 31 %), the final sample size was 198 participants ( $Age_{Mean} = 34.6$ , 61.6% females).

The failure rate on the instructional manipulation procedure was lower than what was detected in the original test of the procedure. In their two studies, Oppenheimer, Meyvis, and Davidenko (2009) reported failure rates of 46% and 35%, respectively. Similarly, recent



research has detected failure rates on the instructional manipulation procedure mostly between 20-40% on traditional, offline subject pools (Hauser & Schwarz, 2016). Hence, compared to extant research based on such subject pools, participants in the current study demonstrated satisfactory attentiveness and compliance with instructions.

We conducted multiple regression analysis to test our predictions. The analysis included change in attitude toward the brand after reading the newspaper article as a dependent measure, with brand diagnosticity (wrong lane accident = 0, high-speed accident = 1), brand identification (continuous variable) toward the focal brand, brand (Toyota = 0, BMW = 1), and their interactions as independent variables.

The three-way interaction (brand diagnosticity, brand identification, and brand) was significant ( $b = .021$ ,  $t(190) = 2.01$ ,  $p < .04$ ), also when controlling for the participants' initial brand attitude ( $b = .023$ ,  $t(189) = 2.32$ ,  $p < .03$ ). Separate analysis of the BMW condition and the Toyota condition yielded the expected results.

In the BMW condition, the interaction between brand diagnosticity and brand identification was significant ( $b = .020$ ,  $t(92) = 2.62$ ,  $p < .01$ ). The interaction is illustrated in Figure 1.

- - Insert Figure 1 and 2 about here - -

Analysis of the interaction showed that the brand identification slope was significant and positive when the accident was brand diagnostic ( $b = .015$ ,  $t(92) = 3.02$ ,  $p < .01$ ), while the slope was not significant when the accident was not brand diagnostic ( $b = -.004$ ,  $t(92) = -.77$ ,  $p = .44$ ). The Johnson-Neyman technique (Spiller et al., 2012) revealed a negative effect of brand diagnosticity when brand identification was 10.56 or lower ( $b_{JN} = -.50$ ,  $t(92) = -1.99$ ,  $p = .05$ ), and positive when brand identification was 76.51 ( $b_{JN} = .80$ ,  $t(92) = 1.99$ ,  $p = .05$ ) or higher on a 0-100 sliding scale. Of importance for Hypothesis 1, analysis of the marginal effects showed that change in brand attitude was significantly lower than 4 (the

scale's midpoint, i.e., no change in brand attitude) for levels of brand identification below 21.94 on the 0-100 sliding scale ( $p=.05$ ) in the diagnostic condition. Similarly, in relevance to Hypothesis 2, change in brand attitude was significantly higher than 4 (the scale's midpoint, i.e., no change in brand attitude) for levels of brand identification above 79.26 on the 0-100 sliding scale ( $p=.05$ ) in the diagnostic condition.

As expected, the interaction between brand identification and accident type was not significant in the Toyota condition ( $b = -.002$ ,  $t(98) = -.238$ ,  $p = .81$ , figure 2). Together, the results of Study 1 support Hypotheses 1 and 2.

### **3.4 Discussion**

The results demonstrate the hypothesized interaction between brand diagnosticity and brand identification on consumer response to negative press about user-generated accidents.

For consumers who do not identify with the brand, a brand diagnostic accident provides negative and relevant brand information and leads to reduced brand attitudes. Consumers who identify with the brand respond diametrically differently. The results show that brand identifiers evaluated the brand more positively after being exposed to negative press about a diagnostic user accident.

Our theory suggests that identity plays a key role in the positive shift in brand evaluations following negative press about brand diagnostic user accidents. We theorize that high brand identifiers increase brand evaluations to maintain self-integrity. If this is the case, the self-affirmation framework suggests that giving high brand identifiers the opportunity to self-affirm would alleviate the need for overcompensation in subsequent brand evaluations. Study 2 was designed to test the identity account directly.

## **4 STUDY 2**

Study 2 was designed to test our suggested identity explanation and the theory in

another context. We used all-purpose detergents as the product category. To investigate the identity account, we included self-affirmation as a factor. In a situation where an individual experiences a threat to the self, self-affirmation provides an opportunity to restore the self, and thus, self-protective reactions to threatening circumstances are mitigated (Steele, 1988). In our study, if high brand identifiers experience brand diagnostic accidents as threats to the self, allowing them to self-affirm should restore the self and alleviate the need to overcompensate through increased brand evaluations.

#### 4.1 Stimuli Development

We created a fictitious news report to manipulate a user accident diagnostic of a strong, powerful, and tough brand of cleaning products. The report stated that a maintenance worker at The White House used a too high concentration of a specific brand of cleaning product, resulting in severe damage to the old historical floor in the State Dining Hall.

We pretested different brands of cleaning products, using American respondents on an online web panel (MTurk,  $n = 101$ ). The results showed that the respondents had similarly positive attitudes toward the brands Mr. Clean ( $M_{\text{Attitude}} = 5.67$ ) and Lysol ( $M_{\text{Attitude}} = 5.83$ ,  $t(101) = -1.36$ ,  $p = .18$ ). However, Mr. Clean was perceived as significantly more “strong” ( $M_{\text{Mr. Clean}} = 5.94$  vs.  $M_{\text{Lysol}} = 5.08$ ,  $p < .01$ ), “powerful” ( $M_{\text{Mr. Clean}} = 5.83$  vs.  $M_{\text{Lysol}} = 5.09$ ,  $p < .01$ ), and “tough” ( $M_{\text{Mr. Clean}} = 5.83$  vs.  $M_{\text{Lysol}} = 4.93$ ,  $p < .01$ ) compared to Lysol. Hence, we used Mr. Clean in the brand diagnosticity condition and Lysol in the non-brand diagnosticity condition.

##### **Historical White House floors damaged by Mr. Clean (*Lysol*)**

The old wooden floor in the White House’s State Dining Room has been severely damaged after a cleaning mistake. It is unclear whether the historical floor can be saved.

A maintenance employee at the White House admitted to having used five times the recommended dosage of Mr. Clean (*Lysol*) when washing the floor. “The high concentration of the powerful cleaner has damaged the wood structures,” an expert said. The result is that the finish is tainted and now has a lackluster, uneven appearance. “Clearly, it was a mistake to use such a high concentration of the cleaner. We are currently investigating different methods to try to repair and save the old, historically important floor,” White House Press Secretary Josh Earnest said.

## 4.2 Procedure

US-based members of the MTurk online panel participated in the survey for a nominal fee. The participants were randomly assigned to one condition in a 2 (brand diagnosticity: non-diagnostic accident vs. diagnostic accident)  $\times$  brand identification (measured)  $\times$  2 (self-affirmation: no self-affirmation vs. self-affirmation) design. The general procedure was similar to that of Study 1, with the addition of a self-affirmation manipulation. For participants in the non-diagnostic accident condition, Lysol was the focal brand used in the manipulation scenario and for the brand identification measurement. Similarly, for the participants in the diagnostic accident condition, Mr. Clean was the focal brand used in the manipulation scenario and for the brand identification measurement. We measured pre-brand attitude and identification with Mr. Clean, Lysol, and some other filler brands (Clorox, Pine-Sol, 409) as in Study 1.

As the first part of the self-affirmation manipulation, participants were asked to rank order 11 traits and values based on their importance to the participants following Steele’s procedure (1988). We also included the instructional manipulation procedure (Oppenheimer, Meyvis, & Davidenko, 2009) to identify careless participants who did not read the instructions. Participants were then randomly assigned to either the brand diagnosticity

condition or the non-brand diagnosticity condition, and read the respective news report. After reading the news report, the self-affirmation manipulation was administered in accordance with previous research (e.g., Steele, 1988). In the self-affirmation condition, participants were asked to write about why their first ranked value was important to them. They were also asked to describe a time in their life when that particular value was important to them and made them feel good about themselves. In the no self-affirmation condition, participants were asked to write about why their ninth-ranked value might be important for some people (the average American). Finally, we measured change in brand attitude as in Study 1, and administered a manipulation check (“To what degree would you say the incident described in the article... Could have happened with the use of any cleaner, not just (brand name) (Reversed), and Confirms my beliefs about the power of (brand name),” measured on scales anchored 1 = Disagree to 7 = Agree).

### 4.3 Results

Seven hundred and four participants completed the survey. After we removed those participants who did not read the instructions and questions properly (31 participants (4.4 %) failed the instructional manipulation procedure), the final sample size was 673 participants ( $Age_{Mean} = 36.09$ , 48.3% females).

The manipulation check showed a small, yet significant, difference. The result indicates that the accident scenario was perceived as more diagnostic of Mr. Clean compared to Lysol ( $M_{Mr. Clean} = 3.4$ ,  $M_{Lysol} = 3.2$ ,  $t(671) = 4.56$ ,  $p < .04$ ).

We conducted multiple regression analysis to test our predictions. The analysis included change in brand attitude after reading the newspaper article as a dependent measure, with brand diagnosticity (non-diagnostic = 0, diagnostic = 1), brand identification (continuous variable), self-affirmation (no-affirmation = 0, self-affirmation = 1), and their interactions as independent variables.

The three-way interaction (brand diagnosticity, brand identification, and self-affirmation) was significant ( $b = -.019$ ,  $t(665) = -3.06$ ,  $p < .01$ ), also when controlling for the participants' initial brand attitude ( $b = -.019$ ,  $t(664) = -3.12$ ,  $p < .01$ ). Separate analysis of the no self-affirmation condition and the self-affirmation condition yielded the expected results.

In the no self-affirmation condition, the interaction between diagnosticity and brand identification was significant ( $b = .014$ ,  $t(341) = 3.33$ ,  $p < .01$ , figure 3). Analysis of the interaction showed that the slope of brand identification was significant and positive when the accident was diagnostic of the brand ( $b = .016$ ,  $t(341) = 5.21$ ,  $p < .01$ ), while the slope was not significant when the accident was not diagnostic ( $b = .001$ ,  $t(341) = .49$ ,  $p = .62$ ). The Johnson-Neyman technique (Spiller et al. 2012) revealed a negative effect of diagnosticity when brand identification was 26.92 or lower ( $b_{JN} = -.30$ ,  $t(341) = -1.97$ ,  $p = .05$ ), and positive when brand identification was 66.88 ( $b_{JN} = .28$ ,  $t(341) = 1.97$ ,  $p = .05$ ) or higher on a 0-100 sliding scale. Of importance for Hypothesis 1, analysis of the marginal effects showed that change in brand attitude was significantly lower than 4 (the scale's midpoint, i.e., no change in brand attitude) for levels of brand identification below 63.95 on the 0-100 sliding scale ( $p = .05$ ) in the diagnostic condition. Similarly, in relevance to Hypothesis 2, change in brand attitude was significantly higher than 4 (the scale's midpoint, i.e., no change in brand attitude) for levels of brand identification above 95.89 on the 0-100 sliding scale ( $p = .05$ ) in the diagnostic condition.

As expected, the interaction between diagnosticity and brand identification was not significant in the self-affirmation condition ( $b = -.005$ ,  $t(324) = -1.03$ ,  $p = .30$ , Figure 4).

- - Insert Figure 3 and 4 about here - -

To bolster confidence in the proposed identity process (Hypothesis 3), we also analyzed the effect of brand identification (continuous variable), self-affirmation (no

affirmation = 0 vs. self-affirmation = 1), and their interaction, on change in brand attitude after reading the newspaper article within the diagnostic condition (i.e., only including the participants in the diagnostic condition). The results showed a positive effect of brand identification ( $b = .013$ ,  $t(335) = 4.00$ ,  $p < .01$ ), while the effect of self-affirmation did not reach significance at the 5%-level ( $b = .46$ ,  $t(335) = 1.84$ ,  $p = .07$ ). The interaction between brand identification and self-affirmation was significant ( $b = -.001$ ,  $t(335) = -2.22$ ,  $p < .03$ ) (Figure 5).

- - Insert Figure 5 about here - -

Analysis of the interaction showed that the slope of brand identification was significant and positive when participants did not self-affirm ( $b = .013$ ,  $t(335) = 4.00$ ,  $p < .01$ ), while the slope was not significant when participants did self-affirm ( $b = .003$ ,  $t(335) = 1.04$ ,  $p = .30$ ). Of importance to Hypothesis 3, the Johnson-Neyman technique (Spiller et al. 2012) revealed a negative effect of self-affirmation when brand identification was 90.59 or higher ( $b_{JN} = -.42$ ,  $t(335) = 1.97$ ,  $p = .05$ ) on a 0-100 sliding scale. In other words, the results show that when exposed to a brand diagnostic user accident, the opportunity to self-affirm (vs. no-affirmation) leads to more negative brand evaluation for brand identifiers.

In Study 1 we rejected an alternative explanation suggesting the positive shift in brand evaluations was a performance signal by demonstrating that the effect holds only when the accident is diagnostic for the brand. In Study 2, one could speculate that the performance signal has different value for people identifying with Mr. Clean than people identifying with Lysol. It might be that consumers who identify with Mr. Clean view attributes such as “strong,” “powerful,” and “tough” as more important than those who identify with Lysol. An alternative explanation is again that the accident signals high performance on important attributes. Following an attribute explanation, this would mean that consumers who value the attributes “strong,” “powerful,” and “tough” in a detergent increase their evaluation of any

brand demonstrating high performance on these attributes. If this is the case, consumers should also like Lysol more if they are exposed to the same performance signal.

To test this alternative explanation directly, we ran regressions with identification with Mr. Clean as the independent variable on change in attitude toward Lysol and change in attitude toward Mr. Clean as dependent variables. To support an attribute explanation, identification with Mr. Clean should positively impact evaluations of both Lysol and Mr. Clean after being exposed to the power diagnostic user accident involving the respective brands. The results showed that the level of identification with Mr. Clean did not influence change in attitude towards Lysol ( $b = -.001, t(174) = -.33, p = .74$ ). In line with the previously presented findings, a higher level of identification with Mr. Clean increased attitudes toward Mr. Clean ( $b = .016, t(167) = 4.76, p < .01$ ). These results do not support the attribute explanation.

#### **4.4 Discussion**

Study 2 demonstrates that brand identification moderates the effect of brand diagnostic accidents also in a fast-moving consumer goods context, providing additional support for Hypotheses 1 and 2. The results also support the identity explanation in Hypothesis 3. Brand identifiers overcompensated in their brand judgments when they were exposed to negative press about a brand diagnostic user accident. This is in line with extant research showing that people are prone to compensatory convictions about value-relevant topics when the self is threatened.

## **5 GENERAL DISCUSSION**

Previous research has investigated transgressions and brand failures, such as product-harm crises, service failures, and brand extension failures. We investigate a different type of



negative brand press: user accidents. According to attribution theory (Folkes, 1984), the consequences of a negative press depend on whether consumers attribute blame to the brand or external factors beyond the control of the brand. The current research demonstrates that negative press can spill over and affect the brand, even if the brand is not actively involved and clearly not to blame for the negative incident. However, our results show that brands do not always suffer from being “guilty by association.” Brands are only implicated if the negative press matches consumers’ existing beliefs and associations about the brand, i.e., it is diagnostic of the brand.

The current research contributes to a contingency-based view of negative brand publicity. Previous literature has demonstrated that the consequences of brand transgressions are contingent on consumers’ prior brand attitude certainty and the degree to which the crisis is relevant to core brand associations (Dawar & Lei, 2009; Pullig, Netemeyer, & Biswas, 2006). The current research shows that the interplay between consumers’ brand identification and the degree to which the user accident matches the brand stereotype (i.e., is relevant to core brand associations), influences how user accidents impact the brand. The results reveal that negative information relevant to core brand associations are not always negative; in fact, it can lead to more positive brand evaluations in some segments.

We find that if a user accident does not match consumers’ beliefs and associations linked to the brand (not brand diagnostic), negative press about the user accident is not perceived as brand-relevant information. The results show that a non-brand diagnostic user accident does not influence brand evaluations. In accordance with the attribution of the blame model, as the brand is not perceived as directly culpable and hardly to blame for the accident, consumers do not incorporate the negative information in their brand judgments.

In situations where the negative press is brand diagnostic, the brand is implicated, despite the fact that it is not culpable. However, the consequences are not straightforward,

and we find that accidents sometimes can be good for the brand. In both of our studies we find an interaction between brand diagnosticity and brand identification.

For consumers who do not identify with the brand, a diagnostic user accident provides negative and relevant brand information that is congruent with existing associations and beliefs about the brand. Such consumers respond negatively and decrease their brand evaluations in response to negative press about brand diagnostic user accidents.

For consumers who identify with the brand, however, a diagnostic user accident is not only brand-relevant but also self-relevant. In this sense, negative press about user accidents represent a threat to brand perceptions and, thus, also to the self. To cope with the threat and maintain a positive self-view, brand identifiers are prone to compensatory convictions and overcompensation in brand judgments. Hence, those who rely on the brand in their identity projects feel a need to restore positive brand and self-views and, thus, increase brand evaluations.

According to self-affirmation theory, people can engage in fluid compensation processes and draw upon alternative sources of self-integrity by affirming some unrelated aspect of the self (Steele, 1988). Hence, if people get the opportunity to restore the self, self-protecting reactions to threats tend to diminish their effect. Based on this logic, we demonstrated the role of self and brand identification by allowing participants to restore the self through a self-affirmation task. When brand identifiers completed a self-affirmation task, the self-protective response of overcompensation in brand judgment diminished, while it did not impact the brand judgment of those who did not identify with the brand.

Our findings are contingent on a match between brand associations and characteristics of the accident. Study 1 shows that the interaction between a high-speed racing car accident and brand identification only holds when the car brand involved in the accident is strongly associated with relevant associations evoked by the accident (BMW) and not when the car

brand evokes other associations (Toyota). The results highlight the importance of consumer identity and defensive responses, as opposed to other explanatory models such as brand attitude and commitment (e.g., Ahluwalia, Burnkrant, & Unnava, 2000).

### **5.1 Managerial Implications**

This research shows how brands can also be affected when they are not responsible and merely implicated in negative events caused by brand users. Examples of consumers' incompetent, reckless, or indecent brand usage are not infrequent, and include car accidents, health problems caused by overdoses of energy drinks, and gun brands frequently used in criminal activity. Sharing in social media increases the reach of unfortunate brand usage. Consequently, brand managers should monitor and potentially respond to these types of brand-related events.

As shown by this research, the actual impact of such user accidents on the brand depends on the incident's brand diagnosticity and the pre-existing consumer-brand relationships. The first step is therefore to assess how diagnostic of the brand the negative incident is perceived to be. If the incident is not seen as diagnostic of the brand, exposure typically has little impact, as no mental linkages between the negative incident and the brand exist.

If the incident is diagnostic of the brand, brand perceptions will be impacted, and managers must consider how to respond. The ideal response depends on the consumer-brand relationship. Consumers who do not identify with the brand might react negatively to diagnostic accidents. Firms should therefore try to stop news about such accidents reaching these consumers and downplay the involvement of the brand. Consumers who identify with the brand do not react negatively to diagnostic accidents, and consumers very close to the brand even react positively to it. While we cannot recommend promoting news of such accidents to these groups, at least they do not need to be actively screened from these types of

incidents. If for practical reasons it is difficult to communicate based on the consumers' connections to the brand, the overall response should be based on the estimated size and importance of the different groups.

## **5.2 Future Research**

Future research could study the effects of negative brand information that matches brand image in other contexts with varying degrees of brand culpability. Will all brand information that matches and confirms existing brand associations have favorable consequences for high brand identifiers, even if the brand is fully or partial responsible? And even if there are victims that are negatively impacted (Marcus & Goodman, 1991)?

Another avenue for future research is to investigate the impact of the characteristics of the specific user involved in the negative incident. We speculate that not only does the behavior leading to the incident influence response to user accidents, but also the characteristics of the user responsible. Further research could investigate the effects of whether the user causing the accident is a typical exemplar of an in-group, out-group, or even a dissociative out-group for the observing consumer.

Knowing that consumers respond differently to negative brand exposure depending on felt brand bonds, future research might also investigate the effectiveness of different response strategies across different individual consumer characteristics.

## **6 CONCLUSION**

This research has found that exposure to accidents caused by users affects consumers' brand evaluations. The effect depends on how diagnostic the user accident is, and on pre-existing brand relationships. Low brand identifiers decrease their brand liking, and high brand identifiers increase their brand liking, but only when the accident is brand diagnostic.



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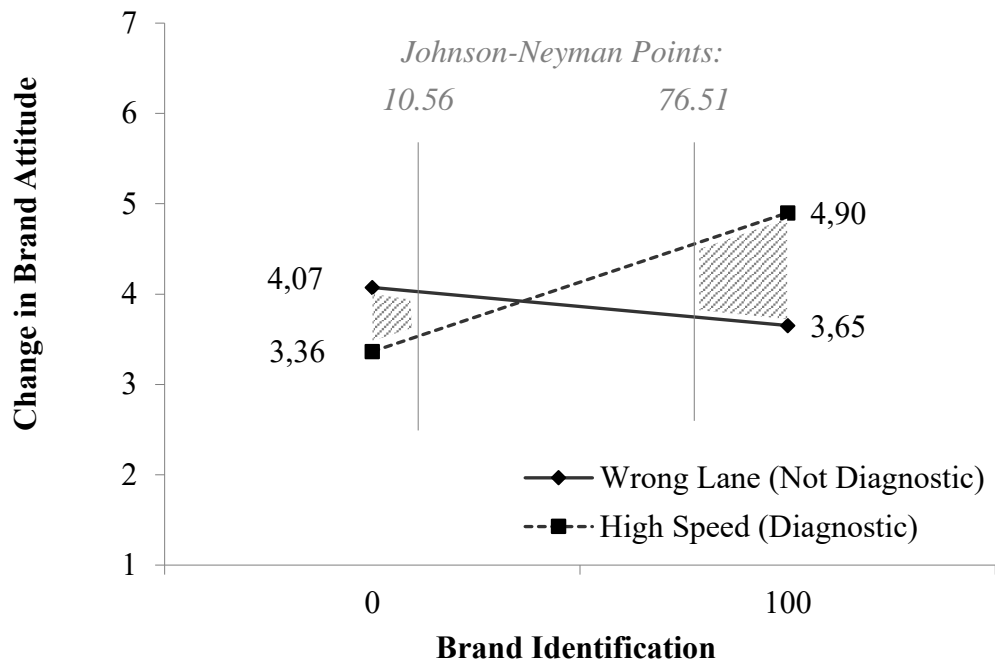
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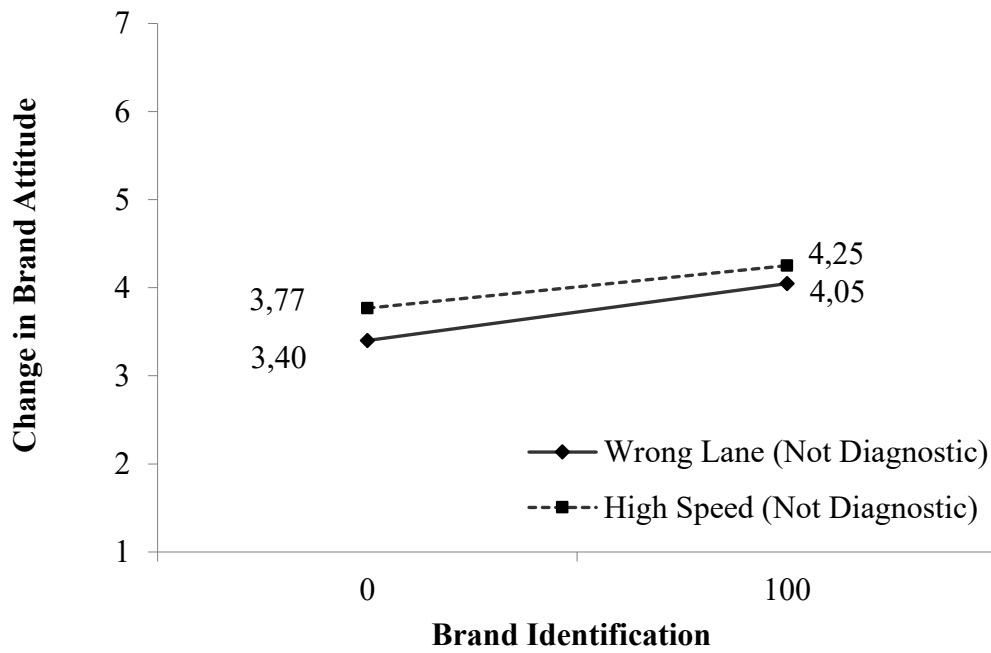
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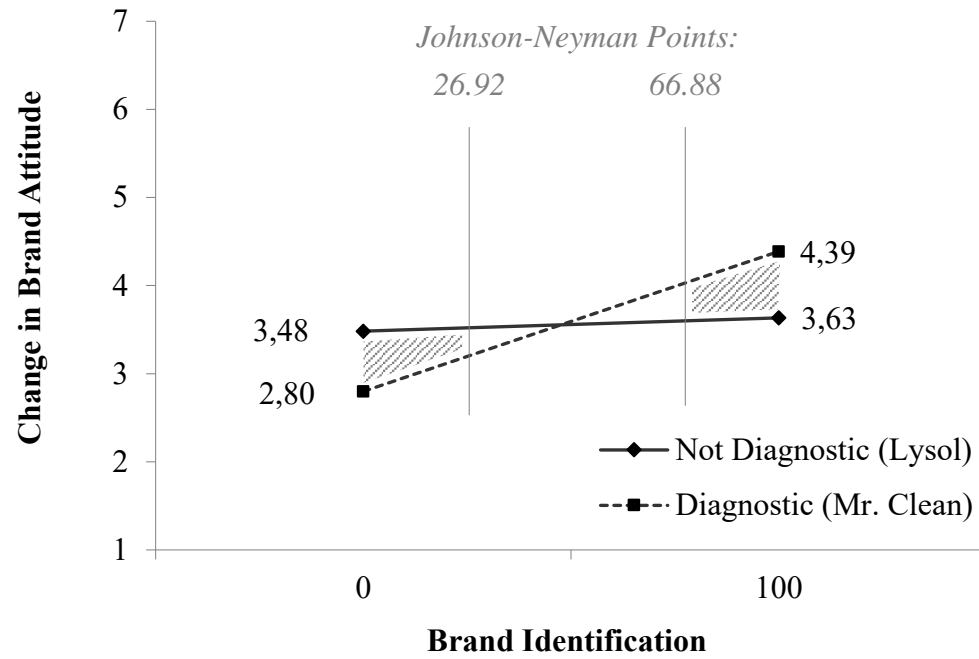
**Table 1: Literature review, relevant studies**

Reference	Type of brand failure	Independent variables	Moderators	Dependent variables	Key finding
Ahluwalia et al. (2000)	Negative product evaluation	Negative/positive information	Brand commitment	Attitude Attitude ambivalence Counterarguments Diagnosticity of information	Consumers committed to the brand react less negatively when exposed to negative brand information.
Dawar and Lei 2009	Product failure	Crisis relevance	Brand familiarity	Brand attitude	For consumers familiar with the brand, crises that are more brand relevant have a more negative effect
Lisjak, Lee and Garnder (2012)	Negative editorial	Self-activation	Implicit self-esteem Self-brand connection	Change in brand attitude	Among participants with high SBC whose self-concept was activated, those with high implicit self-esteem became more positive after reading negative information about a firm
Cheng, Barnett White, and Nguyen Chaplin (2011)	Negative product evaluation	Product quality	Self-brand connection Self-affirmation	Self-evaluation Brand evaluation Self-brand connection	Negative information gave participants with high SBC lower self-evaluations. After completing a self-affirmation task, participants with high SBC lowered their brand evaluations and reduced their SBC.
The current research	<i>User accident</i>	<i>Brand diagnosticity</i>	Brand identification Self-affirmation	Change in brand attitude	<i>We expect that for consumers who identify with the brand, a brand-diagnostic accident leads to higher evaluations</i>

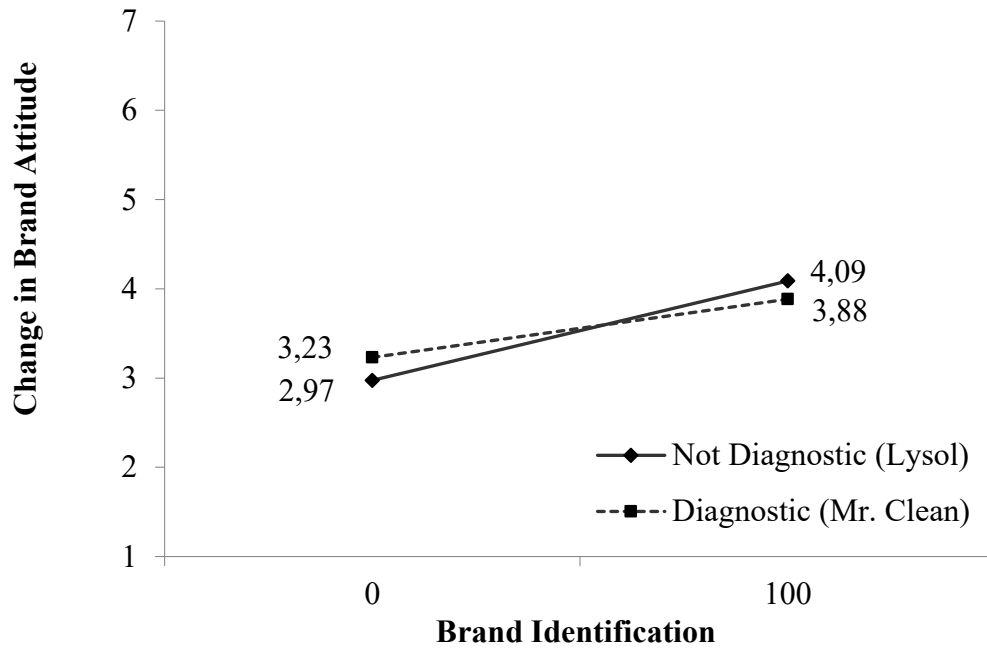
**Figure 1: BMW - Brand Identification × Accident Type Interaction (Study 1)**

**Figure 2: TOYOTA - Brand Identification × Accident Type Interaction (Study 1)**

**Figure 3: NO SELF-AFFIRMATION: Brand Identification × Brand Diagnosticity Interaction (Study 2)**



**Figure 4: SELF-AFFIRMATION: Brand Identification × Brand Diagnosticity Interaction (Study 2)**





**Figure 5: DIAGNOSTIC CONDITION: Brand Identification × Self-Affirmation Interaction (Study 2)**

