

## When does negative brand publicity hurt? The moderating influence of analytic versus holistic thinking

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### Abstract

Negative publicity can diminish positive consumer perceptions of a brand. We explore the impact of processing style on mitigating the effects of negative publicity. We hypothesize that holistic thinkers are less susceptible to negative publicity information than are analytic thinkers. Holistic thinkers are more likely to consider external context-based explanations for the negative publicity, resulting in little or no revision of beliefs about the parent brand. Analytic thinkers, in contrast, are less likely to consider contextual factors, attributing negative information to the parent brand and updating their brand beliefs accordingly. Across three studies, we find support for our predictions.

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Consumers today have access to a wide variety of outlets for product information, including traditional media and new media, such as online news forums, webcasts, and podcasts. These outlets have provided firms with new opportunities for marketing their products and services, but have also made it more difficult for firms to restrict or manage negative publicity about their products and services. Failed automobile safety tests, manufacturing defects in medical devices, computer chips that spark fires in laptop computers, and toxic ingredients in brands of dog food are just a few recent examples of negative publicity that have reached billions of consumers around the world.

How harmful is negative publicity? The working assumption is that consumers pay attention to negative publicity and change their attitudes accordingly. This notion is supported by research showing that individuals place more weight on negative than positive information in forming judgments (Eagly & Chaiken, 1993). And, there is certainly no shortage of real world examples to buttress this conclusion. For example, the well-publicized sudden acceleration problems in the Audi 5000 a decade ago led to decreased consumer preference and purchase

for associated Audi models for many years (Sullivan, 1990). Just recently, the negative publicity surrounding toxic ingredients in dog food produced by Chinese suppliers has taken a toll, with sales of major dog food brands plummeting as a result (Pet food crisis rocks industry, 2007). Not even denials or direct refutations of the negative publicity can stem the negative impact (Griffin, Babin, & Attaway, 1991; Menon, Jewell, & Unnava, 1999; Tybout, Calder, & Sternthal, 1981).

However, negative publicity is not always harmful. Consumers with strong brand attitudes are unlikely to be affected by negative brand publicity. These consumers defend their strong attitudes towards the brand, rallying to the brand's defense by elaborating pro-brand sentiments or mounting counterarguments against the negative publicity, thereby neutralizing its potential negative impact (Ahluwalia, Burnkrant, & Unnava, 2000; Dawar & Pillutla, 2000; Herr, Kardes, & Kim, 1991; Pullig, Netemeyer, & Biswas, 2006). Firms can also encourage a focus on pro-brand sentiments by shoring up positive associations to the brand, which diverts attention away from the negative publicity. Commercials, sponsorships, and corporate social responsibility programs are a but a few of the ways that firms can encourage consumers to elaborate on pro-brand sentiments, reduce the salience of negative publicity, and promote a thought process that places less weight on negative publicity (Klein & Dawar, 2004; Okada & Reibstein, 1998; Smith & Vogt, 1995; Tybout, Calder, & Sternthal, 1981; Weinberger, Allen, & Dillion, 1981).

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A surprising omission from this research is the role of contextual information in diverting attention away from negative publicity. Negative publicity does not occur in a vacuum and contextual factors can be important to consumers as they think about the cause of a negative incident, such as a product failure or quality problem (Folkes, 1984; Folkes & Kotsos, 1986). For example, consumers could attribute the cause of the Firestone 500 tire failures to improper tire inflation or improper tire mounting on the affected Ford Explorers, which are contextual factors that divert blame from the Firestone brand. By considering contextual factors, consumers are more likely to attribute blame to sources outside the Firestone company (external attribution) than sources inside the Firestone company (internal attribution). These attribution processes are well known, and external attributions have been found to decrease the impact of negative publicity in recent research (Klein & Dawar, 2004).

Missing, however, is an understanding of when contextual factors will be considered by consumers faced with negative publicity. The process is not an automatic one, as evidenced by the general tendency of individuals to make internal attributions, and ignore contexts, when reasoning about the causes of other people's behavior (Gilbert, Pelham, & Krull, 1988). In this article, we propose that general styles of thinking dictate the extent to which consumers will consider contextual factors when drawing attributions. Psychologists have found that individuals with different styles of thinking—analytic versus holistic—vary in the importance they place on contextual factors in cognitions. Holistic thinking involves an orientation to the context or field as a whole, whereas analytic thinking involves a detachment of the object from its context and a focus on attributes of the object (Nisbett, Peng, Choi, & Norenzayan, 2001). As such, holistic thinkers are more attuned to external contextual factors as a determinant of behavior, whereas analytic thinkers ignore the context and focus on the object or event itself (Miller, 1984; Choi, Nisbett, & Norenzayan, 1999). When exposed to negative publicity about a familiar brand, we predict that holistic thinkers will be more likely to consider contextual factors, more likely to attribute negative incidents to external causes, and less likely to change their favorable attitudes and beliefs toward the brand. As a result, holistic thinkers will be less susceptible to the harmful effects of negative publicity.

We test these predictions in a series of three studies. In Study 1, we demonstrate that analytic versus holistic styles of thinking influence the consideration of contextual factors and brand evaluations in response to negative publicity. Holistic thinkers are unaffected by negative publicity, whereas analytic thinkers revise their prior brand beliefs in an unfavorable direction. In Study 2, we manipulate the salience of contextual factors, with the expectation that increasing the salience of these factors should encourage analytic thinkers to respond more like holistic thinkers when exposed to negative publicity. We find support for this prediction. When contextual factors are made highly salient, analytic thinkers respond to negative publicity in a manner similar to holistic thinkers, incorporating contextual factors into attributions and maintaining their positive brand evaluations. These findings provide evidence of the mechanism

responsible for differences in styles of thinking, which we add to in a third study. In Study 3, we manipulate cognitive load during the task, expecting that an increase in cognitive load should discourage holistic thinkers from considering contextual factors, thereby making holistic thinkers respond more like analytic thinkers. Consistent with this prediction, we find that holistic thinkers consider contextual factors under a low but not a high cognitive load; under a high cognitive load, holistic thinkers behave more like analytic thinkers, making fewer external attributions and revising their brand attitudes and beliefs in response to negative publicity.

Our findings contribute to a better understanding of the effects of negative publicity on consumer attitudes and beliefs. Prior research has found several factors that mitigate the effects of negative publicity, such as brand commitment and positive brand communication programs. We find that negative publicity is also mitigated by general processing styles that consumers bring to the situation, with the harmful effects of such publicity less evident among holistic versus analytic thinkers. Our results also add to a better understanding of the antecedents of analytic and holistic thinking among consumers. Recent research in psychology has focused on styles of thinking as reflective of cultural differences between East and West. Our findings show that styles of thinking can also reside at an individual level, which can then be influenced by contextual factors such as the saliency of contextual cues and cognitive load. Manipulating these antecedents can promote holistic thinking, which encourages consumers to make external attributions that deflect blame away from brands and protect the brand from negative publicity.

## Conceptual background

### *Analytic and holistic styles of thinking*

Nisbett and his colleagues propose that an individual's social environment promotes certain cognitive processes more than others (Nisbett et al., 2001). Individuals embedded in many social relations have beliefs about focusing on the field and paying attention to relationships between objects. In contrast, individuals with fewer social relations have beliefs that the world is discrete and discontinuous and that an object's behavior can be predicted using rules and properties. In this way, individuals become holistic or analytic thinkers. *Holistic thinking* is defined as "involving an orientation to the context or field as a whole, including attention to relationships between a focal object and the field, and a preference for explaining and predicting events on the basis of such relationships" (Nisbett et al., 2001, p. 293). *Analytic thought* "involves a detachment of the object from its context, a tendency to focus on attributes of the object to assign it to categories, and a preference for using rules about the categories to explain and predict the object's behavior" (Nisbett et al., 2001, p. 293).

A substantial body of research supports this view. Analytic thinkers have been shown to ignore contextual determinants of behavior and consistently assign causality of an event to the object or the individual (Choi et al., 1999; Miller, 1984). In

contrast, holistic thinkers, who tend to focus on the field, also see external contextual influences as important determinants of behavior. For example, analytic thinkers explain an acquaintance's behavior, good or bad, mainly in terms of corresponding personality traits; holistic thinkers explain these behaviors in terms of social roles, obligations, and other contextual factors (Miller, 1984; Shweder & Bourne, 1982). Interestingly, these differences have also been reflected in newspaper articles about murders written by analytic and holistic reporters (Morris & Peng, 1994). Whereas analytic reporters focus more on personal dispositions of the murderer, holistic reporters focus more on situational factors surrounding the murderer. In the area of student achievement, holistic thinkers believe that effort (a contextual factor) is most important, unlike analytic thinkers who believe that internal, natural abilities of the student have greater influence (Stevenson & Stigler, 1992). Similar effects have been observed in interpreting non-human behavior (Morris & Peng, 1994; Peng & Nisbett, 1997). For example, Morris and Peng (1994) showed participants pictures of fish moving in relation to each other. Analytic thinkers viewed the behavior of individual fish as being caused by internal factors, whereas holistic thinkers viewed the behavior of an individual fish as being caused by contextual factors (e.g., movements of other fishes).

Summarizing this research, Choi et al. (1999) conclude that differences in causal explanations of events mainly occur due to the greater contextual focus among holistic thinkers, compared to analytic thinkers, not to differences in internal object-based explanations. For instance, a study conducted by Norenzayan, Choi, and Nisbett (2002) found that self-report measures of implicit theories revealed no differences between analytic and holistic thinkers for an internal object-based theory, but showed stronger support for an external context-based theory among holistic thinkers. This suggests that holistic thinkers use internal object-based explanations as well as external context-based explanations, whereas analytic thinkers tend to rely on internal object-based explanations exclusively.

Most of the research described above examines styles of thinking in a cross-cultural context, comparing individuals from Western cultures (e.g., U.S.) with those from Eastern cultures (e.g., Korea, China, India). In fact, the analytic-holistic framework was originally developed to provide an explanation for cultural differences, based on the idea that different cultures have different social environments that promote certain styles of thinking. Individuals in East Asian societies, who are embedded in many social relations, tend to be holistic thinkers, while individuals in Western societies, with fewer social relations, tend to be analytic thinkers. However, it is also the case that social orientations vary within cultures, and recent research acknowledges within-culture differences in analytic and holistic thinking (Choi, Koo, & Choi, 2007). This is consistent with other streams of cross-cultural research, such as self-construal and individual-collectivism, which find that cross-cultural differences also occur within cultures (Lee, Aaker, & Gardner, 2000; Mandel, 2003). In our research, we adopt a within-culture focus for examining the effects of analytic and holistic processing on consumer response to negative brand publicity, to which we now turn.

### *Styles of thinking and negative brand publicity*

How do consumers respond to negative publicity about a brand they hold in high regard? Prior research suggests that negative events, such as a product failure or negative publicity, often spur consumers into thinking about the causes of the behavior (Klein & Dawar, 2004; Wong & Weiner, 1981). For example, when a poor quality product is launched, consumers might attribute it to poor management practices, or low quality parts supplied by a supplier, or even labor problems plaguing the entire industry. According to Weiner (1985), the locus of attributions can be internal or external. If the locus is internal, people tend to attribute blame to the company. If the locus is external, people assign blame to external factors. Aside from enabling consumers to predict and control their environment, these attributions also determine consumer satisfaction, emotion (e.g., anger), behavior (e.g., demanding refunds, complaining), and brand evaluations (Folkes, 1984; Folkes & Kotsos, 1986; Klein & Dawar, 2004).

Different styles of thinking are likely to influence the way consumers interpret a brand's actions, especially actions that are negative in nature (Klein & Dawar, 2004). Holistic thinkers are more likely to consider external context-based factors in addition to internal factors, whereas analytic thinkers are likely to restrict their focus to internal object-based explanations, which implicate the parent brand. For example, in the case of a low quality product, holistic thinkers might consider several external context-based explanations for the quality problem, including poor quality components delivered by an outside supplier, in addition to internal object-based factors. An analytic thinker would tend to rely exclusively on internal object-based explanations for the quality problems, such as the desire to cut costs or outdated manufacturing facilities.

Once exposed to negative brand publicity, analytic thinkers, who focus on internal object-based explanations, are more likely to revise their brand evaluations in a negative manner. Because these explanations involve inferences about the brand, which are often negative in nature, these consumers are likely to revise their brand attitudes and beliefs in a negative direction. In contrast, a revision of brand evaluations is less likely for holistic thinkers, who consider more external context-based explanations. Because external context-based explanations divert blame from the parent brand, these consumers are less likely to revise their brand attitudes and beliefs on the basis of the negative publicity. Summarizing our discussion, we forward the following hypotheses:

**H1.** Styles of thinking influence the *explanations* consumers generate for negative brand publicity. Specifically, holistic thinkers consider more external context-based explanations than do analytic thinkers.

**H2.** Styles of thinking influence the *brand evaluations* resulting from negative brand publicity. Specifically, brand evaluations of holistic thinkers remain unchanged, whereas those of analytic thinkers decline.

## Study 1

### Sample and design

Our predictions were tested in a 2 (style of thinking: analytic, holistic) × 2 (time: pre-exposure, post-exposure) design. Forty-four students from a southern university participated in the study at two points in time, before and after exposure to the negative brand publicity. Analytic and holistic thinkers were identified using a scale that asks respondents to agree or disagree (1 = *strongly disagree*; 7 = *strongly agree*) with a set of 10 statements, such as “Everything in the universe is somehow related to each other” and “The whole is greater than the sum of its parts” (Choi et al., 2003). Responses to all ten statements were averaged and a median split (median = 5.33) was used to identify analytic and holistic thinkers.

### Stimuli

Mercedes-Benz was identified as a suitable brand based on a pre-test ( $n=45$ ), indicating the brand to be one with a high degree of brand familiarity ( $M=3.40$  on a 4-point scale), favorable brand attitudes ( $M=6.06$  on a 7-point scale) and strong brand beliefs related to prestige ( $M=6.40$ ), expensive ( $M=6.71$ ), and high quality ( $M=6.40$ ). Brand beliefs were identified on the basis of a pretest that asked participants to list any positive or negative thoughts that come to their mind when they think of Mercedes-Benz. The negative publicity information was delivered in the text of a press release:

Stuttgart, Germany—(PR NEWSWIRE) — Nov. 15—Today Helmut Freisen, Chairman and CEO, Mercedes-Benz, announced that Mercedes-Benz will launch a new automobile line, named Ultraline by Mercedes, which will include a 2-door and 4-door sedan. Shipments will begin on May 1, 2005. Manufacturing will take centered at the Mercedes-Benz factory in Tuscaloosa, Alabama.

Although shipments of the new automobile line have been stalled by serious manufacturing problems and poor quality, Mercedes-Benz is committed to the May 1, 2005 launch date.

The press release was tested with a sample similar to the one included in the main study, with participants asked to agree or disagree with two statements, “The press release provided negative information about Mercedes-Benz” and “The press release provided unfavorable information about Mercedes-Benz” (1 = *strongly disagree*; 7 = *strongly agree*). Responses, which were summed across items and averaged, indicated that the press release was perceived to be negative as intended ( $M=5.32$ ;  $n=53$ ).<sup>2</sup>

<sup>2</sup> Participants also rated the automobile referenced in the press release (Ultraline by Mercedes) in terms of similarity (1 = *similar*; 7 = *different*) and consistency (1 = *consistent*; 7 = *inconsistent*) with the Mercedes-Benz image. Ratings, which were summed across items and averaged, indicated that new automobile line was perceived to be moderately consistent with the Mercedes-Benz brand image ( $M=4.3$ ).

### Procedures and measures

Participants filled out a survey prior to reading the negative brand publicity. Participants were told that they would be asked about their opinions and impressions of a brand. Included were questions about their attitude toward Mercedes-Benz (1 = *poor*; 7 = *excellent*) and their beliefs about Mercedes-Benz as being associated with concepts such as prestige, expensive, and high quality (1 = *strongly disagree*; 7 = *strongly agree*).

Two weeks later, participants were exposed to the stimuli. They read the Mercedes-Benz press release and then completed the same brand attitude and belief measures as before. Next, participants were asked for their opinions of why the new Mercedes-Benz cars were having manufacturing and quality problems. Respondents were asked to indicate their agreement (1 = *strongly disagree*; 7 = *strongly agree*) with a statement reflecting an internal object-based explanation, “Mercedes-Benz alone is responsible for its quality and manufacturing problems,” and one reflecting an external context-based explanation, “Factors outside of Mercedes-Benz’ control are responsible for its quality and manufacturing problems.” Finally, participants completed the holistic thinking measure described earlier along with several demographic questions.

### Results

#### Context-based vs. Object-based explanations

A one-way ANOVA comparing analytic versus holistic thinkers on the item measuring agreement with an external context-based explanation showed a significant main effect of style of thinking (see Table 1 for means and standard deviations). Holistic thinkers endorsed an external context-based explanation more often than did analytic thinkers,  $F(1, 43)=3.80$ ,  $p=.05$ . No significant differences emerged for the item endorsing an internal object-based explanation,  $p>.10$ .

#### Brand attitude and beliefs

A 2 (style of thinking: analytic, holistic) × 2 (time: pre-exposure, post-exposure) repeated measures ANOVA was

Table 1  
Study 1: means and standard deviations

Measure	Time	Analytic thinkers	Holistic thinkers
<i>Brand beliefs:</i>			
Expensive	Pre-extension	6.40 (.86)*	6.41 (.73)
	Post-extension	5.85 (.91)*	6.30 (.56)
Prestige	Pre-extension	6.14 (.96)*	6.30 (.63)
	Post-extension	5.47 (1.25)*	6.30 (.70)
High quality	Pre-extension	5.81 (1.12)	6.04 (1.02)
	Post-extension	5.62 (1.12)	5.52 (1.24)
Brand attitude	Pre-extension	5.52 (.98)	5.78 (1.38)
	Post-extension	5.57 (1.08)	5.52 (1.31)
<i>Explanations:</i>			
Object-based	Post-extension	5.28 (1.52)	4.95 (1.26)
Context-based	Post-extension	3.66 (1.83)*	4.56 (1.31)*

Notes. \* indicates differences in means at  $p<.05$ . Standard deviations in parentheses.

conducted for brand attitude and individual brand beliefs (see Table 1 for means and standard deviations). A significant style of thinking  $\times$  time interaction emerged for the prestige belief,  $F(1, 42)=4.39$ ,  $p<.05$ , and the expensive belief,  $F(1, 42)=3.92$ ,  $p=.05$ . Consistent with our hypothesis, no decline in evaluations were found for the holistic thinkers for either the prestige,  $p>.10$ , or expensive belief,  $p>.10$ . However, brand evaluations for the analytic thinkers declined for the prestige,  $F(1, 42)=8.38$ ,  $p<.01$ , and expensive beliefs,  $F(1, 42)=11.16$ ,  $p<.01$ . No significant effects emerged for the remaining brand beliefs or brand attitude.

#### Regression analysis

To confirm our findings based on median splits of the analytic-holistic thinking measure, we conducted a series of regression analyses with a continuous measure of analytic-holistic thinking as the independent variable. The dependent variable was a measure of brand evaluation change, computed by subtracting the pre-exposure from the post-exposure measures for brand attitude and each brand belief. Separate regression analyses were conducted for each belief and brand attitude, which confirmed styles of thinking as a significant predictor of evaluation change for the prestige,  $\beta=-.36$ ,  $t=-2.47$ ,  $p=.02$ , and expensive beliefs,  $\beta=-.34$ ,  $t=-2.69$ ,  $p=.01$ , only.

#### Discussion

Our findings confirm that styles of thinking are an important influence on reactions to negative brand publicity. When exposed to a press release, holistic thinkers were more likely to consider context-based explanations for the event, leading to no change in brand evaluations. In contrast, analytic thinkers were less likely to incorporate context-based explanations into their thinking, resulting in a decline in brand evaluations. As anticipated, analytic and holistic thinkers did not differ in terms of internal object-based explanations. Thus, holistic thinkers appear to have a more complex view of causality, considering both object-based explanations and context-based explanations.

Interestingly, only two brand beliefs (prestige and expensive) were adversely affected by the negative publicity. No differences in brand attitudes or the belief pertaining to quality emerged. Although brand dilution is sometimes limited to a small set of brand beliefs (Loken & John, 1993), it is also possible that our manipulation of styles of thinking was not strong enough to detect differences in other measures. We measured styles of thinking in our sample and used a median split to identify participants as analytic thinkers and holistic thinkers. Because the median was quite high (5.33 on a 7-point scale), it is possible that the separation between analytic and holistic groups may not have been as strong as desired.

To address this issue, we manipulate styles of thinking in the next study. Analytic and holistic thinking varies across individuals, but it can also vary within an individual, with different styles of thinking being more or less salient at any point in time. The ability to think analytically and holistically

can co-exist within individuals, and it is possible to increase the accessibility of a specific style of thinking even though an individual may be chronically inclined toward analytic or holistic thinking (Hong, Morris, Chiu, & Benet-Martínez, 2000). We use a priming methodology to make analytic or holistic processing more accessible, which affords greater control for the styles of thinking manipulation and allows us to rule out extraneous influences introduced by comparing self-selected groups of analytic and holistic thinkers.

In addition, we also examine the process behind differences between analytic and holistic thinkers in more detail. Earlier, we argued that differences occur because analytic (holistic) thinkers tend to ignore (consider) contextual factors when they observe and reason about behavior. For instance, Gilbert and Malone (1995) indicate that analytic thinkers tend to be unaware of contextual constraints and have unrealistic expectations about how someone would behave under constraints. Holistic thinkers, in contrast, tend to be strongly aware of external contexts and their impact on behavior. If this line of argument is correct, increasing the salience of contextual factors should encourage analytic thinkers to respond more like holistic thinkers, resulting in a consideration of external context-based explanations for negative publicity and less revision of brand attitudes and beliefs. We forward the following predictions:

**H3.** Under low contextual salience, holistic thinkers will be more likely to consider context-based *explanations* for negative publicity than will analytic thinkers. Under high contextual salience, analytic and holistic thinkers will be equally likely to consider context-based *explanations*.

**H4.** Under low contextual salience, analytic thinkers will revise their *brand evaluations* when exposed to negative publicity, whereas holistic thinkers will not. Under high contextual salience, *brand evaluations* of both analytic and holistic thinkers will remain unchanged.

## Study 2

### Sample and design

Our predictions were tested in a 2 (prime: analytic, holistic)  $\times$  2 (contextual salience: low, high) between subjects design with a control group. Brand evaluations were compared to the control group, who responded to questions about brand attitude and brand beliefs only. Procedures, stimuli, and measures were identical to those used in the first study, with two exceptions. First, the prime for analytic and holistic thinking was inserted prior to exposing participants to the press release. Second, brand attitude was measured by a two-item scale (1=*bad* to 7=*good*; 1=*unfavorable* to 7=*favorable*). One hundred and four students from a southern university participated in the study.

### Priming manipulations

Analytic thinking was manipulated by asking participants to view a black and white line drawing of scene, which had line

drawings of 11 smaller objects (ski cap, bird, key) embedded in the scene. They were shown pictures of these 11 objects and were asked to find as many of the objects as possible embedded in the larger scene. Finding embedded figures encourages field independence, which is a major characteristic of analytic thinking (Nisbett et al., 2001). Holistic thinking was manipulated by asking participants to look at the same scene and write about what they saw in the scene. They were also asked to focus on the background of the picture. Recall that focusing on the background encourages field dependence, which is a major characteristic of holistic thinking (Masuda & Nisbett, 2001). Participants in this condition were *not* told about the 11 smaller objects that were embedded in the scene. Note that the figures were well embedded, such that participants in the holistic condition would not spontaneously see those objects.

Two pretests were conducted on the priming procedure to check the adequacy of the manipulation. In the first, participants ( $n=33$ ) were given the priming task and then asked to respond to several items from the holistic thinking scale that measure a focus on the environment (e.g., “It is not possible to understand the pieces without looking at the whole picture” “Paying attention to the field is more important than paying attention to its elements”). These items load onto a single factor of the holistic thinking scale (cf. Choi et al., 2003) and are believed to measure the locus of attention (Choi, Koo, & Choi, 2007). As expected, holistically-primed participants endorsed these items more strongly than did analytically-primed participants,  $M_{analytic}=4.09$ ,  $M_{holistic}=4.60$ ,  $F(1, 32)=2.86$ ,  $p=.05$ . Further, we compared the priming tasks on a number of factors—including degree of interest, attention paid, ease and effortlessness, and mood—to ensure that the tasks did not prime unintended aspects. No differences were found for any of these measures ( $ps>.10$ ).

A second manipulation check presented participants ( $n=45$ ) with the priming task followed by a picture composed of 22 simple objects (e.g., heart, cake, flag) dispersed on a page (Kühnen & Oyserman, 2002). Participants were given 90 s to memorize the objects. Next, they were presented with a blank page with a grid and asked to write down the names of the objects, in the location where they saw them. Consistent with Kühnen and Oyserman (2002), holistically-primed participants reported a higher proportion of objects in the correct location on the grid (.84) compared to analytically-primed participants (.68,  $p<.01$ ). However, the two groups did not differ in the total number of objects recalled (12.13 vs. 12.16,  $p>.10$ ). Thus, as expected, holistically-primed participants, being context-dependent, are better able to recall contextual location information even when they have not been asked to specifically memorize the location (Masuda & Nisbett, 2001).

### Contextual salience manipulation

Contextual salience was manipulated by the following instructions to participants in the high salience condition: “Imagine that you were trying to figure out why Mercedes-Benz had quality problems with the new car that you just read about, you might read several articles, like the ones listed below. Please read through this list carefully and place a check mark by

any article that would not be relevant in thinking about Mercedes-Benz’ quality problem.” Next, they were presented with a list of headlines of 10 news articles, with titles that referred to internal object-based events (“Mercedes-Benz increases its dealerships network in the U.S.” Source: Forbes Magazine) or external context-based events (“Carson coatings, an outside supplier, provided poor quality auto parts to Mercedes-Benz” Source: New York Times). As seen in the Appendix, 7 items were context-based items and 3 were object-based items. More context-based items were included to increase the salience of this type of information in the causal reasoning process. Participants in the low salience condition did not participate in this task.

### Results

#### Context vs. Object-based explanations

A 2 (prime) $\times$ 2 (contextual salience) ANOVA comparing analytic and holistic thinkers on the item measuring agreement with a context-based explanation showed a prime $\times$ contextual salience interaction,  $F(1, 67)=4.78$ ,  $p<.05$  (see Table 2 for means and standard deviations). Contrasts revealed that in the low salience condition, holistically-primed consumers endorsed a context-based explanation more than did analytically-primed consumers,  $F(1, 67)=6.80$ ,  $p<.05$ .<sup>3</sup> In the high salience condition, holistically-primed and analytically-primed consumers endorsed context-based explanations equally,  $F(1, 67)=.42$ ,  $p>.10$ . No differences emerged for the item endorsing an object-based explanation,  $p>.10$ .

#### Brand attitude and beliefs

Hypotheses were tested by comparing responses of the treatment conditions to the control group. A brand attitude index was computed by averaging responses to the two attitude items (see Table 2 for means and standard deviations). For comparing treatment means to a control group, Dunnett’s test was conducted (cf. Ahluwalia & Gurhan-Canli, 2000). (Note, all  $t$ s are Dunnett’s statistic). In the low salience condition, relative to the control group, brand evaluations did not change for holistically-primed consumers ( $ps>.10$  for all measures), but declined for analytically-primed consumers for brand attitude  $t(106)=2.65$ ,  $p<.05$ , high quality  $t(106)=2.20$ ,  $p<.05$ , expensive  $t(106)=2.49$ ,  $p<.05$ , and prestige  $t(106)=2.40$ ,  $p<.05$ . The decline for analytically-primed consumers extends to all brand evaluation measures, suggesting that the more limited effects found in Study 1 were due to a weak style of thinking manipulation. As predicted, in the high salience condition, brand evaluations did not decline for holistically-primed nor analytically-primed consumers, relative to the control group,  $ps>.10$ .

### Discussion

Our findings are consistent with those observed in the first study. Under low contextual salience, analytically-primed

<sup>3</sup> Note that the degrees of freedom for this analysis is much lower than the overall sample size, due to the exclusion of the control group.

Table 2  
Study 2: means and standard deviations

Measure	Control group	Low salience		High salience	
		Analytic prime	Holistic prime	Analytic prime	Holistic prime
<i>Brand Beliefs:</i>					
Expensive	6.06 (.92)	5.38 (1.24) <sup>a</sup>	5.78 (1.08)	6.40 (.73)	6.33 (.89)
Prestige	6.40 (.67)	5.71 (1.05) <sup>a</sup>	6.21 (1.08)	6.60 (.63)	6.00 (1.06)
High quality	6.36 (.86)	5.73 (1.12) <sup>a</sup>	5.95 (.92)	6.60 (.63)	6.20 (.86)
Brand attitudes	6.25 (.69)	5.54 (1.05) <sup>a</sup>	6.00 (1.01)	6.10 (.82)	5.86 (1.21)
<i>Explanations:</i>					
Object-based		4.95 (1.70)	5.16 (1.21)	5.07 (.79)	4.73 (1.66)
Context-based		2.86 (1.35)*	4.00 (1.59)*	4.13 (1.13)	3.80 (1.26)

Notes. Asterisks indicate significant differences at  $p < .05$ .

The superscript "a" denotes significant differences compared to the control group. Standard deviations in parentheses.

consumers were less likely to consider context-based explanations for negative brand publicity than were holistically-primed individuals. As a result, consumers primed to think analytically revised their brand attitudes and beliefs downward, whereas consumers primed to think holistically did not. Thus, regardless of whether style of thinking was varied as an individual trait (Study 1) or was primed to be temporally salient (Study 2), we found holistic thinkers to be less susceptible than analytic thinkers to negative publicity.

Further, our findings support the view that analytic and holistic thinkers respond to negative brand publicity differently due to the consideration of contextual information. Under low contextual salience, holistic (analytic) thinkers were more (less) accepting of context-based explanations for the negative event described in the press release. However, when aspects of the context were made salient, analytic thinkers became as accepting of context-based explanations as were holistic thinkers. As a result, both groups maintained their existing positive attitudes and beliefs toward the brand in the face of negative brand publicity.

In the next study, we seek further evidence for our view by manipulating the ability of holistic thinkers to consider context-based explanations for negative brand publicity. In Study 2, we manipulated contextual salience to encourage analytic thinkers to respond more like holistic thinkers. In Study 3, we manipulate cognitive load (and cognitive resources) to force holistic thinkers to respond in a manner similar to analytic thinkers. Prior research suggests that using internal object-based information is relatively automatic, requiring little cognitive effort (Lieberman, Gaunt, Gilbert, & Trope, 2002). However, using external context-based factors requires cognitive resources (Gilbert, Pelham, & Krull, 1988), particularly in situations where the goal of forming an impression about a target object is explicit (Lieberman, Jarcho, & Obayashi, 2005). These findings suggest that under high cognitive load, holistic thinkers will be unable to use contextual factors that are usually salient to them under conditions of low cognitive load. Therefore, for holistic thinkers, a decline in brand evaluations would be observed under high cognitive load, but not under low cognitive load. In contrast, analytic thinkers do not usually consider contextual

factors, suggesting that they would show a decline in brand evaluations regardless of cognitive load. Thus, we forward the following predictions:

**H5.** Holistic thinkers will be more likely to consider context-based *explanations* under low cognitive load than high cognitive load. Analytic thinkers will be unaffected by cognitive load, rarely considering context-based *explanations* under low and high cognitive load.

**H6.** Holistic thinkers will exhibit no decline in *brand evaluations* under low cognitive load, but they will exhibit a decline under high cognitive load. Analytic thinkers will be unaffected by cognitive load, exhibiting a decline in *brand evaluations* under low and high cognitive load.

### Study 3

#### Sample and design

Our predictions were tested in a 2 (prime: analytic, holistic)  $\times$  2 (cognitive load: low, high) between subjects design with a control group. The control group responded to questions about brand attitude and brand beliefs only. Priming manipulations were identical to Study 2. Cognitive load was manipulated by asking participants in the low (vs. high) load condition to memorize a list of 1 (vs. 10) word(s) to be recalled at the end of the study (Drolet & Luce, 2004). The list of words was provided prior to exposure to negative publicity about a new car from BMW. One hundred and ten students from a southern university participated in the study.

#### Stimuli

On the basis of a pretest ( $n=101$ ), BMW was chosen as a suitable brand on the basis of high brand familiarity ( $M=3.10$  on a 4-point scale), favorable brand attitudes ( $M=6.40$  on a 7-point scale) and strong brand beliefs, related to prestige ( $M=6.03$ ) and high quality ( $M=6.39$ ). We created a press release about a new line of BMW automobiles with product quality problems, similar to the one used in our previous studies. In addition, attribute information about the new car was

Table 3  
Study 3: means and standard deviations

Measure	Control group	Low load		High load	
		Analytic prime	Holistic prime	Analytic prime	Holistic prime
<i>Brand beliefs:</i>					
Prestige/exclusive	6.17 (.94)	5.63 (1.04) <sup>a</sup>	5.90 (.88)	5.73 (.77) <sup>a</sup>	4.98 (1.15) <sup>a</sup>
High quality	6.56 (.70)	6.04 (1.02) <sup>a</sup>	6.33 (.64)	5.95 (.90) <sup>a</sup>	5.43 (1.34) <sup>a</sup>
Brand attitudes	6.42 (.69)	5.93 (1.21) <sup>a</sup>	6.09 (1.11)	5.82 (1.16) <sup>a</sup>	5.52 (1.48) <sup>a</sup>
<i>Explanations:</i>					
Object-based		4.96 (1.64)	4.63 (1.56)	5.23 (1.31)	5.26 (1.81)
Context-based		5.22 (1.54)	5.83 (.76)*	5.50 (1.44)	4.57 (1.56)*

Notes. Standard deviations in parentheses. Asterisks indicate significant differences at  $p < .05$ . The superscript "a" denotes significant differences compared to the control group.

included to make the text more representative of product information often transmitted in press releases:

Munich, Germany—(PR NEWSWIRE) — October 4—Today Norbert Reithofer, Chairman and CEO, BMW, announced that BMW will launch a new automobile line, named 8-series, which will include a 2-door and 4-door sedan. The 8-Series sedans will have a very powerful V-8 engine, elegant new styling, and a host of new amenities to enrich the driving experience. They will be priced as a high end luxury car. Shipments will begin on December 1, 2006. Manufacturing will take place at the BMW factory in Spartanburg, South Carolina.

Although shipments of the new automobile line have been stalled by serious manufacturing problems and poor quality, BMW is committed to the December 1, 2006 launch date. BMW CEO, Norbert Reithofer acknowledges these manufacturing problems but feels confident that they can be resolved in time.

#### Procedures and measures

Participants in treatment groups were given the negative brand publicity after being exposed to the priming and cognitive load manipulations. They read the BMW press release and then indicated their attitude toward BMW (1 = *poor* and 7 = *excellent*; 1 = *bad* and 7 = *good*) and their beliefs about BMW as being associated with concepts such as prestige and high quality (1 = *strongly disagree* and 7 = *strongly agree*).

Next, participants were asked for their opinions of why the new BMW cars were having manufacturing and quality problems. Respondents were asked to indicate their agreement (1 = *strongly disagree* and 7 = *strongly agree*) with a statement reflecting an internal object-based explanation, "BMW alone is responsible for its quality and manufacturing problems" and one reflecting a consideration of contextual factors as well, "BMW along with factors in its environment is responsible for its quality and manufacturing problems." This second statement was worded to capture the interaction of the object with its context, which has been identified as an important aspect of holistic thinking (Norenzayan, Choi, & Nisbett, 2002).

Demographic information and responses to the holistic thinking scale were collected next. Finally, participants were asked to recall the word(s) that were instructed to memorize at the beginning of the study (cognitive load manipulation) and were also asked to indicate how much effort they expended in order to keep the word(s) in memory.

#### Results

##### Manipulation check

A 2 (prime: analytic, holistic)  $\times$  2 (cognitive load: low, high) between subjects ANOVA on the number of recalled words showed that participants in the high cognitive load condition recalled more words than did those in the low cognitive load condition,  $M_{\text{low}} = 1.00$ ,  $M_{\text{high}} = 6.40$ ,  $F(1, 88) = 168.32$ ,  $p < .01$ . Participants in the high cognitive load condition also reported expending more effort in trying to keep the assigned words in memory,  $M_{\text{low}} = 1.88$ ,  $M_{\text{high}} = 3.98$ ,  $F(1, 88) = 47.4$ ,  $p < .01$ .

##### Object vs. Context-based explanation

A 2 (prime: analytic, holistic)  $\times$  2 (cognitive load: low, high) between subjects ANOVA on the item measuring agreement with the context-based explanation revealed a prime  $\times$  cognitive load interaction,  $F(1, 88) = 7.48$ ,  $p < .01$ <sup>4</sup> (see Table 3 for means and standard deviations). Contrasts showed that for holistically-primed participants, increasing cognitive load lead to a decline in context-based explanations,  $F(1, 88) = 10.29$ ,  $p < .01$ . However, for analytically-primed consumers, there were no differences in consideration of context-based explanations between the low and high cognitive load conditions,  $p > .10$ . A similar analysis performed on the item measuring agreement with an object-based explanation showed no significant effects,  $p > .10$ , as expected.

##### Brand attitude and beliefs

Our hypotheses were tested by comparing responses in the treatment conditions to the control group (see Table 3 for means and standard deviations). A brand attitude index was

<sup>4</sup> Note that the degrees of freedom for this analysis is much lower than the overall sample size, due to the exclusion of the control group.



computed by averaging the responses to the two attitude items. Ethnicity was used as a covariate in the analysis. As in the previous study, Dunnett's test was conducted. (Note, all  $t$ 's are Dunnett's statistic). The results indicated that, as expected, cognitive load affected the responses of holistic but not analytic thinkers. Relative to the control group, brand evaluations for holistically-primed consumers did not change in the low cognitive load condition (for brand attitude, high quality, and prestige,  $p$ 's > .10); however, in the high cognitive load condition, evaluations declined for brand attitude  $t(105)=2.34$ ,  $p<.05$ , high quality  $t(105)=3.46$ ,  $p<.05$ , and prestige  $t(105)=4.42$ ,  $p<.05$ . As expected, brand evaluations declined for analytically-primed consumers in both the low and high cognitive load conditions, relative to the control condition. Under a low cognitive load, decreases were found for brand attitude  $t(105)=2.20$ ,  $p<.05$ , high quality  $t(105)=2.19$ ,  $p<.05$ , and prestige  $t(105)=2.19$ ,  $p<.05$ ; under a high cognitive load, similar decreases were registered for brand attitude  $t(105)=2.19$ ,  $p<.05$ , high quality  $t(105)=2.30$ ,  $p<.05$ , and prestige  $t(105)=2.25$ ,  $p<.05$ .

### Discussion

Our results indicate that increases in cognitive load, which reduce the cognitive resources available for processing information, influence responses to negative publicity for holistic but not analytic thinkers. Consideration of external contextual factors is not automatic, and unlike internal object-based information, requires cognitive resources. When cognitive resources become less available (high cognitive load condition), holistic thinkers begin to respond to negative publicity in a manner similar to analytic thinkers—ignoring contextual factors surrounding the negative incident and revising their brand attitudes and beliefs downward. Analytic thinkers, who typically ignore contextual factors, are unaffected by cognitive load—they favor object-based explanations and revise their brand evaluations downward under both low and high cognitive loads.

These findings lend support to our view that it is the consideration of contextual factors that drives differences between analytic versus holistic thinkers in their responses to negative brand publicity. When cognitive resources are available for considering context-based explanations, holistic thinkers endorse the idea that the negative brand incident could be due to external causes, and do not penalize the brand as a result. When adequate cognitive resources are less available, holistic thinkers endorse the idea that the negative brand event is due to internal causes, and penalize the brand to the same extent as analytic thinkers.

### General discussion

Negative publicity can impact the way consumers feel about a brand. Our results show that consumers with different styles of thinking reason differently about negative incidents associated with familiar and well-liked brands. Analytic thinkers tend to attribute negative events to the brand itself,

whereas holistic thinkers also consider external context-based explanations for the same incident. As a result, holistic (analytic) thinkers are less (more) likely to change their previously-held attitudes and beliefs about the brand in response to negative publicity.

Our results, summarized in Table 4, also provide evidence regarding the mechanism responsible for these differences. Holistic thinkers are more willing to consider external context-based explanations for a brand's misfortunes, whereas analytic thinkers focus on internal object-based explanations for the brand's behavior. The role of contextual factors in driving differences in analytic versus holistic thinkers was supported in two studies. Increasing the salience of contextual factors encouraged analytic thinkers to reason in a way similar to holistic thinkers (Study 2), whereas decreasing the cognitive resources needed to consider contextual factors altered the thinking patterns of holistic consumers to be similar to those of analytic thinkers (Study 3). In both studies, increasing (decreasing) the attention paid to contextual factors reduced (increased) the impact of negative publicity on brand attitudes and beliefs.

These findings contribute to our knowledge of how consumers respond to negative brand publicity, as well as having implications for related research areas and future research. We discuss these topics in more detail below.

### Negative brand publicity and product/service failures

Firms make substantial investments in developing positive associations to their brands, which can be undermined by a single episode of negative publicity. Given the stakes involved, the search for ways to diminish the impact of negative publicity is of prime importance. Unfortunately, few strategies appear to be effective in this regard. Denials and direct refutations of the negative publicity are largely ineffective (Griffin, Babin, & Attaway, 1991; Menon, Jewell, & Unnava, 1999; Tybout, Calder, & Sternthal, 1981). More promising are long-term strategies for building strong brands, which encourage consumers to focus on pro-brand sentiments and mount counter-arguments against negative publicity (Ahluwalia, Burnkrant, & Unnava, 2000; Dawar & Pillutla, 2000; Herr, Kardes, & Kim, 1991; Pullig, Netemeyer, & Biswas, 2006).

Table 4  
Summary of results

Study	Experimental condition	Context-based explanation for negative brand publicity	Brand evaluation change
1		Holistic > analytic thinkers	Holistic thinkers — no Analytic thinkers — yes
2	Low contextual salience	Holistic > analytic thinkers	Holistic thinkers — no Analytic thinkers — yes
	High contextual salience	Holistic = analytic thinkers	Holistic thinkers — no Analytic thinkers — no
3	Low cognitive load	Holistic > analytic thinkers	Holistic thinkers — no Analytic thinkers — yes
	High cognitive load	Holistic = analytic thinkers	Holistic thinkers — yes Analytic thinkers — yes

Our findings add to this line of research by highlighting the role that style of thinking plays in consumer response to negative brand publicity. Holistic thinkers are more open to considering contextual factors surrounding negative brand incidents, which makes them less likely to assign blame solely to the brand. Analytic thinkers, in contrast, seem to focus on the negative publicity alone, which makes them more likely to assign blame to the brand. These findings suggest that strategies to influence styles of thinking could be useful in managing negative brand publicity. If consumers can be encouraged to pay attention to contextual factors, such as industry problems or outside suppliers, the impact of negative publicity can be countered. Contextual factors might be made more salient by a heavy placement of news stories that make contextual factors (such as industry problems of outside suppliers) more salient or by mention of contextual factors in the firm's public relations efforts when asked to respond directly to negative brand publicity.

Product and service failures present equally daunting challenges for firms. Negative experiences can harm the brand's reputation, not only for the consumer experiencing the product or service failure but also for others who learn of the negative experience through word of mouth. Prior research in this area has employed attribution theory to better understand consumer response to product failures (Folkes, 1984; Folkes & Kotsos, 1986) and service delivery failures (Folkes, Koletsky, & Graham, 1987). Most of this research has focused on the consequences of consumers making certain types of attributions. For example, consumers who attribute blame to the company are more likely to complain, want restitution, and revise their beliefs in a more negative direction (Folkes, 1984; Folkes, Koletsky, & Graham, 1987; Klein & Dawar, 2004; Laczniak, DeCarlo, & Ramaswami, 2001; Maxham & Netemeyer, 2002).

Our findings suggest that styles of thinking may be an important antecedent in determining whether consumers attribute blame to the company. Given our findings, we would expect analytic (holistic) thinkers to be more (less) prone to blame the company when a product or service failure occurs. Because analytic thinkers are less likely to consider external contextual factors that may have contributed to the failure, such as an unorthodox product use or unusually busy service time, they are more likely to attribute failures to the company. Strategies that foster holistic thinking, such as increasing the salience of external contextual factors, may encourage consumers to divert blame for product or service failures. In this case, it is important that firms make external factors more salient yet avoid the perception that the firm's sole response is to make excuses for poor performance.

#### *Analytic vs. holistic styles of thinking*

Our research is based on the psychological literature on styles of thinking. Most of the research in this vein examines styles of thinking in a cross-cultural context, comparing individuals from Western cultures, who are characterized as analytic thinkers, with those from Eastern cultures, character-

ized as holistic thinkers. Our findings demonstrate that analytic and holistic thinking can vary at an individual level as well, which is consistent with recent research that acknowledges within-culture differences in analytic and holistic thinking (Choi, Koo, & Choi, 2007). Further, because styles of thinking can vary at an individual level, contextual factors can influence the extent to which individuals engage in analytic versus holistic thinking. To our knowledge, our research is the first to show that analytic and holistic thinking can be influenced by contextual factors, with holistic thinking being fostered by making contextual factors more salient (Study 2) and analytic thinking encouraged by a reduction in cognitive resources available for considering contextual factors (Study 3).

These patterns of analytic and holistic thinking were tied to the attributions that individuals make when confronted with negative publicity about a reputable brand. Individuals engaging in holistic (analytic) thinking were more (less) likely to consider external context-based explanations for the negative publicity, which resulted in less (more) harm to the brand's reputation. These findings are consistent with prior research in psychology showing that holistic (analytic) thinkers consider more (fewer) external context-explanations when arriving at a causal explanation for an individual's or object's behavior (Choi et al., 1999). However, in this research, participants are usually not familiar with nor do they hold strong prior beliefs about the individuals or objects being judged. In contrast, our studies examine causal explanations about objects (brands) where individuals hold strong priors that are counter to the new information (negative publicity) they are exposed to. To our knowledge, our research is the first to examine how analytic versus holistic styles of thinking affect causal explanations that result in updating (or not updating) prior beliefs and attitudes.

These findings suggest the usefulness of the styles of thinking framework compared to other frameworks for understanding the role of culture and context dependence. Consider the individualism-collectivism framework, which distinguishes collectivist cultures, where individuals define themselves as interdependent members of a collective (e.g., family, co-workers), from individualistic cultures, where individuals stress autonomy and independence of the self (Markus & Kitayama, 1991; Triandis, 1995). The analytic-holistic thinking framework and the individualism-collectivism framework have similar cultural *antecedents*—many versus few social relationships. Both frameworks predict that individualistic (analytic) cultures are less context dependent than collectivist (holistic) cultures (Kühnen et al., 2001; Nisbett et al., 2001). However, the analytic-holistic thinking framework also predicts certain *unique consequences*. Compared to analytic thinkers, holistic thinkers (1) have a different notion of causes for events, (2) are more accepting of contradiction, (3) perceive events and the world to be always changing, and (4) are less likely to rely on categories, and more on relations between objects (Nisbett et al., 2001; Choi et al., 2007). By drawing on this framework, we were able to offer insights about response to general information domains (that is, negative publicity), which would not have been possible with the individualism-collectivism framework.

### Future research directions

Our findings demonstrate that styles of thinking influence consumer response to negative publicity. Differences were observed for intact groups of analytic and holistic thinkers as well as experimental groups primed to think analytically and holistically. Evidence for the mechanism underlying these differences, namely the consideration of external context-based explanations, was also obtained by using experimental manipulations that raised the salience of contextual factors or lowered the cognitive resources needed to consider contextual factors.

Our findings can be extended in several ways. At the top of the list is consideration of negative publicity that is more extreme in nature. Our studies used negative publicity about a new car with quality problems. We did not explore negative publicity related to extremely negative and recurring events, such as the gas tank explosions in Ford Pintos during the 1970's that resulted in multiple deaths prior to redesign of the automobile. It is possible that extremely negative publicity of this sort may override the tendency of holistic thinkers to entertain external causes, although prior research in styles of thinking suggests that differences between analytic and holistic thinkers become more pronounced as observed behaviors become more negative (Miller, 1984). Thus, increasing the extremity of negative publicity might make the differences between analytic and holistic thinkers even larger.

This last point raises the issue of whether one would observe differences in styles of thinking in the case of positive publicity. Firms are obviously interested in the persuasiveness of positive brand publicity about their products and services. Although consumers with analytic and holistic styles of thinking may not differ as much in response to positive versus negative publicity, as suggested above, it is also true that differences in attributions for analytic versus holistic thinkers have been observed for neutral behaviors (scenes of fish swimming: Morris & Peng, 1994) and positive behaviors (pro-social behavior: Miller, 1984).

Also of interest would be further research with different types of brands other than those included in our studies. Both Mercedes-Benz and BMW are prestige brands, anchored on abstract brand associations such as luxury and exclusivity, as compared to functional brands such as Toyota, anchored on concrete brand associations such as low maintenance and good gas mileage. Also, both Mercedes-Benz and BMW are very well-regarded brands, as opposed to brands that have less positive images, such as Buick and Pontiac. Although it is difficult to speculate on these brand differences, it is possible that the halo effect surrounding a brand like Mercedes-Benz or BMW might protect it from negative publicity that is fleeting and relatively minor in nature, for both analytic and holistic thinkers. As suggested by this example, considering interactions between types of publicity (negative, positive) and types of brands (positive image, less positive image) could provide a more complete picture of the influence of styles of thinking on responses to brand publicity.

Finally, we have not considered other consumer characteristics that may affect responses to negative publicity. Consumers who are more knowledgeable or expert in a product class may be able to conjure up contextual factors that could account for negative product or service performance. For example, consumers who are knowledgeable about airline operations may be more forgiving of an incident of lost luggage because they know of a contextual factor, such as a too brief connection time between flights, which could account for the delay. Or, as another example, consumers who are high in need for cognition may be prone to process information surrounding an incident of negative publicity in more detail, including contextual information.

Moving in these directions would provide a much fuller understanding of how analytic and holistic styles of thinking affect consumer response to brand publicity. Further, styles of thinking may impact other types of consumer judgments and choices as well. Interest in processing styles has recently been rekindled by consumer research in areas such as mental construal levels (Dhar & Kim, 2007; Fiedler, 2007; Kardes, Cronley, & Kim, 2006; Kim & John, 2008; Liberman, Trope, & Wakslak, 2007; Lynch & Zauberaman, 2007; Trope, Liberman, & Wakslak, 2007) and consumer mindsets (Chandran & Morwitz, 2005; Dhar, Huber, & Khan, 2007). Although researchers are just beginning to explore the impact of analytic and holistic thinking on consumer judgments (Mathur & Maheswaran, 2005; Monga & John, 2007), our findings suggest that styles of thinking may prove to be a very useful addition to consumer research in the future.

### Appendix A

#### Study 2: Contextual salience manipulation

If you were trying to figure out why Mercedes-Benz had quality problems with the new car you just read about, you might read several articles, like the ones listed below. Please read through this list carefully and place a check mark by any article that would *NOT* be relevant in thinking about Mercedes-Benz's quality problem.

- "Carson coatings, an outside supplier, provided poor quality auto parts to Mercedes-Benz" Source: New York Times
- "Mercedes-Benz increases its dealerships network in the U.S." Source: Forbes Magazine.
- "Labor union threatens to sabotage production lines for major automobile manufacturers." Source: ABC news.com
- "New emission regulations in the U.S.: Problems for European and Japanese car makers?" Source: The Washington Post
- "Mercedes-Benz appoints a new CEO to take the helm in January 2007." Source: Road & Driver.
- "Mercedes-Benz to switch advertising agencies." Source: Advertising Age.
- "Avner, Inc. pleads guilty to providing defective machinery to Mercedes-Benz and BMW" Source: CNN.com
- "Government mandates new safety equipment in automobile factories: Will quality suffer?" Source: Auto News Weekly

- “Labor problems in the automotive industry affect worker productivity.” Source: Newsweek magazine
- “Mercedes-Benz under external pressure to manufacture cars faster.” Source: nbc.com

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