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When Does Negative Brand Publicity Hurt? The Moderating Influence of Analytic Versus Holistic Thinking

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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.

Keywords: Brand Publicity, Holistic Thinking

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When Does Negative Brand Publicity Hurt?

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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 braking system failures 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 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, & Dillon, 1981).

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 saliency 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. These findings add to an emerging area of interest in consumer behavior in styles of thinking (Monga & John, 2007; Ng & Houston, 2006), mental construal levels (Dhar & Kim, 2007; Kardes, Cronley, & Kim, 2006; Trope, Liberman, & Wakslak, 2007), and consumer mindsets (Chandran & Morwitz, 2005; Dhar, Huber, & Khan, 2007). In addition, our findings suggest ways to decrease the fallout from negative publicity, including making contextual factors more available and encouraging consumers to make external attributions to deflect blame and protect the brand's reputation.

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 (Miller, 1984; Choi et al., 1999). 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, & Nisbett (1998) 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) x 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.

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* and 7 = *excellent*) and their beliefs about Mercedes-Benz as being associated with concepts such as prestige, expensive, and high quality (1 = *strongly disagree* and 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* and 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 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, $p > .10$.

Insert table 1 about here

Brand Attitude and Beliefs. A 2 (style of thinking: analytic, holistic) x 2 (time: pre-exposure, post-exposure) repeated measures ANOVA was conducted for brand attitude and individual brand beliefs (see table 1 for means and standard deviations). A significant style of thinking x 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 identity 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, Chui, & Benet-Martinez, 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 the differences between analytic and holistic thinkers in more detail. Earlier, we argued that analytic and holistic thinkers differ 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) x 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 and 7 = good;* 1 = *unfavorable* and 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 (p's > .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 seconds 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 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) x 2 (contextual salience) ANOVA comparing analytic and holistic thinkers on the item measuring agreement with a context-based explanation showed a prime x 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, $F(1, 67) = 6.80$, $p < .05$. 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, $p > .10$.

Insert table 2 about here

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). In the low

salience condition, relative to the control group, brand evaluations did not change for holistically-primed consumers (p's > .10 for all measures), but declined for analytically-primed consumers for brand attitude $t(49) = -2.86$, $p < .01$, high quality $t(49) = -2.38$, $p < .05$, expensive $t(49) = -2.24$, $p < .05$, and prestige $t(49) = -2.83$, $p < .01$. 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, *p's* > .10.

Discussion

Our findings are consistent with those observed in the first study. Under low contextual salience, analytically-primed 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) x 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 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 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) x 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, $M_{low} = 1.00$, $M_{high} = 6.40$, $F(1, 88) = 168.32$, $p < .01$. Participants in the high cognitive load

condition also reported expending more effort in trying to keep the assigned words in memory, $M_{low} = 1.88$, $M_{high} = 3.98$, $F(1, 88) = 47.4$, $p < .01$.

Object vs. Context-based Explanation. A 2 (prime: analytic, holistic) x 2(cognitive load: low, high) between subjects ANOVA on the item measuring agreement with the context-based explanation revealed a prime x cognitive load interaction, $F(1, 88) = 7.48$, $p < .01$ (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.

Insert table 3 about here

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 computed by averaging the responses to the two attitude items. Ethnicity was used as a covariate in the analysis. 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 $t(39) = 2.06$, $p < .05$, high quality $t(39) = -2.81$, $p < .01$, and prestige $t(39) = 4.05$, $p < .01$. 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 $t(39) = 1.76$, $p < .05$, high quality $t(39) = -1.82$, $p < .05$, and prestige $t(39) = -2.17$, $p < .05$; under a high cognitive load, similar decreases were registered for brand attitude $t(38) = 1.87$, $p < .05$, high quality $t(38) = 2.30$, $p < .05$, and prestige $t(38) = 2.76$, $p < .01$.

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 in 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.

Insert table 4 about here

Consumer Response to Negative Brand Publicity

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 counterarguments against negative publicity (Ahluwalia, Burnkrant, & Unnava, 2000; Dawar & Pillutla, 2000; Herr, Kardes, & Kim, 1991; Pullig, Netemeyer, & Biswas, 2006).

Our findings add to this line of research by highlighting the role that style of thinking plays in consumer response to negative brand publicity. While strong attitudes and pro-brand sentiments can insulate a brand from negative publicity, the general mindsets that consumers bring to the situation also influence their response. 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, focus on the negative publicity alone, which makes them more likely to assign blame to the brand. These general styles of thinking go beyond specifics of a particular piece of negative publicity, or a particular brand, which increases their importance in understanding consumer response to negative publicity.

Because they affect general processing patterns, styles of thinking can be seen as having a more pervasive influence on how consumers respond to negative publicity. This observation also suggests that strategies to influence styles of thinking could have widespread application. 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. One such strategy suggested by our research is to make contextual factors more salient at the time consumers are being exposed to negative publicity. This might be accomplished, for example, 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.

Consumer Response to Product and Service Failures

In addition to negative publicity, product and service failures represent a substantial concern to 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. In the new media environment, word of mouth is no longer constrained to one's family and friends—it can be communicated on a widespread basis through internet discussion groups and websites designed specifically for consumers to share product and service experiences.

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).

However, the antecedents that cause consumers to make certain attributions as a result of their negative product experience are less clear (Klein & Dawar, 2004). Our findings suggest styles of thinking as a promising avenue for researchers who desire to study the antecedents of attribution processes in the future. For example, in the case of product and service failures, the consumer's style of thinking may be an important determinant of whether they assign blame to the company, complain, ask for refunds or apologies, or discontinue their patronage. Given our findings, we would expect holistic consumers to be less visceral in response to product and service failures, with less severe consequences when such failures occur.

Analytic Versus Holistic Styles of Thinking

Consumer researchers have long been interested in general processing modes that impact the amount or type of information considered during product evaluation and choice. Recently, this interest has been rekindled by research in the areas of mental construal levels (Dhar & Kim, 2007; Kardes, Cronley, & Kim, 2006; Trope, Liberman, & Wakslak, 2007), consumer mindsets (Chandran & Morwitz, 2005; Dhar, Huber, & Khan, 2007), and styles of thinking (Monga & John, 2007; Ng & Houston, 2006).

Prior research on styles of thinking in consumer behavior has focused on aspects of analytic and holistic thinking related to the ability to find relationships among objects. For example, Monga & John (2007) report that holistic thinkers (from an Eastern culture) are more able than are analytic thinkers (from a Western culture) to identify relationships between a parent brand and a new brand extension. Because they can see relationships more readily, holistic thinkers perceive greater brand extension fit with the parent brand, resulting in more positive brand extension evaluations. We extend this line of inquiry by drawing upon another aspect that distinguishes analytic and holistic styles of thinking—appreciation of contextual factors in causal

reasoning. Although finding relationships between objects and paying attention to context are related at a global level, the focus of our current research on context and causal reasoning presents another opportunity for using the styles of thinking framework to examine issues of importance in consumer behavior.

We also extend research in this area by examining the influence of styles of thinking at the individual level. To date, research has focused on styles of thinking as a mechanism for understanding cultural differences in consumer behavior, as illustrated by the Monga & John (2007) study described above. We extend this line of inquiry by examining the influence of styles of thinking within culture. Although styles of thinking emerge from differences in social environments across cultures, it is also the case that social environments can vary within a culture, causing variations in styles of thinking (Choi, Koo, & Choi, 2007). Thus, style of thinking can be considered a general mindset, with the potential to influence many areas of consumer behavior.

Future Research Directions

Our findings demonstrate that styles of thinking influence consumer response to negative publicity. In doing so, we have employed intact groups of analytic and holistic thinkers as well as priming manipulations to experimentally induce analytic and holistic thinking. We have also examined conditions which bring analytic thinkers closer to holistic thinking (salience of contextual information) and holistic thinkers closer to analytic thinking (high cognitive loads).

However, a number of issues remain unaddressed. At the top of the list would be an examination of types of negative publicity. In our studies, a new car with quality problems was chosen as the focus of the negative publicity shown to consumers. We did not explore whether different types of negative publicity might evoke different responses among analytic and holistic

thinkers. For example, holistic thinkers may be less prone to consider contextual factors for negative publicity related to extremely negative and recurring events, such as the gas tank explosions in Ford Pintos during the 1970's, which resulted in multiple deaths prior to recalls and redesign of the automobile. Or, analytic thinkers may be less prone to attribute blame to companies for negative publicity surrounding ethical mismanagement than product/service failures. Because ethical indiscretions are often focused on one or two individuals within a company, analytic thinkers may attribute the ethical violations to the individual but not the company they represent.

Another worthwhile research direction would be to examine further consumer characteristics that may affect response 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 consumer response to negative publicity.

REFERENCES

Ahluwalia, R., Burnkrant, R. E. & Unnava. H. R. (2000). Consumer response to negative publicity: The moderating role of commitment, *Journal of Marketing Research*, *37*, 203-214.

Chandran, S. & Morwitz, V. (2005). Effects of participative pricing on consumers' cognitions and actions: A goal theoretic perspective. *Journal of Consumer Research, 32,* 249-259.

Choi, I., Nisbett, R. E., & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin, 125*, 47-63.

----, Dalal, R., Kim-Prieto, C., & Park, H. (2003). Culture and judgment of causal relevance. *Journal of Personality and Social Psychology, 84*, 46-59.

----., Koo, M ., & Choi, J. A. (2007). Individual differences in analytic versus holistic thinking. *Personality and Social Psychology Bulletin, 33,* 691-705.

Dawar, N. & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of consumer expectations**,** *Journal of Marketing Research, 37,* 215-227.

Dhar, R. & Kim, E. Y. (2007). Seeing the forest or the trees: Implications of construal level theory for consumer choice. *Journal of Consumer Psychology, 17,* 96-100.

Dhar, R., Huber, J., & Khan, U. (2007). The shopping momentum effect. *Journal of Marketing Research, 44,* 370-378.

Drolet, Aimee and Mary Frances Luce (2004), "The Rationalizing Effects of Cognitive Load on Emotion-Based Trade-off Avoidance," *Journal of Consumer Research,* 31(1), 63-77.

Eagly, A. & Chaiken, S. (1993). *The psychology of attitudes*, Fort Worth, TX: Harcourt Brace Jovanovich.

Folkes, V. (1984). Consumer reactions to product failure: An attributional approach. *Journal of Consumer Research, 10,* 398-409.

Folkes, V. & Kotsos, B. (1986). Buyers' and sellers' explanations for product failure: Who done it? *Journal of Marketing, 50,* 74-80.

Folkes, V., Koletsky, S., & Graham, J.L. (1987). A field study of causal inferences and consumer research reactions: A view from the airport. *Journal of Consumer Research, 13,* 534-539.

Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117, 21-38.

Gilbert, D. T., Pelham, B. W., & Krull, D. S. (1988). On cognitive busyness: When person perceivers meet persons perceived. *Journal of Personality and Social Psychology, 54,* 733-740.

Griffin, M., Babin, B. J., & Attaway, J. S. (1991). An empirical investigation of the impact of negative public publicity on consumer attitudes and intentions. In R. H. Holman & M. R. Solomon (eds.), *Advances in Consumer Research,* (Volume 18, pp. 334-341). Provo, UT: Association for Consumer Research.

Herr, P. M., Kardes, F. R., & Kim, J. (1991). Effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnosticity perspective *Journal of Consumer Research. 17,* 454-463.

Hong, Y., Morris, M. W., Chiu, C., & Benet-Martínez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709-720.

Kardes, F. R., Cronley, M. L., & and Kim, J. (2006). Construal-level effects on preference stability, preference-behavior correspondence, and the suppression of competing brands. *Journal of Consumer Psychology, 16,* 135-144.

Klein, J. & Dawar, N. (2004). Corporate social responsibility and consumer's attributions and brand evaluations in a product harm crisis. *International Journal of Research in Marketing, 21*, 203-217.

Kühnen, U. & D. Oyserman (2002). Thinking about the self influences thinking in general: Cognitive consequences of the salient self-concept. *Journal of Experimental Psychology, 38,* 492-99.

Laczniak, R. N., DeCarlo, T. E., & Ramaswami, S. N. (2001). Consumers' responses to negative word-of-mouth communication: An attribution theory perspective. *Journal of Consumer Psychology, 11*, 57-73.

Lee, A. Y., Aaker, J. L., & Gardner, W. L. (2000). The pleasures and pains of distinct self-construals: The role of interdependence in regulatory focus," *Journal of Personality and Social Psychology*, *78*, 1122-1134.

Lieberman, M. D., Gaunt, R., Gilbert, D. T., & Trope, Y. (2002). Reflection and reflexion: A social cognitive neuroscience approach to attributional inference. *Advances in Experimental Social Psychology, 34,* 199-249

Lieberman, M. D., Jarcho, J. M., & Obayashi, J. (2005). Attributional inference across cultures. *Personality and Social Psychology Bulletin, 31,* 889-901.

Loken, B. & John, D. R. (1993). Diluting brand beliefs: When do brand extensions have a negative impact? *Journal of Marketing, 57*, 71-84.

Mandel, N. (2003). Shifting selves and decision making: The effects of self construal priming on consumer risk taking. *Journal of Consumer Research, 30*, 30-40.

Masuda, T. & Nisbett, R. E. (2001), "Attending Holistically Versus Analytically: Comparing Context Sensitivity of Japanese and Americans," *Journal of Personality and Social Psychology,* 81 (November), 922-34.

Maxham III, J. G. & Netemeyer, R. G. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of Marketing, 66,* 57-71.

Menon, G., Jewell, R. D., & Unnava, H. R. (1999). When a company does not respond to negative publicity: Cognitive elaboration versus negative affect perspective. In E. J. Arnould & L. M. Scott (eds.), *Advances in Consumer Research* (Volume 26, pp. 325-329). Provo, UT: Association for Consumer Research.

Miller, J. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology, 46*, 961-978.

Monga, A. B. & John, D. R. (2007). Cultural differences in brand extension evaluation: The influence of analytic versus holistic thinking. *Journal of Consumer Research, 33,* 529-536.

Morris, M. W. & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology, 67*, 949-971.

Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review, 108*, 291-310.

Ng, S. & Houston, M. J. (2006). Exemplars or beliefs? The impact of self-view on the nature and relative influence of brand associations. *Journal of Consumer Research, 32,* 519-529.

Norenzayan, A., Choi, I., & Nisbett, R. E. (2002). Cultural similarities and differences in social inference: Evidence from behavioral predictions and lay theories of behavior. *Personality and Social Psychology Bulletin*, 28, 109-120.

Okada, E. M. & Reibstein, D. J. (1998). When !@#? (bad stuff) happens: Effects of related and unrelated positive associations on the influence of negative secondary associations. In J. W. Alba & J. W. Hutchinson (eds.) *Advances in Consumer Research* (Volume 25, pp. 349-356.). Provo, UT: Association for Consumer Research.

Peng, K., & Nisbett, R. E. (1997). Cross-cultural similarities and differences in the understanding of physical causality. In M. Sheild (Ed.), *Proceedings of conference on culture and science.* Frankfort: Kentucky State University Press.

Pet food crisis rocks industry (2007, April 15). *Progressive Grocer*, 86, 10.

Pullig, C., Netemeyer, R. G., & Biswas, A.(2006). Attitude basis, certainty, and challenge alignment: A case of negative brand publicity. *Journal of the Academy of Marketing Science,* 34, 528-543.

Shweder, R. A., & Bourne, E. J. (1982). Does the concept of the person vary cross-culturally? In R. A. Shweder (Ed.), *Thinking through cultures: Expeditions in cross-cultural psychology* (pp 113-155). Cambridge, MA: Harvard University Press.

Smith, R. E. & Vogt, C. A. (1995). The effects of integrating advertising and negative word-of-mouth communication on message processing and response. *Journal of Consumer Psychology, 4,* 133-151.

Stevenson, H. W. & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and what can we learn from Japanese and Chinese education.* New York: Summit Books.

Sullivan, M. (1990). Measuring image spillovers in umbrella-branded products. *The Journal of Business, 63*, 309-321.

Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation and behavior. *Journal of Consumer Psychology, 17,* 83-95.

Tybout, A. M., Calder, B. J., & Sternthal, B. (1981). Using information processing theory to design marketing strategies, *Journal of Marketing Research, 18,* 73-79.

Weinberger, M. G., Allen, C. T., Dillion, W. R. (1981). The impact of negative marketing communications: The consumers' union/Chrysler controversy. *Journal of Advertising, 10,* 20-28.

Weiner, B. (1985). An attributional theory of achievement, motivation, and emotion. *Psychological Review, 92,* 548-573.

Wong, P. T. P. & Weiner, B. (1981). When people ask questions and the heuristics of the attributional search. *Journal of Personality and Social Psychology, 40,* 650–663.

APPENDIX

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

TABLE 1

Study 1: Means and Standard Deviations

Measure	Time	Analytic thinkers	Holistic thinkers
Brand beliefs:			
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)
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)
Explanations:			
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.

TABLE 2

Study 2: Means and Standard Deviations

		Low salience		High salience	
Measure	Control group	Analytic prime	Holistic Prime	Analytic prime	Holistic Prime
Brand Beliefs:					
Expensive	6.06 (.92)	5.38 (1.24)[a]	5.78 (1.08)	6.40 (.73)	6.33 (.89)
Prestige	6.40 (.67)	5.71 (1.05)[a]	6.21 (1.08)	6.60 (.63)	6.00 (1.06)
High Quality	6.36 (.86)	5.73 (1.12)[a]	5.95 (.92)	6.60 (.63)	6.20 (.86)
Brand Attitudes	6.25 (.69)	5.54 (1.05)[a]	6.00 (1.01)	6.10 (.82)	5.86 (1.21)
Explanations:					
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.

TABLE 3

Study 3: Means and Standard Deviations

		Low load		High load	
Measure	Control group	Analytic prime	Holistic prime	Analytic prime	Holistic Prime
Brand Beliefs:					
Prestige / Exclusive	6.17 (.94)	5.63 (1.04)[a]	5.90 (.88)	5.73 (.77)[a]	4.98 (1.15)[a]
High Quality	6.56 (.70)	6.04 (1.02)[a]	6.33 (.64)	5.95 (.90)[a]	5.43 (1.34)[a]
Brand Attitudes	6.42 (.69)	5.93 (1.21)[a]	6.09 (1.11)	5.82 (1.16)[a]	5.52 (1.48)[a]
Explanations:					
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.

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