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CULTURAL ORIENTATION AND BRAND DILUTION: IMPACT OF MOTIVATION
LEVEL AND EXTENSION TYPICALITY

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This research examines cross-cultural differences in brand dilution effects and the moderating role of motivation and extension typicality. Drawing from recent findings that culture affects the way people treat conflicting information, this research predicts that Easterners and Westerners would react differently to failure in a brand extension. Contrary to previous finding that failure in a typical extension would lead to less brand dilution for Westerners when they are highly motivated (relative to when they are less motivated), this research argues that Easterners will exhibit greater brand dilution when they are less motivated (relative to when they are highly motivated). The opposite pattern of results is expected when the extension is atypical. Three studies examined and found support for these predictions and the underlying processes.

Keywords: Brand Dilution, Culture, Self-Construal, Motivation, Extension Typicality

Introduction of brand extensions or new products using an established brand name is one strategy in which firms leverage a brand's goodwill (Aaker and Keller 1990; Boush and Loken 1991). This strategy allows firms to introduce new products at much lower risks and costs. The proliferation of brand extensions in the marketplace testifies to the value firms place on this strategy. However, using a brand extension strategy is not without drawbacks. Although successful brand extensions may help to enhance the equity of a brand, the converse is true too. Should an extended product fail, the negative affect or associations it generates may filter back to the parent brand, thereby "diluting" its equity (Loken and John 1993; Milberg, Park and McCarthy 1997). Thus, firms need to be very cautious when making brand extension decisions and understand how various factors, such as culture, may affect consumers' reactions to extension success and failure.

The importance of understanding the impact of culture on the effectiveness of branding strategies has been widely acknowledged by practitioners and researchers. The number of American companies that have expanded into foreign markets have increased exponentially over the years. Successful penetration of overseas markets requires a good understanding of the impact of culture on people's purchasing behavior. A fundamental issue marketing managers need to know is how consumers in different cultures will react to various branding strategies. In this research, we examine a slice of this issue by looking at how culture affects people's reactions to brand extension failures.

Recent findings in the cross-cultural literature show that people across cultures do not process information similarly. Specifically, research shows that Easterners (e.g., Chinese) are more tolerant of inconsistency. When faced with two pieces of conflicting information, they

prefer to seek a “middle” position by taking both pieces of information into account. On the other hand, Westerners (e.g., Americans) feel a greater need to resolve any inconsistency. They are more likely to focus on just one piece of the information to the exclusion of another piece in such situations (Nisbett et al. 2001). This finding suggests that there may be a difference in the way Easterners and Westerners evaluate brand extension failure information. Why is that so? Most brands that are extended in the marketplace possess at least a moderately positive brand image. When an extension fails, the negative information will be in conflict with the brand’s positive image. Since Easterners and Westerners differ in the way they process conflicting information, we should also logically expect a difference in brand dilution effects. This is consistent with previous findings that the impact of an extension failure on brand equity is dependent on a number of factors such as consistency of the extended product with the parent brand, motivational level, information accessibility and diagnosticity, and firms’ branding strategies (Ahluwalia and Gurhan-Canli 2000; Gurhan-Canli and Maheswaran 1998; John, Loken and Joiner 1998; Loken and John 1993; Milberg et al. 1997). Building on these findings, this research proposes that culture is also an important variable to consider.

Thus, the objective of this research is to address two basic issues critical to understanding how firms should brand their products in foreign markets. One, does culture affect how consumers react to brand failure information? We examine this issue in the context of bi-culturalists. Specifically, we assess how bi-culturalists would respond when different cultural orientations or processing styles are made temporarily more accessible. Two, whether motivation level and extension typicality moderate this effect? By showing how the effect of culture varies depending on individuals’ motivation level and type of extended products, this research

highlights the complexity in understanding when and how culture affects consumers' judgments. Answers to these questions will help marketing managers make better branding decisions in foreign markets. The rest of our paper is organized as follows. First, we provide a brief discussion of the relevant literature on which we draw our hypothesis. Next, three studies conducted to test these hypotheses are reported. We conclude with a discussion of the implications of our findings and avenues for future research.

THEORETICAL FRAMEWORK

Extant Literature on Brand Feedback Effects

Introducing new products in the marketplace is necessary for firms to renew consumers' interest in their products and to keep pace with changing consumers' taste. However, the manner in which new products should be introduced has been a critical issue. Should the new products be introduced under a separate brand or the same family brand? Each strategy has its pros and cons. Introducing new products under the family brand name helps to reduce promotion costs and aid in acceptance of new products. This is especially so if consumers are already familiar with the brand and may transfer existing brand beliefs to the new products (Keller 2002). However, information does not only flow in one direction. Should the new product fails, negative beliefs generated from the extension failure may filter back to the parent brand, thereby diluting its brand equity (Loken and John 1993; John et al. 1998). As it is important for firms to protect their brand equity, understanding when brand dilution effects occur and to what extent

they occur is interesting managerially and theoretically. As a testimony to the importance of this issue, numerous studies conducted in the literature have attempted to address these questions (e.g., Ahluwalia and Gurhan-Canli 2000; Gurhan-Canli and Maheswaran 1998; Loken and John 1993; John et al. 1998; Milberg et al. 1997).

The studies conducted may be grouped into two categories. One group of studies focuses primarily on identifying situations in which firms are insulated from dilution effects. For instance, John et al. (1998) found that flagship products are relatively immune to negative feedback from extended products. Milberg et al. (1997) also showed that firms may strategically seek to mitigate any negative feedback effect from product extensions through sub-branding.

Another group of studies focuses on identifying variables that may moderate brand dilution effects. For example, Loken and John (1993) examined how perceptions of “gentleness” and “quality” for Johnson and Johnson may be affected by the typicality of the brand extension (i.e., the extent to which the extension is perceived as inconsistent with the parent brand). They found that dilution is less likely when extension typicality is made salient *and* the extension is perceived as atypical of the family brand. Ahluwalia and Gurhan-Canli (2000) found that enhancement and dilution effects are greatest when extension information is highly accessible (i.e., top of the mind).

Thus, there has been substantial research into the factors affecting brand dilution. However, much of existing research was conducted in Western cultures. The question remains – do we expect extension failure to have similar effects in Eastern cultures? Existing research is silent on this issue. Drawing from recent findings in the cross-cultural literature, we propose that people in different cultures would react differently to extension failures, depending on their

motivation level and typicality of the extended product.

Impact of Motivation and Extension Typicality

Review of existing literature suggests that one of the key factors that may affect brand dilution effects is motivation level. Motivation affects one's willingness to process the information given (Eagly and Chaiken 1993; Petty and Wegener 1999). Dual process theories such as Elaboration Likelihood Model (ELM) and Heuristic-Systematic Model postulate that motivation may affect the quality and quantity of information processed (Petty and Wegener 1999). When motivation is low, people engage in less resource demanding processes. They process less information and scrutinize the same information less carefully (Gurhan-Canli and Maheswaran 1998; Petty and Wegener 1999). They rely only on a subset of the information in making their judgments. On the other hand, when motivation increases, people may engage in relatively more extensive and effortful processing. They are more likely to scrutinize all information presented and show increased consideration of diagnostic information to arrive at a reasoned attitude (Aaker and Sengupta 2000; Gurhan-Canli and Maheswaran 1998; Petty, Cacioppo and Schumann 1983; Petty and Wegener 1999).

Though the general consensus is people would engage in less effortful processing and rely only on a subset of information under low motivation, there seems to be a lack of agreement on what information people would focus on when conflicting information is presented. One stream of literature (e.g., consistency bias, negativity effects, predecisional distortion) argues that when motivation is low, people would discount any inconsistent information and rely on their

prior attitude or beliefs in their judgment. For example, research in consistency bias argues that under low motivation, people are more likely to base their evaluations on prior brand attitude and discount any inconsistent information. Research in predecisional distortion also shows that people tend to distort new information to make it consistent with their existing preferences (Russo, Meloy and Medvec 1998).

Based on this perspective, in the event of an extension failure, we would expect greater dilution when motivation is high, relative to when motivation is low. This is because when motivation is low, consumers would rely more on their prior attitude towards the brand (which in most cases would be positive since it is more likely for brands that possess positive equity to engage in brand extension). However, when motivation increases, one would pay greater attention to all information presented and give greater weight to information that is more diagnostic. Since prior research on negativity effect shows that negative information (such as extension failure) is typically considered more diagnostic than positive information (Ahluwalia 2002), we would expect greater dilution under high motivation.

However, another group of studies argues for the reverse. Some researchers argue that though it is true one is less likely to process all the information presented under low motivation, they propose that in such situation, the individual would choose to rely on the piece of information that is perceived to be more diagnostic (Chaiken, Liberman and Eagly 1989). For instance, Maheswaran and Chaiken (1992) found that under low motivation, when the valence of attribute information provided is inconsistent with that of heuristic cues, people tend to rely on the more diagnostic attribute information in their judgments. Aaker and Sengupta (2000) also found that when there is an incongruity between the source (e.g., endorser) and attribute

information, judgments of consumers are influenced primarily by the more diagnostic attribute information.

Following these researches, one would expect consumers to pay greater attention to the extension failure information (which is more diagnostic) under low motivation. However, when people invest more effort to process all the information available to them under high motivation, the inclusion of other pieces of information (including positive information such as prior brand attitude) in the evaluation might mitigate the negative effect of the extension failure. In this situation, we would expect greater dilution in the low motivation condition.

Note this perspective is not arguing that people would not focus on the diagnostic information under high motivation, nor is it arguing that the positive and negative information would contribute equally to people's attitude. All it is saying is a person taking into account both positive and negative information would exhibit more favorable attitude than another taking into account only negative information. Although it is true that under high motivation, one would expect the more diagnostic negative information to exert a greater impact, the mere consideration of the positive information should also exert some influence on one's attitude.

Thus, the two perspectives make very different predictions on the impact of motivation on brand dilution. Though the two perspectives appear contradictory, they may be equally valid, albeit in different conditions. Studies by Gurhan-Canli and Maheswaran (1998) show that depending on the typicality of the extension, higher motivation may lead to greater or lesser dilution. Specifically, they found that failure of an extension in a product category that is considered typical or similar to the brand's existing products leads to greater dilution in the low motivation condition, relative to a high motivation condition. This is because failure in a typical

extension is a piece of diagnostic information that people cannot ignore. Since they consider only a subset of information under low motivation, it is proposed that people would focus on this piece of negative information. However, when motivation increases, the inclusion of other information reduces the impact of the extension failure information. On the other hand, when an extension is atypical, failure in the extension would not be diagnostic of the brand's quality. In the low motivation condition, such extension would be sub-typed and has minimal influence on the overall brand schema. In the high motivation condition, since all pieces of information would be considered, the extension failure information might still exert some influence on one's perception even though it is not a piece of highly diagnostic information. In such cases, we would expect greater dilution in the high motivation condition, relative to the low motivation condition. Thus, the impact of motivation on brand dilution effects appears to be dependent on the perceived typicality of the extension. Following these findings, we propose that:

H1a: For a typical extension, when an extended product's performance on an attribute is perceived to be below expectations, Westerners will evaluate the parent brand lower on that attribute when motivation is low than when motivation is high.

H1b: For an atypical extension, when an extended product's performance on an attribute is perceived to be below expectations, Westerners will evaluate the parent brand lower on that attribute when motivation is high than when motivation is low.

Brand Dilution Effects in Eastern Culture

Despite their differences, most of the studies reviewed above are of the consensus that when conflicting information is presented, people would focus only on selected information under low motivation. When motivation is high, people would take into account more information and pay greater attention to information that is more diagnostic. However, is this way of processing information universal? The answer is yes and no. Research shows that like Westerners, Easterners also engage in more effortful processing of information when motivation is high. Under high motivation, Easterners would scrutinize the information provided in greater detail and pay greater attention to information that is more diagnostic (Aaker and Sengupta 2000; Aaker and Maheswaran 1997). However, unlike Westerners, when motivation is low, Easterners do not necessarily focus only on selected information in making a judgment. A stream of research in the marketing and psychology literature has shown that under low motivation, Easterners' greater tolerance for ambiguity may lead them to incorporate information from conflicting perspectives in their judgments¹.

For example, Aaker and Sengupta (2000) show that when motivation is low, though Westerners are more likely to focus on selected pieces of information, Easterners are more likely to consider multiple pieces of information provided. In their studies, they show that under low motivation, when participants from an Eastern origin are given conflicting information about an attribute and an endorser, Easterners are more likely to take into account both pieces of information while Westerners focus primarily on the attribute. They argue that this is because Easterners are more tolerant of ambiguity and are less compelled to resolve the incongruity.

This argument is consistent with prior research in the cross-cultural literature that shows Easterners deal with contradictions in a dialectic or compromise fashion (Peng and Nisbett

1999). They process information holistically, attending to and assigning some causality to context (Choi and Nisbett 2000). To Easterners, the world is constantly changing and it is important to understand the interrelation among events (Nisbett et al. 2001). An ever changing world also implies constant contradiction. This emphasis on change and interrelation among events leads to a more dialectic way of thinking, which “involves reconciling, transcending, or even accepting apparent contradictions” and the search for the “Middle Way” (Nisbett et al. 2001; Peng and Nisbett 1999). Unlike Westerners who are chronically more likely to reject one of the propositions and focus on the piece of information considered to be more plausible or diagnostic, Easterners feel that truth can be found in each perspective and one should seek a balance between two extreme views.

Supporting the above argument, in the psychology literature, Peng and Nisbett (1999) found that participants who read about two contradictory studies demonstrated more moderate attitudes relative to those who read only one of the studies. This suggests that participants who read about the two contradictory studies took into account both perspectives and this was reflected in their attitude. Evidence for greater tolerance of inconsistency in Eastern cultures can be found in other domains. For example, Bagozzi, Wong and Yi (1999) show that unlike Americans who are more likely to experience only one form of emotions, both negative and positive emotions may co-exist for Chinese. Cousins (1989) also shows that Easterners consider both dispositional traits and contextual cues when making a judgment; whereas Westerners take into account only the dispositional traits. Thus, there is significant evidence to show that unlike Westerners who zoom in on a particular aspect, Easterners are chronically more likely to take into account information from varied perspectives.

Drawing from these findings, we argue that since extension failure by a positively viewed brand may be construed as two pieces of contradictory information (i.e., the positive image of the brand versus the negative information about the new product), Easterners would react differently to an extension failure compared to Westerners. Specifically, since Easterners chronically take into account more pieces of information, we argue that they are more likely to incorporate both negative extension failure information and positive brand attitude in their judgments under low motivation. However, when motivation increases, closer scrutiny should reveal that some information is more diagnostic than others and greater weight should be placed on this information (Aaker and Sengupta 2000). Whether this would lead to greater or lesser degrees of dilution depends on the typicality of the extension. When the extension is typical, more elaborate processing would lead Easterners to focus on the more diagnostic extension failure information. This should lead to greater dilution when motivation is high, compared to when motivation is low (i.e., focusing on the piece of more diagnostic negative information under high motivation should lead to less favorable attitude towards the parent brand, compared to considering both the negative and positive information under low motivation). On the other hand, when the extension is atypical, more elaborate processing under high motivation should lead Easterners to realize that the extension failure is not diagnostic of the parent brand. Thus, they would focus more on their prior attitude. This should lead to less dilution when motivation is high, compared to when motivation is low (i.e., focusing on the piece of more diagnostic positive information under high motivation should lead to more favorable attitude towards the parent brand, compared to considering both the negative and positive information under low motivation)².

H2a: For a typical extension, when an extended product's performance on an attribute is perceived to be below expectations, Easterners will evaluate the parent brand lower on that attribute when motivation is high than when motivation is low.

H2b : For an atypical extension, when an extended product's performance on an attribute is perceived to be below expectations, Easterners will evaluate the parent brand lower on that attribute when motivation is low than when motivation is high.

Brand Enhancement Effects

Hypotheses 1 and 2 argue for cross-cultural difference in brand dilution effects. What happens when an extension is successful? In the event of an extension success, the positive success information is consistent with the positive brand information. Since there should be no difference in the way Easterners and Westerners evaluate congruent information, we would expect a similar pattern of results in both cultures. Consistent with previous research showing that greater elaboration would lead to more polarized and stronger attitudes, we would expect greater brand enhancement when individuals are highly motivated, relative to when they are not as motivated, in both cultures.

H3: Both Easterners and Westerners will exhibit a greater degree of brand enhancement when motivation is high, relative to when motivation is low.

To test the above hypotheses, three studies were conducted. Study 1 examines the impact

of culture on the feedback effect of negative information on a typical extension by making either the Eastern cultural orientation or the Western cultural orientation more accessible through priming. Study 2 builds on the findings in Study 1 by priming individuals' processing styles more directly and examining the moderating role of extension typicality. Study 3 further examines what happens in the event of a brand extension success. Details of each study are described next.

STUDY 1

Method

Design. The objective of Study 1 was to examine whether people across cultures exhibit different brand dilution effects. In particular, it focused on how extension failure on a key parent brand attribute will affect consumers' subsequent parent brand beliefs about the attribute³. To test the hypotheses, a 2 (Cultural Prime: U.S. prime vs. Chinese prime) X 2 (Motivation: Low vs. High) between-subjects design was conducted. Typicality was held constant across conditions and all participants were shown information for a moderately typical extension (H1a and H2a). All factors were manipulated and participants were randomly assigned to each condition.

Culture was manipulated by increasing the accessibility of specific cultural orientations (i.e., Eastern culture or Western culture) in the participants through priming. This methodology is consistent with recent findings in the literature that multiple cultural orientations may exist within an individual (e.g., biculturals, see Hong et al. 2000; Lau-Gesk 2003) and, in any given context, one orientation may be more dominant than the other. However, a less dominant cultural

orientation may be made temporarily more accessible through a variety of priming techniques. Relative to cross-national designs traditionally used in the literature, this approach allows researchers to control for a host of extraneous variables that may lead to potential confounding. Thus, it has been widely used in the literature (e.g., Aaker and Lee 2000; Chen et al. 2005; Hong et al. 2000). Consistent with this paradigm, in the following studies, bi-culturalists were recruited and their Eastern or Western cultural orientation was made temporarily more accessible through visual primes.

Participants. One hundred and five students from a Singapore University participated in this study for partial fulfillment of course credit. Since most previous research has focused on the difference between Eastern culture (epitomized by Chinese culture) and Western culture (epitomized by American culture), in our studies, participants were shown either a U.S. prime, or a Chinese prime. Only Chinese Singaporean students were used in this study. Singapore students are a good sample for such studies as most Singaporeans retain some knowledge of their own ethnic culture (e.g., Chinese), and yet are also exposed to Western influences (e.g., products, films). Thus, they embody in them both the traditional Eastern culture and the Western culture that they have been exposed to since birth. Moreover, since English is the first language in the country, problems associated with having to translate the questionnaire are avoided. This yielded about 26 students in each cell. In addition, a control group whereby participants were not exposed to the extension information was included as a baseline condition to check for dilution.

Procedure and Stimuli. The study was conducted online and participants completed the study in front of a computer. To prime each cultural orientation, participants were shown collages comprising either U.S. cultural icons or Chinese cultural icons. This priming technique

was adapted from a similar method used by Hong et al. (2000), and has been successfully used in the marketing literature (Chen, Ng and Rao 2005). On the cover page of the study, participants were told that they would be asked to complete two unrelated studies. They were told that the first study aimed to assess their knowledge of important icons and were asked to examine the icons carefully. On the next page, participants saw either a U.S. collage or a Chinese collage. The U.S. collage comprised pictures of American cultural icons (e.g., Superman, Statute of Liberty, U.S. flag and bald eagle). The Chinese collage comprised pictures of Chinese cultural icons (e.g., Confucius, Great Wall of China, calligraphy and Chinese opera) (Chen et al. 2005). After viewing the collage, participants were asked to recall the icons they just saw. This helped to reinforce the prime. Next, subjects were told to proceed to the second study⁴.

The first page of the second study included the motivation manipulation. Participants were told that Sony would be introducing a new type of Personal Digital Assistant (PDA) that allows one to play games (with controls similar to Gameboy) in either Singapore (in the high motivation condition) or in Asia (in the low motivation condition). Sony was chosen as it was a familiar brand in Singapore ($7 =$ highly familiar, $M = 6.5$), and pretest showed that people are generally favorable towards it ($7 =$ very favorable, $M = 6.6$). PDA was also chosen after careful consideration. Since extension typicality was held constant in this experiment, we opted for a product that was perceived to be moderately typical of existing Sony's products. Prior research has shown that culture or processing styles may affect one's perception of extension similarity (Monga and John 2005; Ng and Houston 2005). Easterners or people who process information holistically are more able to find relationships among products, and therefore view products to be more similar, compared to Westerners or people who process information analytically. In view

of this concern, we needed a product that both groups viewed similarly in terms of typicality. PDA fits this bill quite well. First, Sony currently has products in the PDA category and the gaming capabilities described in the extended product were similar to the game consoles currently sold by Sony. A pretest shows that PDA with gaming capabilities were viewed to be typical of Sony's products by participants primed with the Chinese collage and those primed with the U.S. collage (7 = typical, $M_{US} = 5.64$ and $M_{Chinese} = 5.35$). Second, as we were interested in the influence of positive brand information relative to negative extension information, we also needed a product whereby brand name is an important attribute. Pretests showed that brand name important in PDA purchases (7 = important, $M = 5.8$).

In the instructions, participants were told that we were interested in their opinion of a new product. To aid in their evaluation, they would be shown a recent Consumer Reports review of the new product. The review provided information of the product performance on four attributes – design, battery life, audio quality and price. The four attributes were chosen based on a few criteria. To test for dilution of specific beliefs, the attributes given should be associated strongly with Sony, and important in consumers' PDA purchases. Based on actual reviews of PDAs published in magazines, newspaper and the web, ten PDA attributes that were considered important were identified. Next, in a pretest, a group of 20 students were asked to rate the extent they associate Sony strongly with the attributes and the importance of the attributes in PDA purchase. From the pretest, the attribute that was associated strongly with Sony and also considered important for PDA – audio quality – was chosen as our focal attribute. To create a negative evaluation of the new product on the focal attribute, the review rated the new PDA poorly on audio quality. A separate pretest with 30 participants showed that the information was

perceived to be moderately inconsistent with Sony's image ($7 =$ inconsistent, $M = 5.3$, $s.d. = 1.23$). In addition, to mask the key attribute we were interested in, three other attributes – design, battery life and price - were also included. To make the review sound believable, the new PDA was rated negatively in terms of design but moderately positive in terms of battery life and price. We did not want to create a situation in which the new product was rated inconsistently on all four attributes that it became too unbelievable. This manipulation was also more realistic as it is very rare for a new product to be rated poorly on all dimensions. After reading the review, participants rated Sony and the new PDA on the four attributes, the perceived typicality of the new PDA, and the consistency of the information provided relative to Sony's image.

Lastly, to assess if the negative information had any impact on actual product choice, participants were further told that their name would be entered in a lucky draw for a MP3 player and asked to indicate what brand of MP3 player they would like to receive should their names be drawn. Two brands of MP3 player were given - Sony and Creative Zen. MP3 player was chosen for this task because it is a product whereby audio quality is of paramount importance. If the negative information provided has affected people's perception of Sony's audio quality, they should be less willing to choose Sony MP3 player. Creative Zen MP3 player was chosen as the alternative MP3 player as it is popular in Singapore and most people have a moderately favorable evaluation of the device ($7 =$ favorable, $M = 5.92$). Pretest showed that there was no significant difference in attitude between the two MP2 players ($M_{\text{Sony}} = 5.66$, $F(1, 24) = .69$, $p > .1$); and people viewed the two brands to be equivalent in audio quality ($M_{\text{Creative}} = 5.69$, $M_{\text{Sony}} = 5.75$, $F(1, 24) = .37$, $p > .1$).

Lastly, participants were asked to indicate any thoughts they had about the review and

complete some manipulation checks and demographic measures. Participants in the control condition were not exposed to the manipulations. They only indicated their evaluation of Sony on the four attributes and their overall attitude towards Sony.

Results

Manipulation checks. To assess whether the motivation manipulation was successful, participants responded to a two-item, seven-point scale on how interested and involved they were when completing the questionnaire (with 7 = highly involved/interested). A full factorial ANOVA performed on the mean of the two-item scale showed that our motivation manipulation was successful. Only the main effect of motivation was significant ($F(1, 101) = 21.66, p < .01$). Participants in the high motivation condition ($M = 4.44, s.e. = .16$) showed they were more motivated than those in the low motivation condition ($M = 3.42, s.e. = .16$). All other main effects and interaction effects were not significant ($p > .1$).

Two measures were used to check if the priming manipulation was successful. First, participants were asked to name the first three politicians that came to mind. The rationale for the measure was that if participants were thinking more in line with an Eastern (Western) culture, other information linked to the Eastern (Western) culture should also spontaneously be more accessible. Thus, they would be likely to list more Eastern (Western) politicians (Chen et al. 2005). A full factorial ANOVA performed on the politicians listed showed a significant effect of cultural priming ($F(1, 101) = 28.27, p < .01$). Participants in the Chinese prime condition listed significantly more Eastern politicians ($M = 1.78, s.e. = .10$) relative to those in the U.S. prime

condition ($M = 1.22$, $s.e. = .10$). Participants in the US prime condition also listed significantly more Western politicians ($M = 2.12$, $s.e. = .11$) relative to those in the Chinese prime condition ($M = 0.88$, $s.e. = .11$). All other main effects and interaction effects were not significant ($p > .1$).

Second, in addition to the politician question, participants were also asked to indicate their attitude towards a list of four values frequently associated with the Chinese culture (e.g., taking care of aged parents, greeting teachers) and four values frequently associated with the Western culture (e.g., being unique, be independent)⁵. Both scales demonstrated good psychometric properties (Chinese scale - $\alpha = .78$; Western scale - $\alpha = .83$). Analysis showed that participants in the Chinese prime condition agreed more with the Chinese cultural values ($M = 5.07$, $s.e. = .10$) relative to the Western cultural values ($M = 4.31$, $s.e. = .10$) ($F(1, 101) = 30.32$, $p < .01$). On the other hand, those in the US prime condition agreed more with the list of Western cultural values ($M = 5.62$, $s.e. = .17$) relative to the Chinese cultural values ($M = 4.56$, $s.e. = .17$) ($F(1, 101) = 19.84$, $p < .01$). Thus, results from both manipulation checks converged and supported our cultural manipulation.

Lastly, participants' ratings on the consistency of the information provided with Sony's image were analyzed. Results showed that the information provided on audio quality was considered to be moderately inconsistent with Sony's image (7= inconsistent, $M = 5.3$, $s.d. = 1.66$). Comparisons across the four conditions revealed no significant difference in the perception of consistency ($p > .1$). There was also no difference in the perception of extension fit between the new PDA and Sony across the conditions ($p > .1$).

Analysis. An ANOVA with cultural prime and motivation as between-subjects variables was conducted on the focal attribute (i.e., audio quality). The main effects of cultural prime and

motivation were not significant ($F(1, 101) = .80, p > .1$ and $F(1, 101) = .03, p > .1$ respectively). However, consistent with expectations, we found a significant two-way interaction between cultural prime and motivation ($F(1, 101) = 9.83, p < .01$)⁶ (see figure A-1). Contrasts showed that participants in the Chinese prime condition rated Sony much lower in audio quality when motivation was high ($M = 3.71, s.e. = .19$) relative to when motivation was low ($M = 4.32, s.e. = .18$) ($F(1, 103) = 5.44, p < .05$). On the other hand, participants in the U.S. prime condition had a lower rating of Sony's audio quality when motivation was low ($M = 3.55, s.e. = .19$) than when motivation was high ($M = 4.14, s.e. = .19$) ($F(1, 103) = 4.35, p < .05$). Thus, result was consistent with our predictions.

 Insert figure A-1 about here

Although the two-way interaction was interesting, it remained silent on whether dilution had occurred. It was possible that our manipulation had increased the attitude of all participants, with a greater increase in one condition than another. A more stringent test for dilution effects would be to show that people in the experimental conditions rated Sony lower in 'audio quality' relative to those in the control condition, in which participants were not exposed to any priming or motivation manipulation. Thus, participants' beliefs about Sony's audio quality in all four experimental conditions were compared to those in the control group ($M = 4.73, s.e. = .25$). Comparisons showed significant dilution in the Chinese prime-high motivation condition (Mean difference with control group = 1.02, $s.e. = .32, p < .05, C.I. = .24$ and 1.80), and the U.S. prime-low motivation condition (Mean difference with control group = 1.18, $s.e. = .32, p < .01, C.I. = .40$ and 1.96). However, the attitude of those in the Chinese prime-low motivation

condition and the U.S. prime–high motivation condition were not significantly lower than the control group mean (both $p > .1$). Thus, dilution occurred only in the Chinese prime-high motivation condition and U.S. prime-low motivation condition⁷.

Process evidence. To examine if the dilution occurred due to the differential treatment of contradictory information, participants' thoughts data was coded. Two independent judges coded the data for the extent to which the participants tried to reconcile the information given in the review with their prior knowledge about Sony. Participants were grouped into two categories – those who tried to reconcile the information and those who focused primarily on the information from the review. The two judges agreed 94% of the time and any differences were resolved through discussions. Analysis on the thoughts data showed a significant difference across the four conditions (Chi-square = 7.46, $p < .01$). More participants in the US prime – low motivation condition indicated that they focused primarily on the information from the review ($n = 21$) compared to those in the US prime – high motivation condition ($n = 9$). Participants in the US prime-high motivation condition showed a greater desire to reconcile the information given in the review with their existing brand beliefs. The reverse was true in the Chinese prime condition. More participants in the Chinese prime – high motivation condition indicated that they focused primarily on the information from the review ($n = 17$) compared to those ($n = 9$) in the low motivation condition. Thus, the pattern of results supported our predictions.

Impact on choice behavior. Finally, to examine if the dilution affected actual purchasing behavior, participants' choice of MP3 player was analyzed. Chi-square test on the number of people who picked Sony MP3 player versus the alternative Creative MP3 player showed a significant difference across conditions (Chi-square = 7.84, $p < .01$). More participants in the US

prime – high motivation condition picked the Sony MP3 player (n = 20) relative to that in the US prime – low motivation condition (n = 11). On the other hand, more participants in the Chinese prime – low motivation condition picked the Sony MP3 player (n = 22) relative to that in the Chinese prime – high motivation condition (n = 9). This suggested that the dilution did filter down to affect participants' subsequent product choice.

Discussion

Results from this study provided support for the proposition that Easterners and Westerners differ in the way they process extension failure information, and this effect was moderated by their level of motivation. Specifically, our results show that for Western primed participants, dilution was greatest when motivation was low; but for Eastern primed participants, dilution was greatest when motivation was high. Findings from the thoughts data provided some evidence for our process explanation - that it is the differential way Easterners and Westerners treat conflicting information that leads to cross-cultural difference in brand dilution effects. This result is intriguing, especially that of Eastern primed participants, as it ran counter to the general assumption that people will only take into account all pieces of information when motivation is high.

Though findings from study 1 were supportive of hypotheses 1a and 1b, there were shortcomings in the study. First, though we successfully primed individuals' cultural orientation in this study, it remained unclear which dimension of culture was driving the effects. The individuals could have differed on a multitude of cultural dimensions. Since we argued that it is

the difference in processing styles that affects the way people react to the conflicting information, study 2 tried to address this limitation by manipulating individuals' processing styles directly.

Two, there is a potential alternative explanation for the findings obtained in study 1. It is argued that Easterners exhibit a different pattern of results because they deal with conflicting information differently. However, it is possible that Easterners and Westerners deal with conflicting information similarly and it is a difference in the perceived diagnosticity of the information given that is driving the results. One may argue that for Easterners, the role of the parent brand is more diagnostic. Thus, they only rely on the parent brand equity under low motivation. When motivation is higher, they take into account all information and therefore, exhibiting greater dilution. Although the thoughts data obtained in study 1 appeared to be more supportive of our account, we would like to obtain more evidence to rule out this alternative explanation. This is achieved by manipulating extension typicality in study 2.

How would the manipulation of typicality tease the two explanations apart? It is interesting to note that the two process explanations make slightly different predictions when extension typicality is taken into account. If Easterners indeed consider more information when motivation is low, then when the extension is typical, we should expect greater dilution when motivation is high, compared to when motivation is low (as hypothesized in H2a). When the extension is atypical, we would expect greater dilution when motivation is low, compared to when motivation is high (see H2b). However, the alternative explanation makes the opposite prediction. If Easterners, like Westerners, take into account only diagnostic information under low motivation and differ only in the type of information they perceived to be more diagnostic

(e.g., brand name), then when they are provided with information that is highly diagnostic (such as failure in a very typical extension), we should expect them to behave like the Westerners and rely on this piece of information too. In this situation, we would expect Easterners to exhibit greater dilution under low motivation (relative to high motivation). On the other hand, when the extension is atypical, we would expect them to exhibit greater dilution under high motivation (relative to low motivation).

STUDY 2

Method

Study 2 aimed to fulfill two objectives. One, study 2 aimed to examine if consumers behave differently when the extension is typical (versus atypical). Second, this study also aimed to see if we can replicate the findings obtained in study 1 when we manipulate individuals' processing style directly.

Participants and Design. One hundred and nineteen students from a Singapore University were paid \$5 each to participate in this study. A 2 (Processing style: Analytic vs. Holistic) X 2 (Motivation: Low vs. High) X 2 (Extension Typicality: Typical vs. Atypical) between-subjects design was adopted. Typicality was defined in terms of product category similarity. All factors were manipulated and participants were randomly assigned to each condition. Seven conditions had 15 participants and one condition had 14 participants.

Procedure and Stimuli. To activate different processing style, participants were given a short passage about a trip to the city and were told to circle all the pronouns in the text (Kühnen,

Hannover and Schubert 2001; Monga and John 2007). Participants in the analytic condition were asked to circle pronouns that represent the independent self (e.g., I, me) while those in the holistic condition were asked to circle pronouns that represent the interdependent self (e.g., we, us). The rationale for this manipulation was since self-views are related to processing styles, by activating different self-view, we should be able to activate the related processing styles (Kühnen et al 2001; Monga and John 2007).

Next, participants were told to read a consumer report about a new product introduced by Nokia recently. Nokia was chosen as the focal brand in this study because pretest showed that people generally have very positive attitude towards the brand ($M = 5.96$). It is very strongly associated with cellular phone and its camera function is viewed very positively for the excellent pictures it produces. To identify appropriate extension products for this study, a pretest was conducted before the actual experiment. Since we wanted to examine how holistic and analytic processors view failure in typical and atypical extensions, we needed products whereby there would be no difference in the typicality perception between these two groups of people.

In view of this requirement, a group of 40 participants were recruited for the pretest. Before the pretest, half of the group was subjected to the holistic processing style manipulation described earlier and the other half of the group was subjected to the analytic processing style manipulation. After the manipulation, participants were asked to indicate the extent they felt a list of 15 products were similar to Nokia's existing products and the products fit Nokia's brand image. Based on the pretest, products that were perceived to be either typical or atypical by both groups of participants were chosen. An internet phone that allows people to engage in video-conferencing via the internet was chosen as the atypical extension (with 7 = highly typical,

typicality rating – holistic processor = 3.97, analytic processor = 4.26; no significant difference across conditions). On the other hand, a cell phone which includes the latest camera functions such as image stabilizer was chosen as the typical extension (typicality rating – holistic processor = 6.43, analytic processor = 6.12; no significant difference across conditions).

As in the earlier studies, participants were provided with information about the extension on four attributes – exterior, user-friendliness, software and camera picture quality - in the review. Picture quality was our focal attribute and the other three attributes were our filler attributes. The product was rated negatively on the picture quality and user-friendliness and neutrally on the other two attributes. After reading the review, participants rated Nokia and the extended product on the list of attributes, and the perceived typicality of the new product. Lastly, they completed a list of manipulation checks and demographic questions before being debriefed.

Results

Manipulation checks. To check if the processing style manipulation was successful, participants responded to a list of six questions that measured the extent they think that things in life are related (e.g., Everything in the universe is somehow related to each other, The whole is greater than the sum of its parts). This is consistent with the argument that holistic processor tend to pay greater attention to the field and see interrelationships among things (Nisbett et al. 2001). The scale demonstrated good reliability ($\alpha = .75$). ANOVA on the mean of the scale showed that the manipulation was successful. Participants in the holistic processing condition were more likely to feel that everything in the universe is highly related ($M = 5.58$, $s.e. = .11$) relative to

those in the analytic processing condition ($M = 4.98$, $s.e. = .11$; $F(1, 111) = 13.94$, $p < .01$).

Manipulation checks also showed that the motivation manipulation was successful.

Participants in the low motivation condition indicated significantly lower level of motivation ($M = 4.32$, $s.e. = .14$) relative to those in the high motivation condition ($M = 4.94$, $s.e. = .15$; $F(1, 111) = 9.35$, $p < .01$). Lastly, to check if the typicality manipulation was successful, participants' rating of the typicality of the two extension products was analyzed. Results showed that the manipulation was successful ($F(1, 111) = 27.39$, $p < .01$). Those in the low typicality condition rated the extended product significantly lower in terms of typicality relative to those in the high typicality condition ($M_{low} = 4.19$, $s.e. = .16$ vs. $M_{high} = 6.22$, $s.e. = .16$). There was no difference in the typicality perception between the two processing style conditions.

 Insert figure A-2 about here

Attribute evaluation. As in earlier studies, a 2 X 2 X 2 ANOVA was run. Results showed a significant main effect of processing style ($F(1, 111) = 4.42$, $p < .05$) and three-way interaction between processing style, motivation and product typicality ($F(1, 111) = 23.21$, $p < .01$). All other effects were not significant. Further probes into the three-way interaction revealed that the two-way interactions in the high typicality condition ($F(1, 111) = 18.44$, $p < .01$) and low typicality condition were significant ($F(1, 111) = 5.03$, $p < .05$). Specifically, we found that when typicality was high, participants in the analytic processing condition rated Nokia picture quality significantly less favorably when motivation was low ($M = 3.36$, $s.e. = .26$) relative to when motivation was high ($M = 4.50$, $s.e. = .26$; $F(1, 111) = 11.06$, $p < .01$). On the other hand, participants in the holistic processing condition rated Nokia significantly less favorably when

motivation was high ($M = 4.11$, $s.e. = .26$) relative to when motivation was low ($M = 5.00$, $s.e. = .26$; ($F(1, 111) = 6.62$, $p < .05$). The reverse finding was obtained when typicality was low. In the low typicality condition, participants in the analytic processing condition rated Nokia picture quality less favorably when motivation was high ($M = 3.96$, $s.e. = .26$) than when motivation was low ($M = 4.69$, $s.e. = .26$; ($F(1, 111) = 4.42$, $p < .05$). On the other hand, participants in the holistic condition exhibited no significant difference in their rating of Nokia's picture quality in both conditions ($M-Low = 4.53$, $s.e. = .26$ vs. $M-High = 4.91$, $s.e. = .26$; $p > .1$). However, the means were directionally consistent with the predictions. Overall, the pattern of results was consistent with our expectations.

Discussion

Findings from study 2 supported our hypotheses that typicality of an extension affects the degree of dilution exhibited by Easterners and Westerners. The findings also provided evidence against the alternative explanation that the results obtained in study 1 was a function of Easterners reliance on the parent brand equity in the low motivation condition.

STUDY 3

Method

The objective of study 3 was to examine what happens when non-conflicting information is given to Easterners and Westerners. In this study, participants were provided information

about either an extension success (congruent, positive attribute information) or an extension failure (incongruent, negative attribute information) by Dell. Unlike extension failure, information about a successful extension by a positive brand is consistent with the parent brand beliefs. Thus, we would expect no difference in brand beliefs across priming conditions (H3).

Participants and Design. One hundred and seventeen students from a Singapore University participated in this study for partial fulfillment of course credit. We ran a 2 (Cultural Prime: U.S. prime vs. Chinese prime) X 2 (Motivation: Low vs. High) X 2 (Brand extension: Success vs. Failure) between-subjects design. All factors were manipulated and participants were randomly assigned to each condition. Three conditions had 14 participants and five conditions had 15 participants. In addition, another 15 students were recruited for the control group. Extension typicality was held constant across all the conditions.

Stimuli. In this study, Dell was the focal brand. Pretests showed that people were generally favorable towards Dell ($M = 5.2$). For the product extension, we chose digital cameras. Although Dell is currently not in the digital camera market, this extension is believable as many computer firms are currently in the digital camera industry. Moreover, digital cameras are also increasingly viewed as a technology or computer-related product. Pretests showed that both Chinese primed and U.S. primed participants perceived digital cameras to be quite similar to Dell's existing products (7 = very similar, $M_{U.S.} = 5.7$ and $M_{Chinese} = 5.9$).

Procedure. The procedure for this study was similar to that described in studies 1 and 2. Participants were shown the priming collage before being exposed to the motivation and branding manipulations. In this study, participants were told that Dell was planning to introduce a new product – digital camera – to the market. The focal attribute was picture quality since it is

an important attribute for digital camera and is also an attribute relevant to aspects of Dell's brand image. Three other attributes (customization, user-friendliness and price) were also included to mask the attribute of interest. Out of the four attributes, two attributes (picture quality and user-friendliness) were manipulated to create either an enhancement or a dilution condition⁸. The other two attributes were "neutral" attributes – neither positive nor negative. To manipulate brand enhancement and brand dilution, participants were told that the product performed either better or worse than other models in the market on the two attributes. For example, in the brand enhancement condition, participants were told that:

"Dell Digito delivers excellent picture quality, richer in color saturation, and clearer than other models in the market. It combines the power of a 3x optical zoom lens, a 3.2 megapixel CCD and advanced photo enhancing technique that makes the pictures sharper and more vibrant relative to those taken by other models."

On the other hand, participants in the brand dilution condition were told that:

"Dell Digito delivers moderate picture quality. The color saturation is not as rich and the picture is not as clear as other models in the market. Even though it is equipped with a 3x optical zoom lens, a 3.2 megapixel CCD and advanced photo enhancing technique, the pictures are not as sharp and vibrant as those taken by other models."

A pretest of 30 participants showed that the information provided in the brand dilution condition was perceived to be more incongruent with Dell's image ($M = 5.0$, $s.e. = .23$) than the information provided in the brand enhancement condition ($M = 2.8$, $s.e. = .25$) ($F(1, 29) = 3.56$, $p < .05$). After reading the review, participants rated Dell and the new camera on each of the attribute, the perceived typicality of digital camera, and the congruity of the information provided to Dell's image. Finally, thoughts about the review and responses to manipulation checks, and demographic measures were taken.

Results

Manipulation and Confounding Check. Manipulation checks showed that the motivation manipulation was successful. Results of a full factorial analysis showed that only the main effect of motivation was significant ($M_{Low} = 3.08$, s.e. = .27 vs. $M_{High} = 4.13$, s.e. = .28; $F(1, 109) = 7.35$, $p < .01$). All other effects were non-significant ($p > .1$). An ANOVA also showed that our priming manipulation was successful ($F(1, 109) = 24.08$, $p < .01$). Participants in the U.S. prime condition listed significantly more Western politicians ($M = 2.28$, s.e. = .14) than Eastern politicians ($M = .72$, s.e. = .14). Those in the Chinese prime condition listed significantly more Eastern politicians ($M = 1.88$, s.e. = .14) than Western politicians ($M = 1.12$, s.e. = .14). No other effects were significant ($p > .1$). Tests of participants' ratings of whether the extended product fit the brand's existing product categories also showed no significant difference across conditions ($p > .1$).

 Insert figure A-3 about here

Results. A 2 X 2 X 2 ANOVA was run. As expected, we found a significant main effect of brand extension ($F(1, 108) = 23.95$, $p < .001$). Participants in the enhancement condition ($M = 4.72$, s.e. = .14) rated the parent brand significantly higher on picture quality than those in the dilution condition ($M = 3.72$, s.e. = .15). Results also showed a significant three-way interaction for picture quality ($F(1, 109) = 5.78$, $p < .05$)⁹ (see figure A-3). All other main effects and interaction effects were not significant ($p > .1$). To decipher the three-way interaction, next, we examined the interaction effects of brand enhancement and brand dilution conditions separately.

As hypothesized, we found that the two-way interaction between culture and motivation was not significant in the brand enhancement condition ($F(1, 109) = 0.81, p > .1$). In both priming conditions, evaluation of Dell's picture quality was higher in the high motivation condition ($M-US = 4.81, s.e. = .27$ and $M-Chinese = 5.04, s.e. = .26$), than the low motivation condition ($M-US = 4.64, s.e. = .26$ and $M-Chinese = 4.40, s.e. = .26$). Relative to the control group ($M = 4.31, s.e. = .20$), both groups of participants rated the parent brand significantly higher in picture quality in the high motivation condition, exhibiting an enhancement effect (US - Mean difference with control group = .51, $s.e. = .31, 1 \text{ tail } p < .05, C.I. = -.12 \text{ and } 1.13$; Chinese - Mean difference with control group = .74, $s.e. = 0.31, p < .05, C.I. = .13 \text{ and } 1.36$). Enhancement effects were not significant in the low motivation conditions (both $p > .1$).

Replicating results in studies 1 and 2, the two-way interaction between culture and motivation was significant in the brand dilution condition ($F(1, 109) = 5.70, p < .05$). Planned contrasts showed that in the U.S. prime condition, dilution was more extreme when motivation was low ($M = 3.51, s.e. = .27$), than when motivation was high ($M = 4.12, s.e. = .28$) ($F(1, 112) = 3.05, p < .05$). On the other hand, in the Chinese prime condition, dilution was more extreme when motivation was high ($M = 3.19, s.e. = .28$) than when motivation was low ($M = 4.07, s.e. = .28$) ($F(1, 112) = 6.27, p < .05$). Next, we compared the ratings in each condition to the control group. Consistent with the findings in study 1, results showed significant dilution only in the U.S. primed-low motivation condition (Mean difference with control group = .79, $s.e. = .35, p < .05, C.I. = .10 \text{ and } 1.49$) and Chinese primed-high motivation condition (Mean difference with control group = 1.11, $s.e. = .36, p < .01, C.I. = .40 \text{ and } 1.83$). The other two comparisons were not significant (both with $p > .1$). Thus, results supported our hypotheses.

Discussion

Results from this study replicated the brand dilution findings in studies 1 and 2. The fact that the same cross-over interaction found in the brand dilution condition was not obtained in the brand enhancement condition (i.e., when information is congruent) is interesting as it signals a certain degree of asymmetry in brand dilution and enhancement effects across cultures. We will discuss this in greater detail in the subsequent sections. In addition, the lack of cross-cultural differences in the brand enhancement (or information congruent) condition also supported our argument that the mechanism driving the cross-cultural difference in brand dilution effect was the differences in the ways Easterners and Westerners evaluate incongruent information.

GENERAL DISCUSSION

Brand extension is an effective way for firms to leverage a brand's equity (Keller 2002). Extant literature has documented various benefits of engaging in brand extensions (e.g., Aaker and Keller 1990; Boush and Loken 1991). However, there are both pros and cons of extending a brand to new categories. The peril of brand extension is the potential dilution of a brand's equity should an extension fail (Loken and John 1993). The objective of this paper is to examine if culture affects brand dilution effects. Three studies conducted using bi-culturalists documented systematic differences in the way individuals with a more Eastern orientations and those with a more Western orientations evaluate brand extension failure information. Specifically, Study 1

shows that when a typical extension fails, Easterners would exhibit significantly greater dilution when motivation is high, compared to when motivation is low. We argue this is because Easterners who are low in motivation are chronically more likely to integrate the negative information with their existing brand schema. When motivation level is high, they would scrutinize the information in greater detail and place greater weight on the negative information which is more diagnostic. However, for Westerners, in the event of a failure in a typical extension, Westerners who are low in motivation are more likely to focus only on the diagnostic negative information, while those under high motivation would pay attention to more of the information presented. This leads to greater brand dilution under low motivation. Building on the results of study 1, study 2 replicated the brand dilution results and shows that a reverse pattern of results was obtained when the extension is atypical. Study 3 further shows that in the event of a brand extension success, both Easterners and Westerners would behave similarly. Altogether, findings from the three studies show that extension failure has differential effects across cultures. Findings from this research make a number of significant theoretical and managerial contributions to the branding and cross-cultural literature.

Theoretical Implications

Theoretically, we contribute to the literature on three fronts. First, drawing from prior research, findings from the three studies provide further evidence that Easterners treat conflicting information differently from Westerners and this has important implications in the marketing context. Though prior research in the cross-cultural psychology literature has shown some

evidence that Easterners treat conflicting information differently from Westerners (e.g., Peng and Nisbett 1999 and Bagozzi et al. 1999), it is yet unclear if such processing differences would affect how consumers process marketing information. The only exception is the research by Aaker and Sengupta (2000) who examined this issue in the marketing context.

Second, the examination of cross-cultural differences in the way people process conflicting information is also a new addition to the brand dilution literature. Traditionally, the brand dilution literature has examined this issue from a categorization perspective. It typically assumes that new products that may be grouped under the same category as existing products would be viewed favorably but the parent brand would also be more vulnerable to extension failure. Our findings bring a new perspective to this issue by showing that, independent of categorization, the way one processes incongruent information is also important. A person who is chronically more likely to take into account all pieces of information would exhibit different level of brand dilution relative to one who focuses only on diagnostic information. Through the manipulation of extension typicality, we further show that this effect cannot be explained by differences in cue diagnosticity across cultures. However, it is important to qualify that since we did not manipulate the relative strength of each cue (e.g., reputation, attribute) in the studies here, future studies may consider pursuing this further and examine what happens if cues of different diagnosticity are provided to consumers from different cultures.

Third, this research also built on previous findings in the brand dilution literature by identifying an important variable that moderates the extent to which brand dilution effects occur. As discussed earlier, there has been significant research on the topic of brand dilution. Previous research has identified a number of interesting factors that moderate brand dilution effects (e.g.,

Ahluwalia and Gurhan-Canli 2000; Loken and John 1993). Implicitly, it is generally assumed that the same brand dilution processes and findings would be applicable to other cultures. Yet, as recent findings in the cross-cultural literature show, this is not necessarily true. Cross-cultural differences in the way one processes information have been found across various domains, and it seems naïve to assume that the same brand dilution process would be universal.

Managerial Implications

Implications for Brand Management. These results have important implications for brand managers operating in a global world. As companies increasingly rely on foreign markets for growth, managers need to understand whether branding strategies used in home markets is transferable to other cultures. Though it is common knowledge that marketing strategies need to be localized when one sells in foreign markets, the more difficult question to answer is what and how marketing strategies should be modified. This issue transcends industries. Our results help to provide some insights into these issues. An important implication from this research is that firms selling high involvement products in Eastern markets (e.g., China) should adopt a different branding strategy relative to those selling low involvement products. For instance, for Easterners, since the brand dilution effect is stronger when the extension is typical and motivation level is high, firms selling high involvement products may need to be very judicious when engaging in close brand extension. They need to be aware that should an extended product fail, the potential negative feedback effect may be fairly strong. For risky product introduction, other branding strategies (e.g., sub-branding or individual branding) may be more beneficial.

This is particularly significant if we take into account the brand enhancement results. Although not discussed in the theorizing, our findings in study 3 show an interesting asymmetry in brand dilution and brand enhancement effects across cultures. Unlike brand dilution effects, Easterners and Westerners demonstrate similar pattern of results for brand enhancement. It is also interesting to note that for Easterners, the brand dilution and brand enhancement effects differ in their magnitude. Further analysis of the results in study 3 revealed that though both brand enhancement and brand dilution effects were significant for Easterners who were highly motivated, the difference between the mean in the brand enhancement condition and that of the control group was only 0.56, while the difference between the mean in the brand dilution condition that that of the control group was 1.18. This seems to suggest that in the Eastern culture, for high involvement products, though introducing a new product under the family brand will lead to some enhancement in brand equity if the product succeeds, it will lead to relatively greater dilution of brand equity if the new product fails. This observation argues against brand extension for high involvement products.

However, it is important to qualify that our recommendations only take into account the impact of extension success and failure on the parent brand. This research did not examine the impact brand name has on the way consumers in Eastern cultures evaluate brand extensions. In making brand extension decisions, companies need to weigh the benefits of introducing a new product under existing family brand against the cost of potential brand dilution in the event of an extension failure. To the extent that the benefits of introducing new products under existing brands outweigh the potential risk of brand dilution, it will be beneficial to engage in brand extension. Our studies present some initial understanding of potential brand feedback effects.

Further investigations are required to fully understand when the benefits of brand extension will outweigh risk of brand dilution.

Other Marketing Implications. The evidence that Easterners and Westerners process conflicting information differently also has important implications on marketing communications strategies. Though not examined in this research, such processing differences may also affect how consumers treat negative information about a positive brand. For example, in the event of a public relations crisis (e.g., where quality control failure by a favorable brand leads to harm to the consumers), we would expect Easterners and Westerners to treat such information differently. If the issue is very severe we would expect Easterners who are highly motivated (e.g., if the issue is personally relevant) to exhibit a more negative attitude towards the company, relative to those who are less motivated. On the other hand, we would expect Westerners who are highly motivated to exhibit a less negative attitude towards the company, relative to those who are less motivated.

Limitations and Future Research

Several limitations of our studies that may present good avenues for future research should be recognized. First, it is important to point out that all the participants in our studies came from a bi-cultural society. The use of a bi-cultural sample allows the random assignment of participants and reduces the potential of confounds across cultures. Though it is assumed that through priming, participants would be influenced to think in patterns that are more aligned with one culture than another, it should be qualified that the findings might not necessarily be

generalizable to mono-cultural societies. Future research is required to test if people in mono-cultural societies behave similarly. Second, in our studies, we focused primarily on brands that are positively evaluated. Though generally most brands that engage in brand extensions are positively viewed, it would be interesting for future research to examine how the results would change if the parent brand is less than positively evaluated.

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FOOTNOTES

1 An exception is the paper by Aaker and Maheswaran (1997) which found that under low motivation, Easterners behave like Westerners and focus only on the diagnostic information.

However, Aaker and Sengupta (2000) argue that this finding applies only in the situation when one of the cues is highly diagnostic.

2 Note we are only arguing that people taking into account both existing brand information (i.e., positive information) and extension failure information (i.e., negative information) will exhibit a different attitude from those taking into account only one piece of information. We are *not* arguing that existing brand information and extension failure information will contribute *equally* to people's attitude. How the two pieces of information are combined may differ across contexts and individuals. Thus, we are not making any predictions about the relative impact of each piece of information.

3 The literature has generally operationalized brand dilution in two ways – dilution in the general affect towards the brand (e.g., Keller and Aaker 1992) or dilution in one's perception of specific attribute beliefs (e.g., Loken and John 1993). We adopted the second operationalization of brand dilution because it was felt that generally, when a company uses an existing brand to introduce a new product, they are hoping to transfer some prevailing, positive association from the parent brand to the new product. These are the associations that define the brand, and often are the brand's key features distinguishing them from competitors (Loken and John 1993).

4 A suspicion check was conducted at the end of the experiment. Participants were asked to write down what they thought were the objectives of each study. The thoughts were coded by two independent judges on whether the participants linked the two studies together. Analysis of the

data showed that almost all the participants believed the story and did not link the two studies together.

5 These cultural values were adapted from those typically used to assess one's self-construal (i.e., independent versus interdependent self) and cultural orientation (i.e., individualism versus collectivism).

6 Similar analyses on the three filler attributes did not yield any significant results ($p > .1$).

7 An ANOVA was also conducted on the overall brand evaluations to assess if dilution at the attribute level filters down to affect participants' evaluation of the brand. Analysis showed no significant main effect or interaction effect ($p > .1$).

8 For "user-friendliness", participants in the brand enhancement condition were either told "Although Dell Digito comes with a range of automatic preset shooting modes; it is not as user-friendly as the other models in the market. The complicated user interface means you would have to spend much time learning how to use the camera. Not good for novice users or anyone looking for a point-and-shoot camera with extra features." Those in the brand dilution condition were told "Dell Digito also comes with a range of automatic preset shooting modes that makes it more user-friendly than other models in the market. The uncomplicated user interface means you won't spend much time learning how to use the camera. Perfect for novice users or anyone looking for a point-and-shoot camera with extra features"

9 The corresponding interactions for the control attributes – customization, user-friendliness and price, were not significant ($p > .1$).

Figure A-1

Impact of Cultural Prime and Motivation on Brand Evaluation

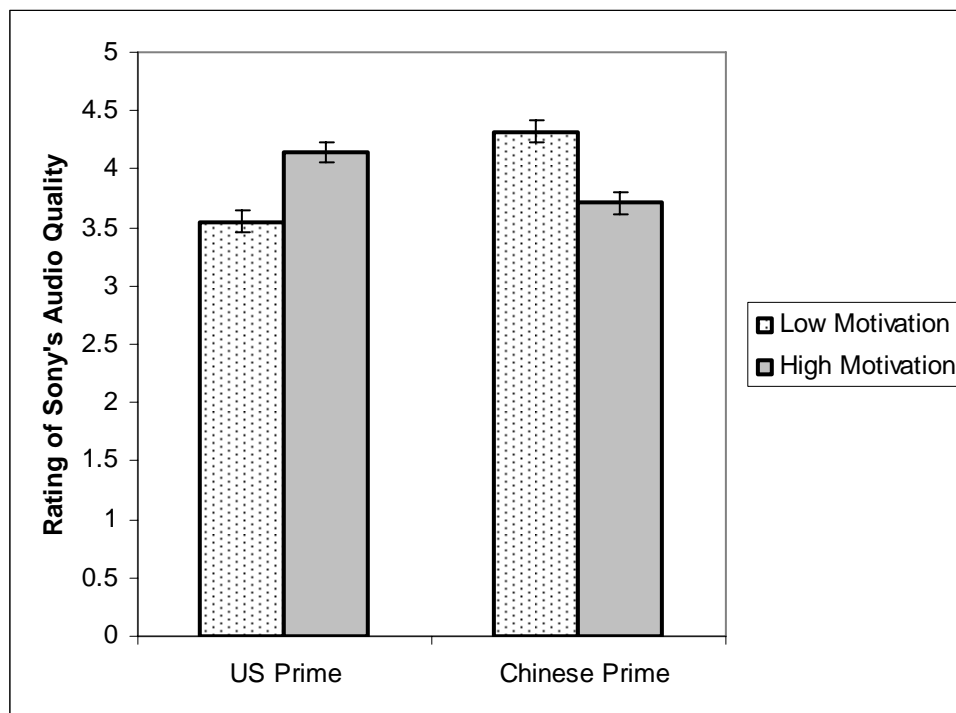


Figure A -2

Effect of Extension Typicality, Motivation and Processing Styles on Brand Evaluation

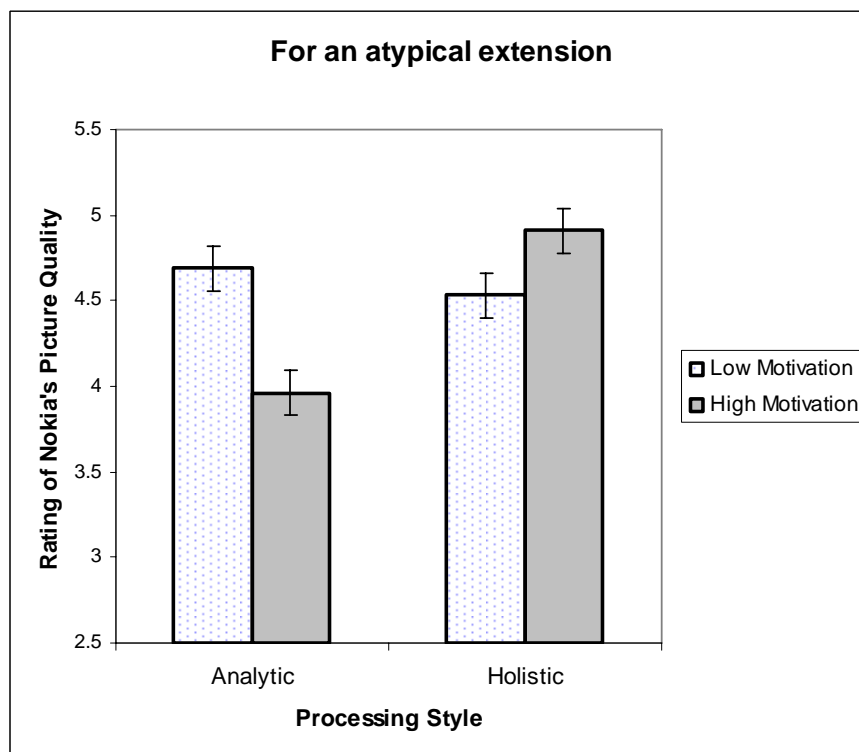
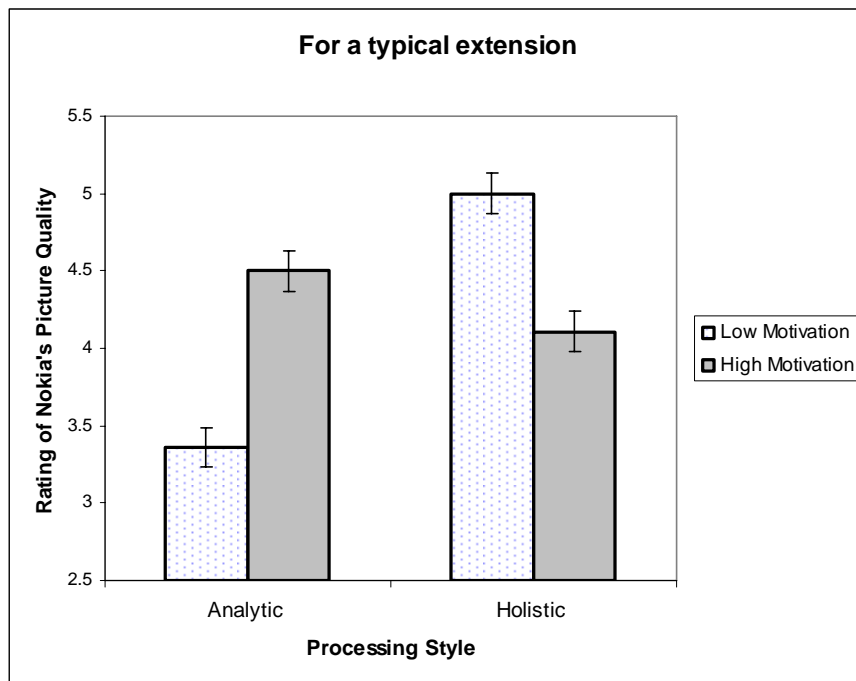


Figure A-3

Asymmetric Effect of Brand Enhancement and Brand Dilution

