

WHEN BRAND EXTENSION FIT MATTERS:  
EXAMINING THE PERSUASIVE IMPACT OF COMPARATIVE ADVERTISING FRAME  
AND SELF-REGULATORY GOALS ON BRAND EXTENSION ACCEPTANCE

by

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ABSTRACT

Brand extensions are new products or services introduced under an existing brand's name. Despite the importance of competitive extension positioning in a realistic marketplace, relatively little attention has been given to investigating the impact of comparative advertising message (framed positively or negatively) on brand extension acceptance. There is also a pressing need to address the role of individuals' motivational factors in enhancing the success of brand extensions. The current research examines how comparative advertising frame and self-regulatory goals influence brand extension evaluations and purchase intentions when brand extension fit matters.

The results from Experiment 1 indicate that a positive comparative frame elicited more favorable extension evaluations and greater purchase intentions than a negative comparative frame under the similar extension condition, while both positive and negative comparative frames contributed equally to brand extension evaluations and purchase intentions under the dissimilar extension condition. In Experiments 2 and 3, however, the interactive patterns of brand extension fit and comparative valence frame is in the reverse direction. The findings from Experiments 2 and 3 suggest that a negative comparative message leads to more favorable brand

extensions and greater purchase intentions than a positive comparative message under the similar extension. The effects of a positive versus a negative comparative message are reversed and even eliminated when the fit between the parent brand and the extension is perceived to be low. These results suggest that regardless of whether the fit between the parent brand and the extension is high or low, risk perception inherent in purchasing extension products could influence the relative effectiveness of a positive versus a negative comparative message on brand extension evaluations and purchase intentions.

Though the hypothesized effects of brand extension fit and consumers' regulatory focus are not supported in Experiment 1, the results from Experiments 2 and 3 reveal that promotion-focused consumers tend to evaluate brand extension more favorably than prevention-focused participants under the similar extension condition, whereas they are equally responsive to the dissimilar extension. Furthermore, the results suggest that perceived extension risk serves as a critical mediator between brand extension fit and consumer evaluations of brand extensions.

INDEX WORDS: Brand Extensions, Comparative Advertising Frame, Self-Regulatory Goals, Perceived Extension Risk

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## DEDICATION

To my wife, Seeun,

My daughter, Hailey Hyein, and

My son, Joshua Sunwoo, with their continuous love and trust

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## CHAPTER 1

### INTRODUCTION

Today, more than 80 percent of new product introductions are brand extensions (Fedorikhin, Park, & Thomson, 2008). The primary goal of these brand extensions is to “capitalize on the brand image for the core product or service to efficiently inform consumers and retailers about the new product or service” (Keller, 1993, p. 15). For example, Calvin Klein has successfully extended its line from clothing to diverse product categories, such as sunglasses, perfume, and home furniture.

The popularity of brand extension strategies may be justified by the belief that brand extensions lead to higher consumer trial than the use of a new brand name because of the existing brand name’s awareness levels and associations (Keller, 1998). Specifically, brand extensions are more likely to succeed than regular new product launches because they can leverage the parent brand’s assets and equity, as well as increase the efficiency of promotional expenditures (Keller, 1998). Brand extensions as low-cost and low-risk leveraging strategies can also revitalize brands and introduce product innovation, thereby fostering usage occasions for a brand, increasing first-mover advantages in certain product categories, and enhancing consumers’ perceptions of a brand as youthful and innovative (Loken, Joiner, & Houston, 2010). Furthermore, brand extensions are the building blocks for developing a company’s brand architecture.

Although brand extensions are an attractive way to introduce new products and leverage the investments a company makes in its existing brand names, not all brand extensions succeed. According to Vašek (2002), about 50 to 60 percent of all brand extensions eventually fail. In fact, the failure rates of brand extensions are even higher than new brand introductions (Völckner & Sattler, 2006). Therefore, understanding the potential determinants of brand extension success has been a long-standing area of research inquiry to provide insights that may help marketing practitioners reduce the failure rates of brand extensions (Völckner & Satter, 2006).

Over the past two decades, a considerable amount of scholarly attention has been given to examining how consumers evaluate brand extensions (Loken, Joiner, & Houston, 2010). In particular, investigating the extent to which a parent brand transfers successfully into various other categories and the conditions under which brand extensions are more likely to succeed has ignited high levels of managerial and academic interest (Desai & Keller, 2002). Conventional wisdom has suggested that the higher the perceived fit of the extension with its parent brand, the more favorable the consumer evaluation of the brand extension (e.g., Aaker & Keller, 1990; Boush & Loken, 1991; Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991). For example, Völckner and Sattler (2006) simultaneously analyzed the direct relationships between brand extension success and its ten predictors. They found that the fit between the parent brand and the extension product is the most important driver of brand extension success, suggesting that brands should not be extended to perceptually distant product categories.

While prior research has documented that consumer evaluations of brand extensions are primarily affected by the extent to which the parent brand is perceived to fit with the extension (Aaker & Keller, 1990; Boush & Loken, 1991; Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991; Völckner & Sattler, 2006), it has often neglected to pin down a more common

marketplace reality, namely competition, independent of the fit-extension relationship. Some scholars (Keller & Aaker, 1992; Yeung & Wyer, 2005) have pointed out that the absence of competition is typical of most brand extension research, which involves the singular evaluations of a brand extension. That is, competing brands from the target category are neither explicitly mentioned nor included in the research design (Kapoor & Heslop, 2009). For example, recent research by Milberg, Sinn, and Goodstein (2010) investigated whether the fit-extension relationship generalizes to realistic market scenarios that include relatively more or less familiar competitor brands. Given that competitive effects are vital to brand extension evaluation, they found that the effects of brand extension fit are diminished when competitors are included in the situational context.

Research to date has gradually turned to understanding the effects of competitive positioning strategies in enhancing acceptance of brand extensions (e.g., Sheinin, 1998). It is noteworthy that positioning is the process of locating a brand in the consumer's mind by differentiating the attributes, benefits, or images from other competing brands. According to Sheinin (1998), positioning is imperative with brand extensions since it may change the parent-extension similarity. Undoubtedly, a key consideration in the development of advertising strategy involves how to build a strong brand position in a competitive marketplace (Miniard, Barone, Rose, & Manning, 2006). In an effort to communicate the brand's superiority, the use of comparative advertising would be an effective way to position brand extensions in the consumer's mind. Empirical evidence has demonstrated that comparative ads are superior to noncomparative ads in anchoring a new brand closer to and/or positioning it as more different from a dominant brand, establishing a clearer brand image, and thus enhancing overall brand positioning (e.g., Dröge & Darmon, 1987).

Although prior literature has confirmed that advertising contributes to the success of brand extensions (Martínez et al., 2008; Völckner & Sattler, 2006), there has been a dearth of research that examines what advertising message strategies are effective for encouraging favorable brand extension evaluations, particularly in comparative advertising when brand extension fit matters. Given the practical usefulness of comparative advertising for positioning brand extensions in competitive contexts, there is a need to investigate the effects of comparative advertising on consumers' acceptance of brand extensions.

On the other hand, a growing body of research on brand extensions has highlighted the importance of studying the influence of motivational factors on consumer evaluations of brand extensions and information processing (Kim & John, 2008; Yeo & Park, 2006). However, our understanding of self-regulatory goals as motivational factors that might moderate the effect of brand extension fit on extension evaluations is relatively limited. In fact, self-regulatory focus is viewed as a generalized motivational dimension that has been shown to be relevant in consumer decision making (Yeo & Park, 2006). Furthermore, it has been suggested that self-regulatory goals play an important role in determining the persuasiveness of comparative advertising (Chang & Chou, 2008; Jain, Lindsey, Agrawal, & Maheswaran, 2007). Since consumers make decisions on the basis of their goal pursuit (Bettman, Luce, & Payne, 1998; Heath, Larrick, & Wu, 1999; Higgins, 2002), the influence of self-regulatory goals has become an important topic for both advertising and marketing researchers.

### **Purpose of the Research**

The primary purpose of this study is to examine how comparative advertising influences consumer evaluations of brand extensions. Today, many advertisers and marketers seem to rely



on comparative advertising to differentiate their brand extensions from other competing brands with respect to product attributes or brand positioning when launching new products under existing brand names in the competitive marketplace. One example of using comparative advertising for brand extensions includes the Atkins Diet snack bar, which compares its ingredients and nutrition facts to its competitors.

A fundamental issue that advertising practitioners and researchers face is how consumer evaluations of brand extensions are affected when different types of comparative advertising are provided beyond the perceived fit between the parent brand and the extension. This study attempts to address the fundamental question by demonstrating comparative valence frame as one of the message features in comparative advertising. Extant literature has suggested that comparative advertising can be categorized based on valence, that is, whether the comparison is positive or negative (Chang & Chou, 2008; Jain et al., 2007; Jain & Posavac, 2004). As such, this study is devoted to exploring consumers' responses to brand extensions through comparative advertising that differs with respect to the valence of comparison (i.e., positive or negative).

Second, this study aims to investigate under what conditions comparative ad message framing might have a stronger or weaker impact on brand extension evaluations across different levels of perceived fit. The current research adds to a sizable body of literature examining the effect of advertising on the acceptance of brand extensions by illustrating the importance of comparative message processing and perceived brand extension fit. Furthermore, examining the combined effects of brand extension fit and comparative valence in advertising enables us to understand ad processing more rigorously and precisely, which in turn can help advertisers and marketers fine-tune their advertising message strategies in the context of brand extension.

Third, this study aims to examine how self-regulatory goals interact with brand extension fit when implementing comparative advertising for brand extension success. Guided by regulatory focus theory (Higgins, 1997), people can approach matches to their goals or avoid mismatches to their goals. There are two types of self-regulatory goals: a *promotion focus* and a *prevention focus*. A promotion focus is characterized by eagerness to attain advancement, hopes, and aspirations, whereas a prevention focus is characterized by vigilance to ensure safety, duties, and obligations (Kirmani & Zhu, 2007). The current research will provide a richer understanding of how the impact of brand extension fit on brand extension evaluations work differently depending on consumers' self regulatory goals when consumers are exposed to comparative advertising that can vary in terms of message feature valence. More importantly, self-regulatory focus is known as one of the useful segmentation variables for marketing to consumers (Zhao & Pechmann, 2007), implying that consumers in these different segments may vary in their perceived fit of and receptivity to an extension. Practically, it can be asserted that consumer reactions to brand extensions may differ in these market segments, thus opening up possibilities for marketers who wish to overcome a moderate or poor-fitting extension.

The remainder of this dissertation proceeds as follows: First, I briefly discuss relevant literature that provides insights into the key determinants that influence brand extension acceptance, which helps elucidate the underlying psychology mechanisms that contribute to a successful or an unsuccessful brand extension. Next, I examine some of the advertising strategies for brand extensions that have been researched relevant to comparative advertising and its effectiveness on consumer evaluations of brand extensions. Third, I report on the three main experiments conducted to test these hypotheses. Finally, I conclude with a discussion, present the implications of the findings, and provide suggestions for future research.

## CHAPTER 2

### LITERATURE REVIEW

#### **The Nature of Brand Extensions**

With the practical impetus for leveraging strong brand equity in a new product category, marketing practitioners and researchers have maintained a keen interest in brand extensions.

What is a brand extension? A brand extension is a branding strategy introducing a host of new products under existing brand names. To illustrate, Clorox toilet bowl cleaner is an extension of the Clorox brand name.

Brand extensions can be broadly classified into four general approaches: (1) line extension, (2) category extension, (3) sub-brand extension, and (4) co-brand extension. In a line extension, the parent brand is used to introduce a new product line within a product category currently served by the parent brand through different flavors, colors, and package sizes, as well as added ingredients (Keller, 1998). It is noteworthy that the parent brand refers to an existing brand that gives birth to an extension product. For example, Crest has introduced several types of toothpaste line extensions through the years, such as Crest Cavity Protection toothpaste and Crest Whitening toothpaste.

A category extension occurs when the parent brand is used to enter a different product category currently served by the parent brand (Keller, 1998). For instance, Arm & Hammer has used its strong brand name to launch different product lines from baking soda to diverse product categories, such as toothpaste, pet care, deodorant, and laundry detergent.

The term “sub-brand extension” refers to a particular type of brand extension where the parent brand name is assigned to the brand extension along with another name created by the company (Loken, Joiner, & Houston, 2010). To illustrate, Microsoft “Xbox,” Ford “Mustang,” and Apple “iPhone” are all sub-branded extensions that embrace both the parent brand name (Microsoft, Ford, and Apple) and another created name (Xbox, Mustang, and iPhone). According to Loken, Joiner, and Houston (2010), the added name helps companies to differentiate their product from others of the parent brand. Although there are many variants of sub-branded extensions, a common one is an endorser brand extension (e.g., Polo by Ralph Lauren, Courtyard by Marriott), which assigns a stronger role to the sub-branded name through the use of “by” or “from” or endorsement by font and type size on product packaging (Loken, Joiner, & Houston, 2010).

Finally, co-brand extensions are defined as extensions that use two brand names owned by separate companies, such as Visa and the United Airlines Mileage Plus program. Similar to sub-brand extensions, co-brand extensions often involve endorser relationships in which both brands are established.

To date, many of the most successful new products fall into brand extensions. It is estimated that brand extensions constitute more than 80 percent of all new products introduced in the marketplace (Fedorikhin, Park, & Thomson, 2008). There are a number of potential advantages to brand extensions. First, brand extensions can facilitate new product acceptance because consumers can easily make inferences about unobserved performance of a new product transferred from the parent brand (Keller, 1998). Thus, brand extensions can reduce the risk of new product introduction failure by providing consumers with familiarity and knowledge about an established brand (Aaker & Keller, 1990; DelVecchio & Smith, 2005).

Second, extending brands within and beyond the original product category can provide positive feedback to the company. They can help to clarify the meaning of a parent brand to consumers and enhance the parent brand image behind the extension (Keller, 1998). It is assumed that brand extensions are stamped with instant credibility and a built-in endorsement from the parent brand (David & Halligan, 2002; Dens & Pelsmacker, 2009).

Finally, given the skyrocketing costs for the introduction of new products, brand extensions are deemed to be profitable because they can substantially reduce introductory marketing expenses, increase the efficiency of advertising expenditures, and thus enhance new product market share (Völckner & Sattler, 2006). Armed with the financial advantages of brand extensions, many firms have used a brand extension strategy to further penetrate existing product categories or expand into new consumer marketplaces.

Smith and Park (1992) examined the impacts of brand extensions on market share and advertising efficiency. Specifically, the authors first conducted survey research using 181 product managers in consumer goods companies to examine their brand strategies, growth rates, and advertising/sales ratios of their primary products. The results obtained from the survey of product managers were then used to construct survey questionnaires that were administered to consumers. A total of 1,383 consumers were asked to evaluate a number of brand extensions based on multiple criteria, such as brand strength, extension product similarity, mode of product evaluation, and product class knowledge. The authors provided empirical evidence that brand extensions capture greater market share and lead to greater advertising efficiency than individual brands, suggesting that advertising efficacy and market share are elevated when the extension product is composed primarily of experience attributes and competes in marketplaces where consumers have limited knowledge of the product class.

Nevertheless, implementing a brand extension strategy is not without drawbacks. Many disadvantages of brand extensions have been articulated in the marketing literature. Put simply, brand extensions can confuse consumers, encounter retailer resistance, cannibalize sales of the parent brand, hurt the image of the parent brand, and forgo the chance to develop a new brand (Keller, 1998; Kim, 2003). In addition, Ries and Trout (1981) asserted that brand extensions can dilute parent brand positioning. In this respect, the managerial decision to leverage an existing brand for extension or create a new brand is often problematic. Although successful brand extensions contribute to the equity of the parent brand, the converse is true as well (Ng, 2010). Practitioners certainly have expressed concern about the potential for dilution of parent brand equity in extending into other product categories (Morrin, 1999). If a brand extension fails, the negative effect or associations of the failed brand extension may filter back to the parent brand, thereby diluting its equity (Ng, 2010). For instance, Levi Strauss & Co.'s move to launch suits with a jeans brand label was an enormous and expensive flop (Bless & Greifeneder, 2009). The failed brand extension might dilute the equity of the parent brand and weaken its associations by giving rise to boomerang effects.

Taking into consideration its advantages and disadvantages, the underlying question facing marketers is not whether their brand should be extended, but how to promote acceptance of brand extensions. They need to be cautious when making brand extension decisions and should understand what factors may influence consumers' reactions to extension success and failure (Ng, 2010). In the sections that follow, relevant research findings will be discussed to understand the underlying determinants that influence whether consumers will evaluate brand extensions in a favorable manner, and thus contribute to the success of brand extensions.

## **Key Determinants of Brand Extension Success**

Potential determinants that influence the success of brand extensions have emerged as the primary focus of research inquiry to shed light on consumer evaluations of brand extensions. To date, much of the existing literature on brand extensions has identified a number of factors that determine whether a new brand extension introduced in the marketplace is evaluated favorably or not. It has been proposed that brand extensions are more likely to be accepted when the perceived fit between the parent brand and the extension is high (Aaker & Keller, 1990; Barone, Miniard, & Romeo, 2000; Yeo & Park, 2006), when the quality of the parent brand is high (Smith & Park, 1992), when attitude toward the parent brand is positive (Aaker & Keller, 1990; Boush & Loken, 1991), when the relevance of the extended associations for the extension product is high (Broniarczyk & Alba, 1994), when marketing/advertising support is high (Reddy, Holak, & Bhat, 1994); and when consumers feel commitment, trust, and/or liking for the parent brand or have had experience using the parent brand (Reast, 2005).

Among these factors, the most critical ingredient of brand extension success that has been found in academic research is the extent to which a brand extension fits with the parent brand (e.g., Aaker & Keller, 1990; Fedorikhin, Park, & Thomson, 2008; Keller & Aaker, 1992; Park, Milberg, & Lawson, 1991; Yorkston, Nunes, & Matta, 2010). Consumers should use the schema of the parent brand to infer their benefits, beliefs, and attributes towards the extension brand (Lau & Phau, 2007). Substantial evidence has supported the effect of brand extension fit on consumers' acceptance of brand extensions, showing that the higher the perceived fit of the extension with its parent brand, the more favorable the extension evaluation (e.g., Aaker & Keller, 1990; Barone, Miniard, & Romeo, 2000; Boush & Loken, 1991; Park, Milberg, & Lawson, 1991; Yeo & Park, 2006; Zhang & Sood, 2002).

Furthermore, when the fit between the parent brand and the extension is perceived to be high, attitudes toward the parent brand and beliefs about the brand's core associations will be more likely to transfer to the new extension product (Loken, Joiner, & Houston, 2010). These research findings imply that extensions with lower levels of perceived fit may have a lower likelihood of succeeding in the marketplace, thus imposing a limitation on brand extension (Ahluwalia, 2008). On the other hand, it has been argued that poor perceived fit contributes to the dilution of parent brands (e.g., Loken & John, 1993). Indeed, brand dilution is considered to occur when the beliefs or feelings about the parent brand are negatively impacted as a consequence of brand extension (Lau & Phau, 2007; Loken & John, 1993).

In support of the consistency effect of brand extension fit, Klink and Smith (2001) confirmed the generalizability and robustness of the positive relationship between perceived fit and brand extension evaluation. Recently, Völckner and Satter (2006) examined the potentially relevant determinants of brand success by simultaneously investigating the direct relationships between several success factors and extension success. The authors found that fit between the parent brand and the extension product is the most important driver of brand extension success, followed by marketing support, parent brand conviction, retailer acceptance, and parent brand experience. To address the underlying mechanisms by which these success factors have a profound impact on increasing the likelihood of brand extension success, they also reported several important structural relationships among these factors. To illustrate, marketing support has both a direct impact on brand extension success and three indirect effects on extension success through the following paths: (1) marketing support → perceived fit → extension success; (2) marketing support → perceived fit → retailer acceptance → extension success; and (3) marketing support → retailer acceptance → extension success. These findings suggested that



understanding mediating effects may serve as a starting point for identifying promising ways to affect certain success determinants and thus the likelihood of brand extension success.

### **Conceptualization of Brand Extension Fit**

Although brand extension researchers have acknowledged the importance of brand extension fit in determining successful brand extensions, there has been no consensus as to the conceptual definition of perceived fit between the parent brand and the extension.

Notwithstanding various conceptualizations of perceived fit, most academic researchers have identified two basic dimensions of perceived fit (e.g., Lau & Phau, 2007; Sheinin, 1998): *category-level fit* and *brand-level fit*.

First, category-level fit can be defined as the similarity or feature overlap between the parent brand and its extension product category (e.g., Aaker & Keller, 1990; Boush & Loken, 1991; Van Osselaer & Alba, 2003; Zhang & Sood, 2002). Guided by categorization theory, consumers are likely to form their perceptions of fit between the parent brand and the extension on the basis of their categorical judgment (Keller, 1998) because they may consider prototypical product attributes of a parent brand (e.g., Honda car) as the standard of reference for the extension category (e.g., Honda motorcycle). In effect, shared attribute associations of the parent brand with extension product category seem to provide a rationale for determining the perceived fit.

There is abundant evidence supporting the fact that perceived fit would be high if the extension category shared important product attributes with the parent brand (Aaker & Keller, 1990). For example, an imagined Crest mouthwash was evaluated more favorably than an imagined Crest shaving cream, presumably because a mouthwash extension from the parent

brand category (i.e., Crest toothpaste) could be seen as a dental care product category associated with “good for teeth” and “cavity prevention.” Inspired by the role of categorization processes, Loken (2006) documented that the higher the similarity between the parent brand and extension product features, the more likely it is that beliefs about the parent brand will be transferred to the new product.

Extending the conceptualization of brand extension fit beyond category similarity, the second dimension is brand-level fit, which refers to the perceived congruity between the specific brand association and the extension (Bhat & Reddy, 2001). The basic premise of brand-level fit is that a brand is a collection of associations stored in memory (Keller, 1993). Park, Milberg, and Lawson (1991) proposed a conceptual definition of perceived fit, which speculates a combination of product feature similarity and brand concept consistency. It is assumed that perceived fit does not depend only on the pure features of the parent brand category and the extension, but also on conceptual dimensions that are related to the specific brand associations. Given brand concepts can be viewed as the brand-unique image associations that emerge from attributes, benefits, and the parent brand’s personality, brand concept consistency can be defined in terms of “how well the brand concept accommodates the extension product” (Keller, 1998, p. 476). For example, Ferrari (recognized as a luxury car brand) extended into product categories, such as perfume and sunglasses. Presumably, consumers’ favorable disposition toward Ferrari and its brand associations with prestige and existing style would extend to the new product entries.

Along similar lines, Broniarczyk and Alba (1994) conceptualized the perceived fit in terms of unique brand-specific associations. Brand associations represent one’s knowledge about a brand held in one’s memory (Keller, 1993). Such associations can take different forms at

different abstraction levels that embrace imagery, attributes, benefits, and attitudes (Nan, 2006). As suggested by Broniarczyk and Alba (1994), unique brand-specific associations can dominate the parent brand effect and category similarity in predicting brand extension evaluations. For example, Froot Loops cereal, whose salient brand associations include “sweet,” “flavor,” and “kids,” was better able to extend to physically dissimilar product categories such as lollipops than physically similar product categories such as hot cereal due to the relevance of the unique brand-specific associations in the dissimilar extension category. Broniarczyk and Alba (1994) observed that a perceived lack of fit between the parent brand’s product category and the extension category could be overcome if key parent brand associations were salient and relevant in the extension category. The results implied that fit at the level of brand association is often a greater driver of brand extension success than the degree of favorable overall attitudes toward the extending brand or the degree of physical similarity between the parent brand and the extension product.

On the other hand, Bridges, Keller, and Sood (2000) provided another compelling demonstration of perceived fit as the notion of “explanatory links.” To the best of our knowledge, exploratory links could be based on any parent brand association held in consumer memory (e.g., attributes, benefits, usage, packaging, pricing, etc.) that is viewed as salient and relevant in the extension context. For instance, the Fisher-Price brand can readily extend into physically dissimilar toys, bath care products, and car seats if consumers unite the products with the link “products for children” (Bridges, Keller, & Sood, 2000). With this in mind, explanatory links can unify the several definitions of perceived fit used in past research by incorporating all aspects of consumer knowledge and memory associated with the brand into the judgment process.

In sum, the present research gravitates to these two characterizations of conceptualizing perceived fit, namely, category-level and brand-level consistency, because both are the products of well-developed theoretical machinery that have implications for brand extension research. Establishing the two fundamental dimensions of perceived fit could be based on product-related features/attributes, non-product-related associations, benefits, and usage situations.

### **The Role of Advertising in Enhancing Brand Extension Evaluations**

Advertising has become an essential part of enhancing consumer evaluations of brand extensions (Bridges, Keller, & Sood, 2000). Given the importance of brand extension fit as a key determinant of extension acceptance (e.g., consumers typically disapprove of the extension if they perceive the extension to be inconsistent with the parent brand), much scholarly work has been devoted to examining the role of advertising in increasing the degree of perceived fit and consequently its effectiveness on brand extensions evaluations (Boush, 1993; Goodstein, 1993; Keller, 1987). There is a considerable body of evidence showing that advertising can influence consumer perceptions of brand extension fit and thereby lead to favorable consumer responses to incongruent brand extensions (Lane, 2000; Martínez et al., 2008; Völckner & Sattler, 2006). For example, advertising slogans are found to improve the perceived fit and subsequently consumer evaluations of brand extensions (Boush, 1993).

According to Bridges, Keller, and Sood (2000), perceived fit can be enhanced if consumers can understand the rationale for the extension through communication strategies in advertising that would help establish exploratory links. In other words, high perceived fit occurs when consumers can establish explanatory links that connect the parent brand and the extension. In general, two important factors in the formation of explanatory links have been identified

(Bridges, Keller, & Sood, 2000): (1) dominant parent brand associations and (2) brand-to-extension relationship. Specifically, the dominant parent brand associations (i.e., either product-related or non-product-related) refer to any potential salience of parent brand associations with consumers (Aaker 1991; Keller, 1993). On the other hand, the brand-to-extension relationship influences whether salient brand associations are seen as relevant in the extension context. As Bridges, Keller, and Sood (2000, p. 3) stated, “relevant associations can be used as the basis for explanatory links, whereas irrelevant or contradictory associations may be ignored or become the basis for low fit perceptions.”

With this in mind, Bridges, Keller, and Sood (2000) revealed that brand extensions are evaluated unfavorably when the parent brand’s dominant association is inconsistent with the extension’s dominant association. These findings have important implications for communication strategies for brand extensions to improve perceived fit between the parent brand and its extension. In particular, they asserted that rational communication strategy (e.g., emphasizing the salience of the physical relationship between the categories) or elaborational communication strategy (e.g., providing information about worrisome extension attributes) would help consumers establish explanatory links between the parent brand and the extension.

Lane (2000) examined how ad repetition and ad content affect consumer reactions to incongruent extensions. In a study of four well-known brands with strong brand associations and positive evaluations (e.g., Heineken, Crest, Keebler, and Michelin), the author found that repeated exposure to advertisements for brand extensions influences more favorable consumer evaluations of incongruent extensions than a single exposure. This relationship is attenuated for highly incongruent extensions when ad content evokes primarily peripheral brand associations (e.g., Crest’s package, logo, color, or mascot) rather than benefit brand associations (e.g., Crest’s

cavity protection, whitening teeth, dental hygiene). However, for moderately incongruent extensions, ad content that evokes either peripheral or benefit brand associations are equally effective. These findings imply that since perceived fit is not a fixed property, consumer evaluation of incongruent extensions could change with repeated exposure to advertisements that evoke appropriate brand associations. Perhaps most convincingly, it is concluded that repeated exposure to extension advertisements that evoke appropriate parent-brand associations helps consumers establish relationships between the parent brand and the extension product, thereby positively influencing perceived fit (Lane, 2000; Völckner & Satter, 2006).

In line with research on the impact of advertising on brand extension acceptance, Völckner and Satter (2006) asserted that extension advertisements can increase the salience of critical brand associations that help consumers infer extension features and benefits and thus understand how an extension fits with the parent brand. This is so because consumers will likely infer judgments of fit and consistency when an advertisement signals how parent-brand attributes improve the brand extension's ability to provide benefits.

More recently, several researchers have gravitated toward the influence of attitudinal constructs (e.g., attitude toward the extension ad) on brand extension evaluations. Nan (2006) found that as the level of perceived fit decreases, the impact of attitude toward the parent brand on brand extension evaluations decreases but the impact of attitude toward the extension advertising increases. In support of Nan's (2006) findings, Dens and Pelsmacker (2009) provided insight into understanding the underlying process by which brand extension evaluations are influenced by attitude toward the extension advertising, along with perceived fit and parent brand quality. The authors reported that attitude toward the extension advertising is the most important antecedent of brand extension evaluations. Specifically, consumers are more likely to rely on

their attitude toward the extension advertising when they evaluate a brand extension, especially in low involvement product categories or in informational appeals.

As indicated above, prior research has demonstrated that advertising is an important driver that influences the level of perceived fit between the parent brand and the extension product and thus increases brand extension acceptance. Though extensively studied in marketing and advertising, what types of advertising strategies are most likely to be effective for promoting acceptance of brand extensions is a largely unexplored area of research. Indeed, the success of brand extension might be achieved by developing and communicating a positioning strategy. This is because positioning brand extensions plays a critical role in influencing the level of perceived fit relative to brand extension knowledge that can stem from the parent brand and extension category (Sheinin, 1998).

Aaker and Myers (1987) distinguished positioning strategies (and thus advertising objectives), including (a) associating the product with a characteristic or benefit, (b) taking a particular position on price-quality tradeoffs, and (c) associating the product with particular cultural symbols. The general distinction among these positioning strategies corresponds to the distinction between advertising claims that are linked to a specific attribute or function of the product versus message advertising that develops a general image of uniqueness, quality, or superiority for the product (see Nakamoto, MacInnis, & Jung, 1993, for a review).

In order to harness the potential of positioning strategy, comparative advertising has been frequently used to associate the new brand with the well-known, dominant brand in the category or differentiate the advertised brand from the comparison brand. Clearly, comparative advertising provides specific product attribute information (e.g., physical features, quality, and

superiority of the product) in an effort to make similarity-based inferences or differentiation-based inferences (Dröge & Darmon, 1987; Pechmann & Ratneshwar, 1991).

Recognizing the importance of positioning brand extensions (Sheinin, 1998), it is possible that comparative advertising can operate within the underlying processes by which consumers judge perceived fit and thus evaluate brand extensions. For instance, Bei, Chu, and Shen (in press) investigated how brand extensions might be positioned in comparative advertising, proposing that comparative brand similarities will interact with comparative claims and consumers' product knowledge to affect brand extension evaluations. Their findings suggested that when the new brand extension is advertised, a similar brand for comparison in comparative advertising would result in an assimilation effect that enhances the brand extension evaluations. Furthermore, it is found that the assimilation effect induced by the similar brands is stronger for those with low versus high product knowledge.

Next, I discuss the influence of comparative advertising and provide insights relating to branding issues. It will help to delineate the specific ad-related message features (i.e., comparative valence) that may affect the relative persuasiveness of comparative advertising.

### **The Relative Effectiveness of Comparative Advertising**

Comparative advertising has become a common practice for developing an effective advertising strategy in today's fiercely competitive marketplace since the Federal Trade Commission (FTC) began advocating its use in 1972. The FTC provided support for the fact that direct comparison of brands would offer better product information and give consumers a more rational basis for making purchase decisions. On the other hand, advertisers wish to convince consumers that their own brand is superior to some competitive brands by enhancing their target



audience's perception of the difference between the advertised brand and referent brands. There are a number of comparative advertising campaigns using claims of superiority relative to competing brands, such as Verizon Wireless comparing its network coverage to AT&T, Dunkin' Donuts comparing its coffee taste tests to Starbucks, and GM comparing its car models to its leading competitors. It is estimated that one third of all advertisements are identified as a form of comparative advertising (Grewal et al., 1997).

Comparative advertising is a form of advertising in which two or more brands of the same product category are compared in terms of specific product or non-product attributes (Chang, 2007; Pechmann & Stewart, 1990; Wilkie & Farris, 1975). In contrast, noncomparative advertising provides information about an advertised brand without references to its competitors.

In light of our current knowledge, comparative advertising can also be categorized as to whether specific competitors are explicitly or implicitly identified as a reference point for interpreting superior claims about the advertised brand's merits and salient attributes (Miniard et al., 2006). That is, direct comparative ads focus on explicit comparisons of the focal brand with the name of the competitive brand (e.g., our brand is better than the leading brand X in the category), whereas indirect comparative ads focus on implicit comparisons between two or more brands without mentioning a specific competitive brand (e.g., our brand is better than any other brand in the category with respect to the featured attribute).

The effectiveness of comparative advertising has been extensively investigated over the past decades. A considerable amount of empirical research has documented that comparative advertising has been proven to draw attention to message content, elicit high levels of message involvement, lead to extensive message elaboration via central-route processing, generate message recall and claim credibility, and enhance brand attitude and purchase intentions (Droge,

1989; Grewal et al., 1997; Muehling, Stoltman, & Grossbart, 1990; see Chang, 2007, for a review). For instance, Putrevu and Lord (1994) found that comparative advertising yields more favorable attitudes toward the brand for products that elicit cognitive and affective involvements simultaneously. Consequently, comparative advertising exerts a positive impact on brand switchers and negatively affects consumers loyal to competing brands.

More importantly, comparative advertising plays a prominent role in establishing competitive brand positioning. Because comparative advertising allows a new market entrant to position itself explicitly or implicitly against the more established brands and to enhance its distinctive advantages, it may be particularly meaningful for a new brand. To illustrate, Wilkie and Farris (1975) articulated the potential usefulness of comparative advertising for brand positioning, particularly through the implementations of associative and differentiative strategies. That is, “for brand differentiation strategies, comparison advertising can be used to isolate and stress determinant attributes. Association strategies, meanwhile, can be used for attributes on which consumers perceived the sponsored brand to be weaker, when in fact it is at parity or better” (Wilkie & Farris, 1975, p. 13). Consistent with the foregoing argument, Pechmann and Ratneshwar (1991) found that direct comparative ads (relative to indirect comparative ads) can enhance consumers’ perceptions of the advertised brand by associating it with the comparison brand and simultaneously differentiate the advertised brand by lowering consumers’ perceptions of the comparison brand on the featured attribute. Armed with these findings, Pechmann and Ratneshwar (1991) suggested that direct comparative ads are most effect for both unfamiliar and familiar advertised brands when the featured attribute is typical of the product category.

However, the results of comparative advertising effectiveness have been less consistent. Much of the previous research has shown that attitude toward the ad is commonly less favorable

for comparative ads than for noncomparative ads, suggesting that comparative ads are likely to evoke counter-argumentation (Belch, 1981; Goodwin & Etgar, 1980; Swinyard, 1981). Since counter-argumentation is central to the notion of message refutational thinking, it has been said to be a key precursor of message acceptance (Jain, Buchanan, & Maheswaran, 2000). This is consistent with the findings of early research (e.g., Wright, 1973), which revealed that counter-argumentation leads to lower claim acceptance. Wilson and Muderrisoglu (1980) provided more direct evidence that comparative ads generated higher levels of counter-argumentation than noncomparative ads. In line with this preceding result, Jain, Buchanan, and Maheswaran (2000) demonstrated that comparative ads lead to more counter-argumentation and lower claim believability, as compared to noncomparative ads. Furthermore, it is found that comparative ads do not result in more positive evaluations of the brand (Gorn & Weinberg, 1984), and can even lead to information overload (Keller & Staelin, 1987) and misidentification of the advertised brand (Pechmann & Ratneshwar, 1991).

Taking into consideration the mixed results of comparative advertising effectiveness, Grewal et al. (1997) conducted a meta-analysis of more than 75 published and unpublished research on comparative advertising. The authors reported that comparative ads are more effective than noncomparative ads in generating message/brand awareness, evoking favorable sponsored brand attitudes, and increasing purchase intentions and behaviors. They pinpointed that comparative ads are more persuasive than noncomparative ads, particularly when the sponsored brand is new to the product category and when the comparison brand is the market leader. That is, new brands seem to benefit from comparative ads comparing themselves to established brands. Nonetheless, it had been found that comparative ads evoke lower source believability and less favorable attitudes toward the ad.

With this in mind, there is not yet a consensus on the effectiveness of comparative advertising despite the fact that a vast amount of literature has been devoted to understanding how comparative advertising works. Given the conflicting findings regarding the impact of comparative advertising, several scholars have called for research initiatives to identify the moderating factors that influence the relative persuasiveness of comparative and noncomparative advertising, highlighting ad-related variables. In response to this research inquiry, numerous studies have examined the different types of comparison and their effects in comparative advertising, acknowledging the importance of message features, such as comparative valence (Chang & Chou, 2008; Jain, 1993; Jain & Posavac, 2004), maximal or minimal claims (Jain, Agrawal, & Maheswaran, 2006), and single versus piecemeal comparison framing (Muthukrishnan, Warlop, & Alba, 2001). Given the existing demonstration that these ad-related message features can influence the persuasiveness of comparative advertising, a closer look at the nature of message framing in comparative advertising underlying message features (e.g., comparative valence) seems warranted.

### **Comparative Valence: Positive versus Negative Comparative Advertising**

In general, comparative advertising can differ with respect to the valence of comparison, particularly a positively- versus negatively-framed message. Comparative valence can be defined as “the extent of perceived derogation in comparative advertisements” (Chang & Chou, 2008, p. 73). Research has asserted that positive or negative comparative advertising depends on whether the advertisement indulges in a nonderogatory or a derogatory comparison (Jain, 1993; Jain & Posavac, 2004). Positive comparative advertising emphasizes the superiority of the target brand

over the competing brand in a non-derogatory manner (e.g., Brand X is good but our brand is excellent; You're OK while I'm more OK).

It implicitly acknowledges that the target brand has qualitatively better or quantitatively more of the same attributes or some additional attributes that the competing brand does not possess (Jain, 1993). In contrast, a negative comparative ad emphasizes the weakness of the competing brand (e.g., Brand X is not good but our brand is good; I'm OK while you're not OK). It describes negative aspects associated with the competing brand that are either reduced in the target brand or not present at all (Jain, 1993). Negative comparative ads are shown to evoke significantly higher counterargumentation and lower claim acceptance than positive comparative ads (Jain, 1993). Subsequently, Jain and Posavac (2004) revealed that positive comparative ads elicit higher believability, better brand attitudes, and fewer negative attributions than negative comparative ads. However, negative comparative ads are more effective than positive comparative ads for unknown or midrange brands.

## CHAPTER 3

### THEORETICAL BACKGROUND

Broadly speaking, there are several distinct theoretical perspectives that have been brought to bear on consumer evaluations of brand extensions. The dominant view is that brands can function as categories and that the products of a brand as an element of a category may influence a series of subsequent information processing (Aaker, 1991; Aaker & Keller, 1990; Boush, 1993). Categorization theory has been frequently used as a theoretical basis to examine the underlying process through which consumers evaluate brand extensions.

Another stream of brand extension literature draws upon motivational perspectives to account for how consumers evaluate brand extensions. In particular, regulatory focus theory provides a novel framework on the evaluative tasks of brand extension acceptance. The following is thus not only to speculate about a categorization approach to consumers evaluations of brand extensions, but also to focus on individuals' motivational systems regarding self-regulation that can be usefully applied to the domain of brand extensions. Furthermore, these theoretical explanations share common assumptions for understanding the relative effectiveness of comparative advertising.

#### **Categorization Theory**

Categorization theory postulates that people tend to divide the world of objects into categories in order to simplify and interpret a complicated environment in an efficient manner

(Ozanne, Brucks, & Grewal, 1992; Sujan, 1985). In this regard, categories can be defined as “a class of objects that we believe belong together” (Smith, 1990, p. 33), or alternatively as “a number of objects that are considered equivalent” (Rosch, 1978, p. 30). According to Mervis and Rosch (1981), “a category exists whenever two or more distinguishable objects or events are treated equivalently. This equivalent treatment may take any number of forms, such as labeling distinct objects or events with the same name, or performing the same action on different objects” (p. 89).

The fundamental assertion of categorization theory is the similarity or match between the object and category. Namely, there is a tendency for people to categorize similar objects together and to assign dissimilar objects to different categories (Carrillat, Harris, & Lafferty, 2010; Medin, Goldstone, & Gentner 1993). As suggested by Tversky (1997), object similarity is contingent upon their common and distinctive features weighted by the saliency of these features. More precisely, “objects with common salient features are seen as similar and are assigned to the same category, whereas objects with salient distinctive features are assigned to different categories” (Carrillat, Harris, & Lafferty, 2010, p. 110).

From a consumer psychology perspective, consumers might be expected to use their categorical representations to make sense of the myriad new and existing products and services (Loken, Barsalou, & Joiner, 2008). In general, a categorical representation refers to information that becomes stored in the cognitive system for a set of products, services, and brands (Loken, Barsalou, & Joiner, 2008). In the process of categorization presentations, consumers can understand and draw inferences about these marketing entities. For example, consumers might classify a new product as a mobile phone on the basis of prior knowledge about physical or functional features of mobile phones, for example, that mobile phones are small in size, enable

users to make seamless telephone calls and send text messages, and support many additional services (e.g., gaming, camera, and MP3 player). Once the new product is categorized successfully, prior categorical information about mobile phones may also be used to make inferences about unknown attributes of the new product or evaluate the new product. This categorization has a profound impact on subsequent cognitive processes, such as encoding and perception, storage, and retrieval, inferences, and the formation of behavioral intentions (Bless & Greifeneder, 2009; Loken, 2006; Shavitt & Wänke, 2001).

Linking this theorizing to the context of brand extension, it has been asserted that brands can be viewed as categories (Aaker & Keller, 1990; Boush, 1993) and the categorization of a product as a part of a brand can influence a series of subsequent information processes that underlie inferences and memory processes (Bless & Greifeneder, 2009). In particular, when faced with an extension product, consumers are likely to accept the extension product that would represent an individual member of the parent brand category because brands as categories have come to be associated with a number of product-related attributes over time. For example, Ivory has successfully extended to soap, shampoo, hair conditioner, dishwashing liquid, and laundry detergent products because these extension products have cleaning features in conjunction with strong product-related attributes, such as soap, mildness, and quality (Keller, 1998).

Categorization theory has its roots in the impression formation literature. For example, Fiske (1982) found that person perception is largely dominated by schema-based affect (e.g., stereotype or prior knowledge). Subsequently, Fiske and Pavelchak (1986) asserted that impressions are formed through category-based or piecemeal-based processes. When a target individual is successfully categorized, people will form an impression of the target individual based on their schema-based affect. In contrast, impression formation will predominantly be



based on the attributes of the target individual when the categorization judgments are unsuccessful. Along similar lines, the dual-process model of impression formation described in Brewer (1988) reflects the difference between information processing that is category-based and person-based. Category-based impression formation refers to top-down processing, in which impression formation starts with categorization of the target individual and activation of a category schema, which thereby leads to subsequent attention, interpretation, and encoding of incoming information about the target individual (Brewer & Feinstein, 1999). In contrast, person-based impression formation describes bottom-up processing, where a representation of the target individual is built up from incoming information and subsequent inferences and generalizations (Brewer & Feinstein, 1999).

Shifting the focus from the impression formation processes, consumers' reactions to brand extensions seem to involve an underlying evaluation mechanism through either a categorical or a piecemeal processing, though the two approaches are not mutually exclusive (Aaker & Keller, 1990; Boush & Loken, 1991; Fiske & Pavelchak, 1986; Nan, 2006). When consumers encounter a new extension, they initially attempt to determine whether or not the brand extension belongs to the parent brand category. When the extension is successfully assigned category membership (i.e., high perceived fit), consumers tend to simply transfer their evaluation of the parent brand to the extension through categorization judgments. On the other hand, a piecemeal-based approach to evaluation may occur when the relationship between the parent brand and the extension product is perceived to be relatively low. In other words, when the extension is not assigned category membership, consumers are likely to evaluate a brand extension on the basis of the attribute-based information in order to reconcile the new product with the existing category. In this view, consumers with a piecemeal-based approach will engage

in much more cognitive effort than those with a categorization-based approach because they carefully scrutinize all the information that pertains to any specific attributes of brand extension.

Brand extension research has been accumulating empirical evidence that consumers are likely to evaluate an extension of a brand more favorably when it is similar rather than dissimilar to the parent brand (e.g., Aaker & Keller, 1990; Barone, 2005; Boush & Loken, 1991; Park, Milberg, & Lawson, 1991). Prior literature consistently indicated that a higher level of perceived fit between the parent brand and the extension would entail stronger beliefs about the brand and be transferred to the new product (Bless & Greifeneder, 2009). Namely, “the more similar the extension is to a parent brand, the more likely are consumers to infer the parent brand characteristics in the extension” (Bhat & Reddy, 2001, p. 113). For example, Aaker and Keller (1990) examined how consumers respond to twenty brand extensions from six well-known brands and found that both perceived fit between the parent brand and extension product categories and perceived high quality for the parent brand could lead to more favorable extension evaluations. According to Lau and Phau (2007), “when a cognitive link is established between the extension brand and the category of the parent brand, the consumers’ attitudes and beliefs that are associated with the product category will then be transferred to the extension brand” (p. 423).

In line with the general assumption of categorization theory, it has been proposed that brand extension evaluation involves an *affect-transfer process*, wherein parent brand associations (e.g., attitude toward the parent brand or parent brand image) are transferred to the extension (Aaker & Keller, 1990; Broniarczyk & Alba, 1994; Nan, 2006; Park, Milberg, & Lawson, 1991). Parent brand associations can be transferred to a new extension product because consumers often believe that an extension possesses the typical attributes of benefits for the parent brand (Aaker &

Keller, 1990) and even brand extension evaluations seem to be more favorable when consumers hold more favorable attitudes toward the parent brand (Bottomley & Holden, 2001).

Clearly, transfer of affect associated with the parent brand depends on the level of perceived fit or similarity between the parent brand and the extension (Aaker & Keller, 1990; Morrin, 1999; Nan, 2006). For instance, consider that Harley-Davidson extends its core product line (i.e., motorcycle) to the denim jeans category. Since certain image and product characteristics of Harley-Davidson are tough, macho, and rebellious masculinity, consumers are likely to perceive a higher level of fit between Harley Davidson and its extension, and thus accept the Harley Davidson jeans because specific brand associations with Harley Davidson may easily transfer to its brand extension. If the parent brand associations are transferred to the extension, then consumers will view the extension as being a suitable member of the brand category and ultimately have a favorable effect on the parent brand (Diamantopoulos, Smith, & Grime, 2005).

Park, Milberg, and Lawson (1991) found that the most favorable evaluations occurred when brand extensions were made with high brand concept consistency and high product feature similarity. Experimentally, the results indicated that a function-oriented brand (e.g., Timex) that has dominant associations related to product performance (e.g., “durability” and “reliability”) could easily extend into product categories that shared the functional association (e.g., stopwatch and calculator). On the other hand, a prestige-oriented brand (e.g., Rolex) that has dominant associations related to consumers’ expression of self-concepts or images (e.g., “high status” and “luxury”) could easily extend into product categories that shared the prestige association (e.g., rings and bracelets). The authors suggested that when a brand’s concept is consistent with its extension products, the prestige brand seems to provide greater extendibility across different

product categories that vary with the degree of product-feature similarity than the functional brand. Therefore, it is concluded that an evaluative transfer from a brand (association, image, or concept) to an extension product is more likely the higher the perceived fit between the parent brand and the extension.

### **Categorization Approach to Comparative Advertising**

Prior research has extended the basic premise of categorization theory to comparative advertising persuasion. Since comparative advertising is conducive to consumers' categorizing the advertised brand relative to the comparison brand, it is most likely to have an associational effect when the featured attribute is typical of the product category (Pechmann & Ratneshwar, 1991). For example, Sujan and Dekleva (1987) adopted a categorization approach to examine the effects of comparative advertising, focusing on the moderating effects of category expertise. The authors showed the differences in experts' and novices' references to comparative and noncomparative advertising at different levels of product specificity. As suggested by Sujan and Dekleva (1987), categorization processes may play an important role in making inferences about product attributes of the advertised brand.

On the other hand, Snyder (1992) investigated the relative effectiveness of direct versus indirect comparative advertising derived from a categorization approach, where direct comparisons are assumed to promote exemplar-based processing and indirect comparisons are assumed to promote prototype-based processing. According to a categorization perspective (Loken, Barsalou, & Joiner, 2008), the exemplar view posits that categories are represented by specific, stored instances of the category, whereas the prototype view postulates that categories are represented by abstract composites based on central tendency information. In support of the

utility of categorization theory, the author found that indirect comparative ads lead to more favorable evaluation of the new brands relative to “other brands” than to the “leading brand,” while direct comparative ads lead to more favorable evaluation relative to both “leading and other brands.” Snyder (1992) concluded that the categorization framework may be useful for explaining the effects of different types of comparative advertising, including association of the new brand with positive category attributes and differentiation of the new brand from comparison brands on evaluative dimensions.

### **Regulatory Focus Theory**

Consumers make goal-driven decisions (Bettman, Luce, & Payne, 1998; Heath, Larrick, & Wu, 1999; Higgins, 2002). According to Lee and Higgins (2009), how consumers process information and make choices is influenced by their motivational systems and self-regulatory goals, which pursue more fundamental needs for nurturance and security. Goals refer to “representational structures that guide the system in its pursuit of a reference or end state” (Markman & Brendl, 2000, p. 98). It has been said that people have a self-regulatory system that regulates their attention, perception, attitudes, and behaviors toward personally relevant goals (Higgins, 1997, 2002).

Inspired by the general hedonic principle that people are motivated to approach pleasure and avoid pain, regulatory focus theory (Higgins, 1997) has been used as a theoretical framework to account for people’s self-regulatory goals or motivation. Higgins (1987) articulated that when people’s end state is positive and desired, people are motivated to have an approach goal. Conversely, an avoidance goal is activated when the end state is negative and undesired. Thus, it is proposed that individuals’ self-regulatory goals underlie approach-avoidance behavior.

This theory distinguishes between two basic types of self-regulatory orientation that adhere to goal pursuits: *promotion focus* and *prevention focus*. In general, promotion focus and prevention focus stem from people's fundamental needs for nurturance and security, which pertain to different desired end states (Higgins, 1997, 2002). People with a survival need for nurturance (i.e., promotion focus) tend to regulate their attention, perceptions, attitude, and behaviors toward approaching gains and avoiding non-gains, whereas those with a survival need for security (i.e., prevention focus) tend to regulate their attention, perceptions, attitude, and behaviors toward avoiding losses and approaching non-losses (Higgins, 1997, 2002; Lee & Higgins, 2009). Research in the last decade has shown that these two distinct types of self-regulatory goals may result in different consequences, as promotion-focused people tend to be more sensitive to the presence or absence of positive outcomes and prevention-focused people tend to be more sensitive to the presence or absence of negative outcomes (Lee & Higgins, 2009).

Importantly, promotion focus is associated with people's aspirations, hopes, advancement, and accomplishments as desired end states and thereby leads to behavioral approach tendency as the strategic "eager" means to goal attainment. However, prevention focus is associated with people's duties, obligations, responsibilities, and safety as desired end states and thus elicits behavioral approach tendency as the strategic "vigilant" means to goal attainment (Aaker & Lee, 2001; Baas, De Dreu, & Nijstad, 2008; Kim, 2006; Lee & Aaker, 2004).

Applying the general notions of regulatory focus theory in the context of brand extension, recent research has opened up the possibility that consumers' self-regulatory goals influence the effect of brand extension fit and thus increase acceptance of brand extensions (e.g., Bless & Greifeneder, 2009; Yeo & Park, 2006). Remarkably, Yeo and Park (2006) examined the interaction effects between parent-extension similarity and self-regulatory focus on evaluations

of brand extensions. The authors suggested that brand extension has two basic components that are relevant for consumer decision making: hedonic attainment value (i.e., the extent to which consumers enjoy the new product when it is of high quality) and perceived risk/uncertainty (i.e., the likelihood that the new product lacks overall quality).

First, an extension may be associated with hedonic attainment value resulting from a high quality product because it provides an additional opportunity for consumers to enjoy a favored brand in a new product category. In particular, this would be true if consumers are strongly attached to the parent brand or have established a strong relationship with the brand (e.g., Fournier, 1998; Park & Kim, 2002). In this vein, an extension of a favored brand may elicit positive responses such as pleasantness, joy, or excitement. Given their sensitivity to potential gains, promotion-focused consumers should be guided particularly by perceived hedonic value of an extension product.

On the other hand, an extension may be linked to perceived risk for consumer decision making because purchasing a new product can elicit consumer uncertainty about product attributes and/or benefits. In particular, the level of perceived risk hinges on the perceived fit between the parent brand and the extension product. In other words, consumers are more likely to feel uncertain when the extension product is dissimilar to the parent brand category since it would be questionable whether the quality of the parent brand is transferable to the extension product (Yeo & Park, 2006). Given their sensitivity to potential losses, promotion-focused consumers should be guided especially by perceived risk of an extension product. In line with these predictions, Yeo and Park (2006) found that similar extensions are evaluated more favorably than less similar extensions when consumers are chronically or situationally prevention focused, whereas such effect is eliminated and sometimes even reversed when

consumers are chronically or situationally promotion focused. These findings imply that the difference is attributed to different weights attached to the perceived fit and to the perceived hedonic value of the extension by promotion-focused versus prevention-focused consumers.

### **How Self-Regulatory Goals Influence the Effects of Comparative Advertising**

Self-regulatory goals play a critical role in influencing the persuasive impact of advertising on information processing. Petty and Cacioppo (1979) pointed out that individuals are more inclined to process a persuasive message when the message is compatible with their goals than when it is incompatible with them. Namely, people tend to have higher motivation when their self-regulatory goals fit the message. This implies that people's goals will activate elaborate processing of the persuasive message, which results in greater persuasion.

A substantial body of research is in line with this goal compatibility idea. For example, Crowe and Higgins (1997) reported that when people are induced by self-regulatory goals, they are more likely to remember information that is compatible rather than incompatible with the regulatory goal. Similarly, Aaker and Lee (2001) suggested that the matching of information with the self-regulatory goals leads to greater persuasion, demonstrating that individuals with more salient promotion goals are more persuaded by an ad appeal emphasizing the positive outcomes achieved by using the product (i.e., promotion-focused information). Conversely, those with more accessible prevention goals are more persuaded by an ad appeal emphasizing the negative outcomes avoided by consuming the product (i.e., prevention-focused information). This is because people with a promotion goal find it easier to respond to promotion-focused information, whereas those with a prevention goal find it easier to respond to prevention-focused information. It is logical to infer that self-regulatory goals are consistent with the



conceptualization of message framing, particularly in the relative effectiveness of positive and negative framed messages. When consumers perceive a promotion-focused situation to be important, greater persuasion effects are likely to be observed for positive framed messages rather than negative framed messages and the reverse effects may hold true (Aaker & Lee, 2001).

In addition, Lee and Aaker (2004) found that the effectiveness of message framing depends on whether or not the fit between self-regulatory goals and message framing is congruent. In this light, they extended the message framing literature by demonstrating the moderating role of regulatory focus and perceived risk on the relative persuasiveness of message framing. Their findings showed that gain-framed appeals are more persuasive when the message is promotion focused and when perceived risk is low, whereas loss-framed appeals are more effective when the message is prevention focused and when perceived risk is high. The key implication of their study is that the regulatory fit principle accounts for the basic persuasive effects involving the differential effectiveness of gain- and loss-framed messages.

By integrating regulatory focus theory with message framing research, recent research has highlighted the importance of studying the influence of self-regulatory goals on the persuasiveness of comparative advertising (e.g., Chang & Chou, 2008; Jain et al., 2007). In support of the broader notion that people will form attitudes and process information in ways that help them sustain their motivational orientation (Avnet & Higgins, 2006), Jain et al. (2007) investigated how promotion-focused and prevention-focused consumers evaluate the comparison brand and what information they anchor on indirect comparative ads framed positively or negatively. These results showed that negative comparative advertising leads prevention-focused consumers to exhibit higher evaluations for the advertised brand and lower evaluations for the comparison brand. However, positive comparative advertising leads promotion-focused

consumers to more favorable attitudes toward the advertised brand with no difference in attitudes for the comparison brand. Subsequently, Chang and Chou (2008) investigated how self-regulatory goals interact with comparative valence on advertising persuasion. The findings indicated that when consumers are exposed to different comparative advertisements (positive frame versus negative frame), they demonstrate unique patterns with regard to perceived differences between target and competitive brands, message diagnosticity, and purchase intentions, depending on their self-regulatory goals. Specifically, when the comparative valence is positive, promotion-focused consumers experience stronger persuasive effects than prevention-focused consumers. On the other hand, prevention-focused consumers experience stronger persuasion effects when the comparative valence is extremely negative.

## Research Hypotheses and Questions

The preceding overview of brand extension research leads to the conclusion that perceived fit between the parent brand and extension product contributes to the success of brand extensions. Substantial evidence has demonstrated that an extension of a strong brand is likely to be evaluated more favorably when the extension is similar to the original brand with respect to physical, conceptual, and contextual consistency (e.g., Aaker & Keller, 1990; Boush & Loken, 1991; Keller, 1998; Martin & Stewart, 2001). When consumers perceive a lack of brand extension fit, the extension product is given smaller probabilities of success. Despite the above evidence that perceived fit exerts a strong influence in the evaluation process of brand extensions, a critical question concerns when the effect of perceived fit on brand extension acceptance is enhanced or attenuated.

Extant research has focused on the role of perceived risk underlying the effects of brand extension fit (e.g., Klink & Smith, 2001; Yeo & Park, 2006). To the best of our knowledge, the conceptualization of perceived risk has been widely acknowledged within the basic premise that consists of the two main components: uncertainty and negative consequences of a choice (Cunningham, 1967). Perceived risk can be defined as consumers' uncertainty when they cannot anticipate the consequences of their purchase decisions (Shiffman & Kanuk, 2000). As suggested by Robertson, Zielinski, and Ward (1984), perceived risk refers to "any action of a consumer [that] will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant" (p. 184).

Understanding the notion of perceived risk is important because consumers are more often motivated to avoid mistakes than to maximize utility in purchasing the product, service, or brand (Mitchell, 1999). It has been proposed that brand extensions often carry perceived risk of

an extension product or uncertainty about the product quality for consumer decision making (Yeo & Park, 2006). As noted earlier, the level of perceived risk would be particularly high when the extension is dissimilar to the parent brand because the transferability of the parent brand's quality to the extension product would be questionable (Yeo & Park, 2006). For example, a dissimilar extension, such as Coke shampoo or Kodak shoes, might be perceived to be highly risky, while a more similar extension, such as Coke energy drink and Kodak digital photo printer, to which manufacturing capabilities or favorable images of the parent brand can be presumed to be easily transferable, would be perceived to be much less risky. In support of this foregoing argument, Smith and Andrews (1995) found that as the level of perceived fit decreases, perceived risk increases, which in turn has a negative impact on brand extension evaluations.

On the other hand, perceived risk has been a critical determinant of how people respond to positively and negatively framed messages (e.g., Grewal, Gotlieb, & Marmorstein, 1994; Rothman & Salovey, 1997). In the marketing literature, message framing has been conceptualized either by emphasizing positive product attributes or benefits gained through product use or by emphasizing negative product attributes or benefits lost by not using the product (Maheswari & Meyers-Levy, 1990). Specifically, positively framed messages highlight a brand's advantages or the potential gains to consumers in a situation, whereas negatively framed messages highlight a brand's disadvantages or the potential losses to consumers in a situation (Grewal, Gotlieb, & Marmorstein, 1994).

Extending the application of message framing strategy to comparative advertising, positive comparative ads might suggest that a company's product is superior to its competitor's product by providing positive outcome information. For example, Bearden and Shimp (1982) have used a positive frame by describing a product (a plastic automobile tire) as "having

advantages over conventional tires by being longer lasting and safer while providing a more comfortable ride” (p. 231). In contrast, negative comparative ads might indicate that a competitor’s product is inferior to the company’s own product by providing negative outcome information.

The underlying mechanism through which perceived risk influences individuals’ responses to message framing is generally discussed within the principle of prospect theory (Kahneman & Tversky, 1979; Tversky and Kahneman, 1981). According to prospect theory, people’s preferences to be risk averse or risk seeking are sensitive to how information is framed. It is important to note that risk aversion refers to a preference for a certain consequence over a gamble of equal or greater expected value, while risk seeking is exhibited if the gamble is preferred (Lee & Aaker, 2004; Tversky & Kahneman, 1981). In other words, people tend to avoid risks when considering the potential gains but are willing to take risks when considering the potential losses. This theoretical explanation is consistent with past research (e.g., Kahneman & Tversky, 1979) suggesting that consumers are likely to be more risk averse in order to secure potential gains when a message is framed positively than when a message is framed negatively. Similarly, Lee and Aaker (2004) asserted that individuals are more likely to focus on negative outcomes when perceived risk is high, whereas they are more likely to focus on the positive outcomes when perceived risk is low. In this regard, Lee and Aaker (2004) provided empirical evidence that positive/gain frames are more effective than negative/loss frames when perceived risk is low, while the reverse is true when perceived risk is high.

These preceding findings lead to a prediction that comparative valence frame (i.e., positive or negative) interacts with brand extension fit and thereby influences consumer acceptance of brand extensions. As described earlier, brand extension fit is likely to determine

the level of perceived risk of the extension product. Put simply, a similar extension might be viewed to be less risky, whereas a dissimilar extension might be viewed to be highly risky. Taken together, it is expected that positive comparative frames are likely to be more persuasive than negative comparative frames under a similar extension condition. However, negative comparative frames are expected to yield more favorable consumer responses to dissimilar brand extensions than positive comparative frames. Therefore, the following hypotheses are proposed.

**H1:** For similar brand extensions, positive comparison frames will lead to (a) more favorable extension evaluations and (b) greater purchase intentions than negative comparison frames.

**H2:** For dissimilar brand extensions, negative comparison frames will lead to (a) more favorable extension evaluations and (b) greater purchase intentions than positive comparison frames.

In addition to the possible influence of comparative valence frame and brand extension fit, prior research has identified some boundary conditions for the effect of brand extension fit, particularly attention to the moderating role of self-regulatory goals (promotion focus versus prevention focus) (Shine, Park, & Wyer, 2007; Yeo & Park, 2006). In line with these predictions, Yeo and Park (2006) revealed that similar extension products are evaluated more favorably than dissimilar extension products for participants in the prevention-focused condition (because similar extensions constitute less risk), whereas this effect is eliminated when participants are in the promotion-focused condition. In fact, the interaction effects of brand extension fit and self-

regulatory goals are observed to hold across extension product categories as follows: CNN weekly news magazine (similar extension) versus CNN movie channel (dissimilar extension); M&M chocolate cake (similar extension) versus M&M sports drink (dissimilar extension); Guess casual suit (similar extension) versus Guess performance skiwear (dissimilar extension).

However, the interaction patterns of brand extension fit and self-regulatory goals remain unanswered when some product category extensions inherently constitute a higher risk than other product category extensions. For example, the potential risk seems quite limited for purchasing a new candy bar relative to purchasing a new computer (Bless & Greifeneder, 2009). In considering new extension product categories that might vary with potential risk, it is expected that the effect of similar extensions will be more pronounced for individuals with a prevention focus than those with a promotion focus. Since prevention-focused consumers are likely to consider the risk factor very seriously, they should view a similar extension to be less risky than a dissimilar extension and thus prefer a similar extension to a dissimilar extension. However, the effect of brand extension fit could be substantially reduced for promotion-focused consumers because they tend to consider the risk factor less seriously (Yeo & Park, 2006). Therefore, the following hypothesis is set forth.

**H3:** For similar brand extensions, prevention-focused consumers will have (a) more favorable brand extension evaluations and (b) greater purchase intentions than promotion-focused consumers.

What is unclear from the literature is whether the differences in extension evaluation and purchase intentions between promotion and prevention-focused consumers will truly emerge in the dissimilar extension condition. Thus, the first set of research question is proposed.

**RQ1:** What if anything is the difference between promotion and prevention-focused consumers on (a) brand extension evaluation and (b) purchase intentions for dissimilar brand extensions?

In light of the above theoretical explanations and abundant evidence, this study attempts to examine the mediating role of perceived extension risk on the relationship between brand extension fit and extension evaluations because perceived extension risk may be a critical factor that provides implications for understanding the underlying mechanism through which the persuasive impact of brand extension fit varies under different comparative valence frames and self-regulatory goals. This leads to the following hypothesis:

**H4a:** For positive comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.

**H4b:** For negative comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.

**H5a:** For promotion-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.



**H5b:** For prevention-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.

The lack of relevant theoretical bases and empirical evidence makes it difficult to formulate specific research hypotheses supporting a three-way interaction effect among brand extension fit, comparative valence frame, and self-regulatory goals. To date, there is a paucity of research examining the synergy effects of comparative valence frame and self-regulatory goals underlying the effect of brand extension fit. Therefore, additional research question is put forth:

**RQ2:** Are there any significant interaction effects of brand extension fit, comparative valence frame, and self-regulatory goals on (a) extension evaluations and (b) purchase intentions?

## CHAPTER 4

### METHODOLOGY

#### **Overview of Experiments**

Three main experiments were conducted to demonstrate the joint influence of comparative valence frame and self-regulatory goals that may moderate the effect of brand extension fit on consumer acceptance of brand extension. Experiment 1 investigated the persuasive processes of comparative valence frame and self-regulatory goals underlying the effect of brand extension fit. To increase external validity, a real brand (i.e., Nike) was used as the target stimulus. In Experiment 1, the regulatory focus variable was experimentally manipulated to be either promotion or prevention focus. Experiment 2 attempted to generalize the results from Experiment 1 across a different set of extension product categories (i.e., laptop computer and handheld vacuum) affiliated with the parent brand (i.e., Motorola). It is noteworthy that the format of direct comparative advertising was used in both Experiments 1 and 2.

Experiment 3 was executed to replicate and extend the main findings obtained in Experiment 2 by changing the direct comparative advertisement to an indirect comparative format. Furthermore, instead of manipulating self-regulatory goals, participants' chronic level of regulatory system was measured in order to categorize participants as a promotion focus or a prevention focus on the basis of a median split on their scores. Previous literature (e.g., Zhao & Pechmann, 2007) suggested that consumers can be predisposed to be promotion focused or

prevention focused; it is estimated that approximately half of consumers are chronically promotion focused, and the other half are prevention focused.

Three experiments were administered through an online survey-based procedure. Participants were provided with a URL, which they accessed to complete the online experimental tasks. Using the Random Link Generator (Baek, Kim, & Yu, 2010), they were randomly assigned to the different experimental conditions. Although the degree of control over web-based studies is lower than for studies conducted in a lab environment, prior research (Krantz & Reeshad, 2000) has shown a close comparative match between the results of psychological research conducted in lab situations and via the Internet.

Results from all three experiments provided consistent evidence by using a set of real, well-known brands over different product domains. Although the use of hypothetical parent brands might provide more experimental control, the current research chose real brands to avoid the possibility of misinterpreting category-level effects with brand-level effects (Broniarczyk & Alba, 1994; Kim, 2003). For rigorous research on brand extensions, the use of actual brands may have generated consumer knowledge structures that are more stable and more resistant to reconfiguration than the use of hypothetical brands (Bridges, Keller, & Sood, 2000). Martin and Stewart (2001) stated that “fictitious brands would not carry the well-formed associations and feelings that are a requisite for brand extension” (p. 474). It also seems that use of hypothetical brands represents a serious threat to the external validity of the results (e.g., Boush & Loken, 1991). However, fictitious extension products for each actual brand were chosen to provide a representative range of brand extension fit and rule out other extraneous elements. Preceding this, a series of pretests was conducted to select the appropriate fictitious extension products for developing the stimulus materials. This procedure was expected to ensure successful

manipulations of the independent variables and thus help increase the internal validity of the main experiments.

## **Stimuli Development**

### *Pretest 1*

The purpose of this pretest was (1) to determine appropriate product categories that can be reasonably relevant to subject samples and (2) to select parent brands that can be real, well-known, familiar, and strongly associated with the identified product category. In order to select suitable product categories for further examination of identifying parent brands, an initial list of 16 product categories was derived from the Simons Choice III marketing database (NCS Spring 2006) on the basis of prior purchase experience, high proportion of product usage, gender neutral, and target audience (i.e., college students aged from 18 to 24). The following product categories were selected: *ice cream, cellular phone, yogurt, frozen pizza, orange juice, facial tissue, digital camera, MP3 player, breakfast cereal, anti-virus software, desktop computer, wrist watch, athletic shoes, jeans, chocolate, and pain reliever.*

A total of 41 college students (41.5% male and 58.5% female) were asked to indicate how often they use each of the product categories on a 7-point semantic differential scale (1 = rarely and 7 = frequently) and to rate how familiar they are with each of the product categories by using a 7-point semantic differential scale (1 = not at all familiar and 7 = very familiar). Participants also rated the degree of product involvement adopted from Zaichkowsky (1985). In particular, product involvement was measured on a two-item 7-point Likert scale anchored with strongly disagree and strongly agree: (1) product relevance - "In general, this product category is relevant to me" and (2) product importance - "This product category is important to

me”. Finally, participants were asked to list the names of the first brands that came to mind when they thought of each product category.

On the basis of the results from the first pretest, athletic shoes and cellular phones were selected as appropriate parent brand product categories because they had the highest proportions of product usage, product familiarity, and product involvement, respectively (see Table 1).

Table 1  
Selection of Product

	<b>Product usage</b>	<b>Product familiarity</b>	<b>Product relevance</b>	<b>Product importance</b>
Ice cream	3.02	6.56	3.68	3.19
<b>Athletic shoes</b>	<b>6.51</b>	<b>6.51</b>	<b>6.12</b>	<b>5.85</b>
Yogurt	3.05	6.10	3.37	2.83
Frozen pizza	2.63	6.07	3.17	2.80
Orange juice	3.68	6.53	4.02	3.46
Facial tissue	4.39	6.21	4.51	3.82
Digital camera	3.71	6.12	4.78	4.46
MP3 player	5.07	6.39	5.61	5.22
Breakfast cereal	4.22	6.29	4.66	4.00
Anti-virus software	4.07	4.83	4.07	4.09
Desktop computer	3.92	5.87	4.61	4.27
Wrist watch	2.81	5.66	3.24	3.00
<b>Cellular phone</b>	<b>6.63</b>	<b>6.71</b>	<b>6.53</b>	<b>6.22</b>
Jeans	5.05	6.07	5.31	5.05
Chocolate	4.24	6.41	4.46	4.05
Pain reliever	3.34	5.73	4.29	4.24

Following Aaker and Keller’s (1990) procedure, four major criteria guided the selection of the parent brands from the given product categories: (1) whether they could be reasonably relevant to subjects, (2) whether they could be perceived as high quality and familiar, (3) whether they could elicit relatively specific brand associations, and (4) whether they were not

broadly extended previously. The following brands met these criteria: Nike for athletic shoes and Motorola for cellular phones. Both of them were familiar and well-liked among participants.

### *Pretest 2*

The second pretest was designed to identify potential similar and dissimilar extension products for Nike and Motorola. Specifically, a new sample of 40 participants (47.5% male and 52.5% female) were first asked to list any product features, benefits, usage situations, images, and other associations that came to mind when they thought of each parent brand. These free-association tasks helped to ensure that participants generated a set of similar or dissimilar extension categories on the basis of attribute associations with each parent brand. For Nike, the top three associations were “shoes,” “energetic/fit,” and “maximum performance.” For Motorola, the most frequent attribute associations were “mobile and digital technology,” “stylish/smart,” and “conversation.”

Next, participants were instructed to list up to three product categories that might be similar or dissimilar to each parent brand based on the attribute associations described above. The hypothetical extensions needed to be reasonable and not illogical, but had to have potential for heterogeneity in light of the degree of perceived fit. Of potential extension product categories that emerged from the open-ended responses to the level of brand extension fit, *bicycles* and *deodorant* were chosen as similar extensions, while *dress shoes* and *digital cameras* as dissimilar extensions for Nike. In addition, *laptop computers* and *digital photo printers* were selected as similar extensions, while *anti-virus software* and *handheld vacuum* as dissimilar extensions for Motorola. Table 2 shows a set of hypothetical extensions that are congruent or incongruent with each parent brand. The selected extensions have not been introduced to the U.S. market.

Table 2

## Identification of Similar and Dissimilar Extension Products

Parent brand	Similar extension	Dissimilar extension
Nike	Bicycle	Digital camera
	Deodorant	Dress shoes
Motorola	Laptop computer	Handheld vacuum
	Digital photo printer	Anti-virus software

*Pretest 3*

The main objective of the third pretest was to verify the level of perceived fit of extension products, taken from the results of the second pretest. A total of 31 college students (41.9% male and 58.1% female) were first asked to answer a series of questions about their familiarity with the parent brand on a seven-point scale from 1 (not familiar at all) to 7 (very familiar), and their perceived quality of the parent brand on a scale from 1 (low quality) to 7 (high quality). The results of the third pretest showed that Nike was recognized as a familiar brand ( $M = 6.61$ ) with high quality ( $M = 6.29$ ) and Motorola was evaluated as a familiar brand ( $M = 5.87$ ) with a high level of quality ( $M = 5.67$ ).

Next, participants were asked to evaluate the perceived fit of several potential brand extensions. Brand extension fit was measured by using four different seven-point scales (1 = strongly disagree and 7 = strongly agree) adopted from Bridges, Keller, and Sood (2000): appropriateness of the extension for the parent brand, degree to which the brand extension makes sense, fit between the parent brand and the extension product in terms of the attribute associations (e.g., product features, benefit, usage situation, and brand image), and understanding of the connection between the parent brand and the extension product. Table 3 shows the descriptive statistics of fit ratings regarding various extension products.

Taking into account the highest and lowest levels of parent-extension fit ratings, Nike bicycle was identified as a high fit extension ( $M = 5.88$ ) and Nike digital camera (2.61) as a low fit extension. The difference between high (bicycle) and low (digital camera) fit extension products was also statistically significant,  $t(30) = 11.41, p < .001$ . On the other hand, Motorola laptop computer was selected as a high fit extension ( $M = 4.66$ ) and Motorola handheld vacuum as a low fit extension ( $M = 1.72$ ). The difference between high (laptop computer) and low (handheld vacuum) fit extension products was statistically significant,  $t(30) = 11.07, p < .001$ . It is important to note that this manipulation check was repeated with a larger sample size in the main experiments to verify the significance difference between similar and dissimilar extension products.

Table 3  
Validation of the Level of Brand Extension Fit

Extension product	Mean	SD	Perceived fit
Nike bicycle	5.88	1.02	High
Nike deodorant	5.44	1.61	High
Nike digital camera	2.61	1.38	Low
Nike dress shoes	3.98	1.71	Low
Motorola laptop computer	4.66	1.33	High
Motorola digital photo printer	4.12	1.19	High
Motorola handheld vacuum	1.72	0.93	Low
Motorola anti-virus software	2.93	1.15	Low

The summary of the research procedure is presented in Figure 1. Based on the results from three pretests, a series of main experiments was conducted to test the research hypotheses and question.

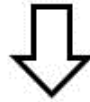


Figure 1

Summary of Research Procedure

**Stimuli Development**

1. Pretest
  - Selection of product categories and parent brands
  - 41 undergraduate students (41.5% male and 58.5% female)
  - Nike for athletic shoes and Motorola for cellular phone were selected
2. Pretest
  - Identification of similar and dissimilar extension products
  - 40 undergraduate students (47.5% male and 52.5% female)
3. Pretest
  - Validation of the level of brand extension fit
  - 31 undergraduate students (41.9% male and 58.1% female)
  - Similar extension (*bicycle* for Nike; *laptop computer* for Motorola)
  - Dissimilar extension (*digital camera* for Nike; *handheld vacuum* for Motorola)



**Main Experiments**

1. Experiment
  - A 2 (brand extension fit) X 2 (comparative valence frame) X 2 (regulatory focus prime) between-subjects factorial design
  - 313 undergraduate students (32.5% male and 67.5% female)
  - Parent brand: Nike
2. Experiment
  - A 2 (brand extension fit) X 2 (comparative valence frame) X 2 (regulatory focus prime) between-subjects factorial design
  - 315 undergraduate students (36.0% male and 64.0% female)
  - Parent brand: Motorola
3. Experiment
  - A 2 (brand extension fit) X 2 (comparative valence frame) X 2 (chronic regulatory focus) between-subjects factorial design
  - 184 undergraduate students (31.0% male and 69.0% female)
  - Parent brand: Motorola

## CHAPTER 5

### EXPERIMENT 1

#### **Research Design**

The first experiment used a 2 (brand extension fit: similar versus dissimilar) X 2 (comparative valence frame: positive versus negative) X 2 (regulatory focus: promotion versus prevention) between-subjects factorial design. Experiment 1 was conducted online. Participants were randomly assigned to the different experimental conditions. Each session lasted for approximately 30 minutes.

Brand extension fit was manipulated as to whether extensions hold the product category of the parent brand constant on the basis of category-level and brand-level consistency (e.g., product-related features/attributes, parent brand associations, benefits, and usage situations). In Experiment 1, a Nike bicycle was used as the similar extension, while a Nike digital camera was employed as the dissimilar extension.

In order to manipulate comparative valence frame, two versions of a print advertisement were designed to elicit either a positive or negative comparison of the target extension with the competitive brand. Based on prior research and existing advertising for each product, four key attributes were identified for each extension product (bicycle - performance drive, comfortable ride, frameset, and weight; digital camera – image quality, dynamic range, shutter speed, and battery life). These attributes were incorporated into the final target ads along with addressing the comparison brand of each product (Trek bicycle and Canon digital camera). Specifically,

positive comparative advertisements emphasized the advantages of the target extension's attributes and benefits without any derogative words (e.g., *Nike's bike is superior to the Trek mountain bike. Compared to the Trek mountain bike, the new Nike bike provides higher performance drive, more comfortable ride, more durable frameset, and lighter weight*). In contrast, negative comparative advertisements highlighted the disadvantages of the competitive brand by using derogatory words (e.g., *The Trek mountain bike is inferior to Nike's bike. Compared to the new Nike bike, the Trek mountain bike provides lower performance drive, less comfortable ride, less durable frameset, and heavier weight*). Except for the two comparative valence frame manipulations, all other aspects of the ad stimuli were identical in size, layout, and background.

Self-regulatory goals were manipulated by combining two frequently used priming procedures. Extant research has suggested that self-regulatory goals can be induced by situational factors, such as using task instructions or message frames that can momentarily activate a promotion or prevention focus (Cesario, Higgins, & Scholer, 2008; Chang & Chou, 2008; Kim, 2006; Nan, 2008). First, participants were asked to think about and write down either their "ideals" or "oughts." In the promotion-focused condition, participants were asked to think about their past ideals, hopes, and aspirations, and to list two of them. In addition, they were asked to think about their current ideals, hopes, and aspirations, and again to list two of them. In the prevention-focused condition, participants were asked to consider their past and current duties, responsibilities, and obligations, and list two of them. This priming manipulation has been shown to induce consumers' promotion and prevention goal orientations effectively in line with previous research (e.g., Chang & Chou, 2008; Kirmani & Zhu, 2007; Pham & Avnet, 2004).

Next, the situational prime to activate either a promotion or prevention focus was manipulated by using the priming ad (i.e., public service advertisement) that preceded the target advertisement. A substantial number of studies have shown that contextual factors (e.g., editorial content, television programs, and ad materials) influence the effectiveness of advertising messages (Chook, 1985; Kim, 2006; Soldow & Principe, 1981; Yi, 1990a, 1990b). For example, Yi (1990a) reported that an automobile advertisement that focuses on the product's large size leads to more favorable attitude toward the brand and purchase intention after the audience has processed a magazine article on travel safety highlighting the positive implication of a car's large size.

Adopted from prior research procedures (Aaker & Lee, 2001; Kim, 2006; Yeo & Park, 2006), participants were asked to read two versions of a public service advertisement encouraging orange juice consumption, which was designed to prime either a promotion focus or a prevention focus. In the promotion-focused condition, one version claimed that drinking orange juice provides greater energy with an emphasis on increasing metabolism levels because promotion goals are related to advancement and growth. The priming ad message for promotion focus included the following:

*Drink orange juice to enhance your energy!*

*Drinking orange juice contributes to the creation of greater energy, promotes your body's metabolism, and improves your immune system. Orange juice is the richest source of Vitamin C. According to research by the U.S. Department of Agriculture, orange juice has more than three times the naturally-occurring Vitamin C than other juices. It leads to higher energy and metabolism levels.*

In the prevention-focused condition, the other version claimed that drinking orange juice provides protection from cancer and heart disease with an emphasis on lowering cholesterol and blood pressure levels since prevention goals are associated with protection and safety. The priming ad message for prevention focus included the following:

*Drink orange juice to prevent heart disease!*

*Drinking orange juice contributes to healthy cardiovascular function, prevents you from heart disease, and reduces the risk of some cancers. Orange juice is the richest source of antioxidant. According to research by the U.S. Department of Agriculture, orange juice has more than three times the naturally-occurring antioxidant capacity than other juices. It leads to lower cholesterol and blood pressure levels.*

Both public service advertisements were identical in visual layout and spacing, except for the message content about promotion and prevention benefits of drinking orange juice.

### **Participants and Procedure**

A total of 313 undergraduate students (32.5% male and 67.5% female) recruited from a major U.S. university in the Southeast participated in Experiment 1 in exchange for extra credit. Participants ranged in age from 18 to 35 ( $M = 20.3$ ). In Experiment 1, e-mails were sent to a convenience sample of undergraduate students, and contained the URL link of the online experimental tasks to distribute the stimuli and the questionnaire. Participants were told that they would be participating in a series of short, unrelated research studies. The first study included the priming manipulations of self-regulatory focus. The second study was introduced as a survey

seeking consumer evaluations of brand extensions. Participants were asked to view either a positive-framed or a negative-framed comparative advertisement for brand extensions. After reading each ad message, they completed a self-administered questionnaire, which included the dependent variables, manipulation checks, and demographic questions.

### **Dependent Measures**

The dependent variables of interest included brand extension evaluations and purchase intentions. Adopted from prior brand extension research (e.g., Aaker & Keller, 1990; Smith & Park, 1992; Yeo & Park, 2006), extension evaluations for Nike (bicycle or digital camera) were measured using five, seven-point semantic differential items anchored with “bad/good,” “inferior/superior,” “unfavorable/favorable,” “poor quality/good quality,” and “dislikable/likable” Coefficient alpha for these five-items was .94. The five items were averaged to form an index for brand extension evaluations.

Purchase intention was measured by four items adopted from Dodds, Monroe, and Grewal (1991). Participants were asked to indicate their agreement with each of the following statements on a 1 to 7 scale (1 = strongly disagree and 7 = strongly agree): “I am likely to purchase a Nike bicycle (digital camera) next time I need a new bicycle (digital camera),” “If I were going to buy a bicycle (digital camera), I would consider buying a Nike bicycle (digital camera),” “I would never buy a Nike bicycle (digital camera) (R),” and “I would recommend a Nike bicycle (digital camera) to my friends or relatives who are going to buy a bicycle (digital camera).” Cronbach’s alpha for this scale was .89. The four items were averaged to form an index for purchase intentions.

Additionally, participants' perceived risk was measured by using the validated scale adopted from Laroche, Bergeron, and Goutaland (2003). Participants were also asked to indicate their agreement with each of the following statements on a 1 to 7 scale (1 = strongly disagree and 7 = strongly agree): "I am sure that I will make a mistake if I purchase a Nike bicycle (digital camera)," "Purchasing a Nike bicycle (digital camera) will cause me lots of trouble," and "I am sure that I will incur some risk if I buy a Nike bicycle (digital camera)." Cronbach's alpha for this five-item measure was .90. The three items were averaged to form an index for perceived risk. Finally, participants were asked about their familiarity with the parent brand and the competing brand on a seven-point semantic differential scale (1 = Not at all familiar and 7 = Very familiar).

## **Results**

### *Manipulation Checks*

To verify the manipulation of brand extension fit, participants were asked to indicate the perceived similarity between the parent brand and its extension product using the same measures as in the pretest. Adopted from Bridges, Keller, and Sood (2000), the four measures were assessed along seven-point scales (1 = strongly disagree and 7 = strongly agree): (1) "A bicycle (digital camera) is an appropriate extension for Nike," (2) "In general, a bicycle (digital camera) from Nike makes sense," (3) "A bicycle (digital camera) is similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image)," and (4) "I can understand the connection between Nike and a bicycle (digital camera)." As expected, participants perceived the extension as more congruent to the parent brand in the similar extension condition ( $M = 5.51$ ,  $SD = 1.28$ ) than in the dissimilar extension condition ( $M = 2.23$ ,  $SD = 1.22$ ). There was a

statistically significant difference between the similar and dissimilar extension conditions,  $F(1, 311) = 527.21, p < .001$ . Thus, the brand extension fit manipulation was successful.

As a check on comparative valence manipulation, participants were asked to indicate their agreement with each of the following statements on seven-point scales (1 = strongly disagree and 7 = strongly agree) adopted from prior research (Chang & Chou, 2008; Jain, 1993; Jain & Posavac, 2004): (1) “The ad was hostile to the comparison brand,” (2) “The ad derogated the comparison brand,” (3) “The ad criticized the comparison brand,” (4) “The ad tried to damage the reputation of the comparison brand,” and (5) “The ad put down the comparison brand.” The manipulation check data revealed that participants in the positive comparison condition ( $M = 3.55, SD = 1.29$ ) perceived less derogation than did those in the negative comparison condition ( $M = 5.30, SD = 1.53$ ). The difference between the positive and negative comparison conditions was statistically significant,  $F(1, 311) = 118.13, p < .001$ . Therefore, the comparative valence manipulation was successful.

To test the efficacy of the priming manipulations of self-regulatory goals, a seven-point scale was used with three anchors adopted from Poels and Dewitte (2008): whether they emphasized (1) more ideas about prevention or (7) more ideas about promotion; (1) avoiding something negative or (7) attaining something positive; and (1) more ideas about protection or (7) more ideas about enhancement. As predicted, promotion-focused participants ( $M = 5.78, SD = 1.05$ ) concentrated more on pursuing promotional goals than prevention-focused participants ( $M = 3.72, SD = 1.44$ ). The difference between the two regulatory focus conditions was statistically significant,  $F(1, 311) = 202.68, p < .001$ . Accordingly, the regulatory focus manipulation was successful.



*Brand Extension Evaluation (H1a, H2a, H3a, RQ1a, and RQ2a)*

An analysis of covariance (ANCOVA) was performed to compare the appropriate cells on the adjusted means for extension evaluation. The analysis treated the perceived fit between the parent brand and the extension (similar versus dissimilar), the valence of comparative ad frame (positive versus negative), and self-regulatory goals (promotion versus prevention focus) as the independent variables. Furthermore, parent and competitor brands' familiarity was incorporated as a covariate. Not surprisingly, the covariate had a positive influence on extension evaluations,  $F(1, 304) = 8.33, p < .01$ , and on purchase intentions,  $F(1, 304) = 4.31, p < .05$ .

In line with expectations, a significant main effect of brand extension fit emerged for extension evaluations,  $F(1, 304) = 77.39, p < .001$ . Specifically, participants evaluated brand extensions more favorably in the similar extension condition ( $M = 5.31, SD = 1.07$ ) than in the dissimilar extension condition ( $M = 4.25, SD = 1.05$ ). There was also a significant main effect of comparative valence where the positive comparative ad ( $M = 5.05, SD = .93$ ) elicited more favorable extension evaluations than the negative comparative ad ( $M = 4.63, SD = 1.17$ ),  $F(1, 304) = 5.96, p < .05$ . However, no main effect of regulatory focus was significant,  $F(1, 304) = .34, p = .56$ .

As shown in Table 4, the interaction between perceived fit and comparative valence frame was observed for brand extension evaluations,  $F(1, 304) = 4.13, p < .05$ . A series of planned comparisons was also conducted to test the hypotheses. As recommended by Winer (1971), "specific comparisons that are built into the design or are suggested by the theoretical basis for the experiment can and should be made individually" (p. 384). Planned comparisons indicated that when the fit between the parent brand and the extension is perceived to be high (i.e., similar extension), participants exposed to the positive comparative frame evaluated brand

extensions more favorably than those exposed to the negative comparative frame ( $M_{\text{positive comparison}} = 5.57$  versus  $M_{\text{negative comparison}} = 5.04$ ,  $F(1, 304) = 10.99$ ,  $p < .01$ ). Thus, H1a was strongly supported (see Figure 2). In contrast, when the fit between the parent brand and the extension product is perceived to be low (i.e., dissimilar extension), no significant difference between participants in the positive and negative comparative frame surfaced for brand extension evaluations ( $M_{\text{positive comparison}} = 4.28$  versus  $M_{\text{negative comparison}} = 4.23$ ,  $F(1, 304) = .08$ ,  $p = .78$ ). Hence, H2a was not supported.

On the other hand, there was no significant interaction effect of perceived fit and regulatory focus on extension evaluations,  $F(1, 304) = .03$ ,  $p = .86$ . As displayed in Table 5, no significant difference between promotion- and prevention-focused participants was observed in the similar extension condition ( $M_{\text{promotion}} = 5.26$  versus  $M_{\text{prevention}} = 5.35$ ,  $F(1, 304) = .31$ ,  $p = .57$ ). Collectively, H3a was not supported. Regarding RQ1a, both promotion and prevention-focused consumers had equally favorably extension evaluations in the dissimilar extension condition ( $M_{\text{promotion}} = 4.23$  versus  $M_{\text{prevention}} = 4.28$ ,  $F(1, 304) = .08$ ,  $p = .78$ ). For RQ2a, there was no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus on extension evaluations,  $F(1, 304) = .02$ ,  $p = .89$ .

#### *Purchase Intention (H1b, H2b, H3b, RQ1b, and RQ2b)*

A significant main effect of brand extension fit surfaced for purchase intention,  $F(1, 304) = 109.05$ ,  $p < .001$ . Participants reported stronger purchase intention in the similar extension condition ( $M = 4.87$ ,  $SD = 1.17$ ) than in the dissimilar extension condition ( $M = 3.39$ ,  $SD = 1.07$ ). However, there were no main effects of comparative valence,  $F(1, 304) = 2.59$ ,  $p = .10$ , and regulatory focus,  $F(1, 304) = .34$ ,  $p = .56$ . Furthermore, there was no significant interaction

effect of perceived fit and comparative valence frame on purchase intention,  $F(1, 304) = 1.36, p = .24$ . Given that the interaction is not statistically significant, however, Keppel (1991) suggested that further examinations of mean comparisons are necessary to assess specific predictions. Following Keppel's (1991) recommendation, post hoc comparisons were performed to accurately identify predicted effects.

The results showed that under the similar extension condition, participants exposed to the positive comparative frame reported stronger intentions to purchase the extension product than those exposed to the negative comparative frame ( $M_{\text{positive comparison}} = 5.07$  versus  $M_{\text{negative comparison}} = 4.67, F(1, 304) = 4.24, p < .05$ ), supporting H1b. However, under the dissimilar extension condition, no significant difference between participants in the positive and negative comparative frame emerged for purchase intentions ( $M_{\text{positive comparison}} = 3.42$  versus  $M_{\text{negative comparison}} = 3.36, F(1, 304) = .09, p = .76$ ). Hence, H2b was not supported.

On the other hand, there was no significant interaction effect of perceived fit and regulatory focus on purchase intention,  $F(1, 306) = .01, p = .94$ . More precisely, both promotion- and prevention-focused participants seemed to have equally great purchase intentions in the similar extension condition ( $M_{\text{promotion}} = 4.83$  versus  $M_{\text{prevention}} = 4.91, F(1, 304) = .14, p = .70$ ), rejecting H3b. Regarding RQ1b, there was also no difference in purchase intentions between promotion- and prevention-focused participants in the dissimilar extension condition ( $M_{\text{promotion}} = 3.34$  versus  $M_{\text{prevention}} = 3.43, F(1, 304) = .20, p = .65$ ). Thus, the extent of participants' purchase intentions did not significantly vary as a function of their self-regulatory goals.

In clarifying RQ2b, no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus was found for purchase intention,  $F(1, 304) = .03, p = .86$ .

Table 4

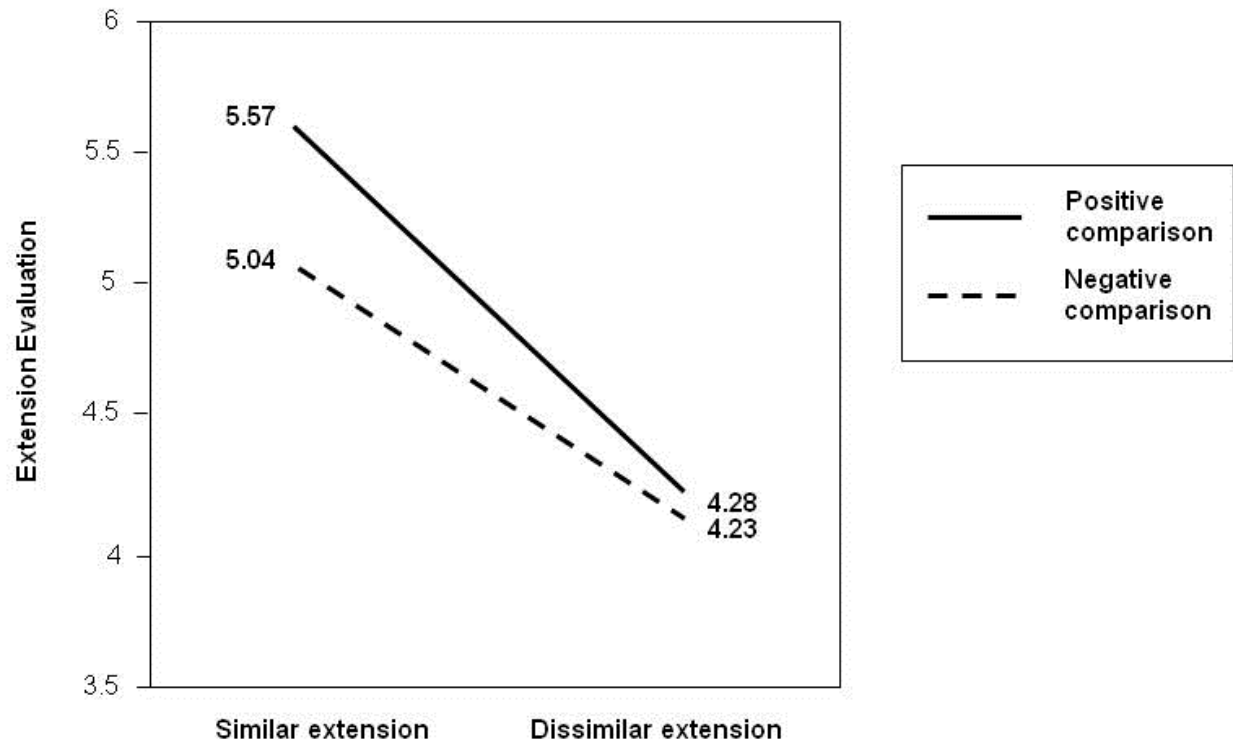
Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Comparative Valence (Experiment 1)

	Similar extension		Dissimilar extension	
	Positive comparison (n = 82)	Negative comparison (n = 79)	Positive comparison (n = 75)	Negative comparison (n = 77)
<b>Extension evaluation</b>	5.57 (.87)	5.04 (1.21)	4.28 (.89)	4.23 (1.16)
	$F = 10.99, p < .01$		$F = .08, p = n.s.$	
<b>Purchase intention</b>	5.07 (1.10)	4.67 (1.22)	3.42 (1.20)	3.36 (1.31)
	$F = 4.24, p < .05$		$F = .09, p = n.s.$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

Figure 2

Interaction Effect of Brand Extension Fit and Comparative Valence (Experiment 1)



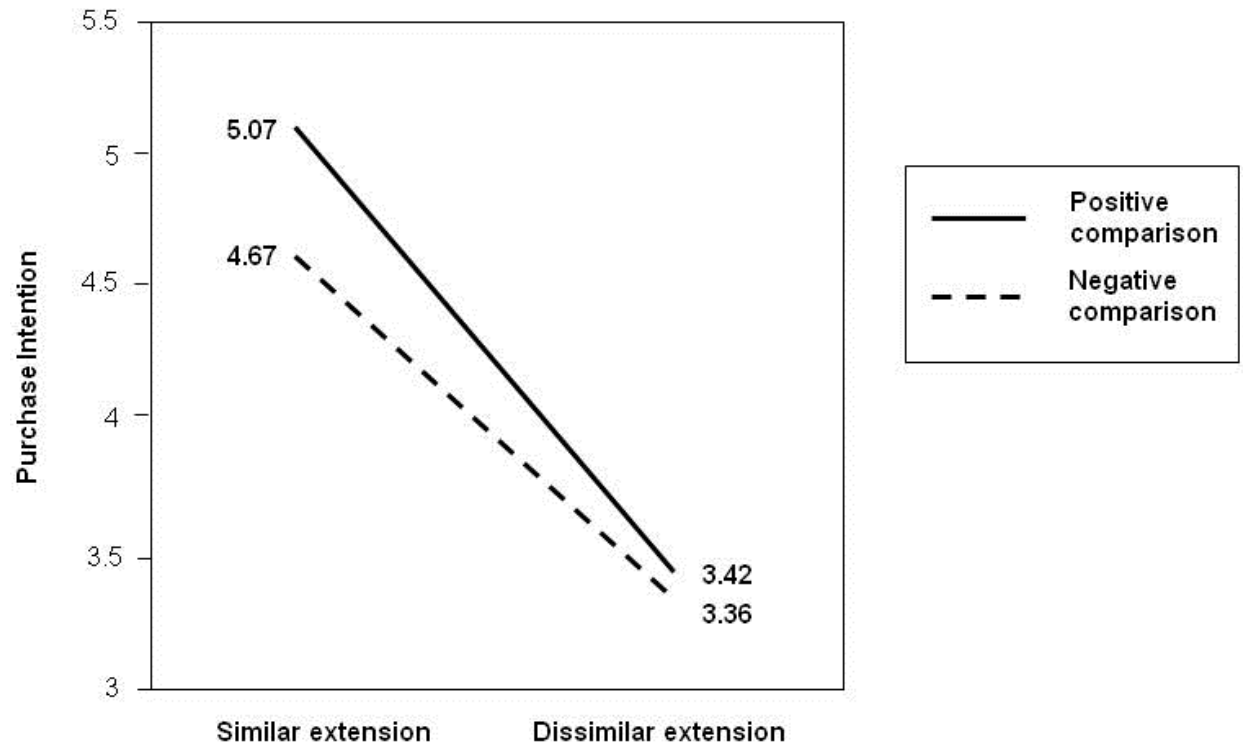


Table 5

Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Regulatory Focus (Experiment 1)

	Similar extension		Dissimilar extension	
	Promotion Focus (n = 84)	Prevention focus (n = 82)	Promotion focus (n = 81)	Prevention focus (n = 76)
<b>Extension evaluation</b>	5.26 (1.22)	5.35 (1.01)	4.23 (1.05)	4.28 (1.15)
	$F = .31, p = n.s.$		$F = .08, p = n.s.$	
<b>Purchase intention</b>	4.83 (1.14)	4.91 (1.20)	3.34 (1.17)	3.43 (1.21)
	$F = .14, p = n.s.$		$F = .20, p = n.s.$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

### *Mediation Analysis (H4a, H4b, H5a, and H5b)*

To investigate the processes underlying the effect of brand extension fit on extension evaluation, a series of mediation analyses was performed with perceived risk as the mediator, separately for each of the comparative frame and regulatory focus conditions. In Experiment 1, a four-step approach suggested by Baron and Kenny (1986) was used for testing mediation.

According to Baron and Kenny (1986), the following conditions must hold to establish mediation. First, the dependent variable should be regressed on the independent variable; second, the mediator should be regressed on the independent variable; third, the dependent variable should be regressed on the mediator; fourth, the dependent variable should be regressed on the independent variable and mediator. If the regressions are significant in the first three steps, and if the regression path from independent variable to dependent variable becomes nonsignificant in the fourth step, the results support full mediation (when there is an indirect effect but no direct effect). If the regression path from the independent variable to the dependent variable is reduced but significant in the fourth step, the results suggest partial mediation (when there are both indirect and direct effects). Finally, Baron and Kenny (1986) recommended testing the significance of the indirect effect by using the Sobel test.

In the positive comparative frame condition, the results of regression analyses showed that (1) brand extension fit (1 = similar extension, 0 = dissimilar extension) significantly influenced extension evaluations ( $\beta = .59, t = 9.24, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = -.55, t = -8.21, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.58, t = -8.74, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = .40, t = 5.55, p < .01$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.36, t = -4.89, p < .01$ ). A

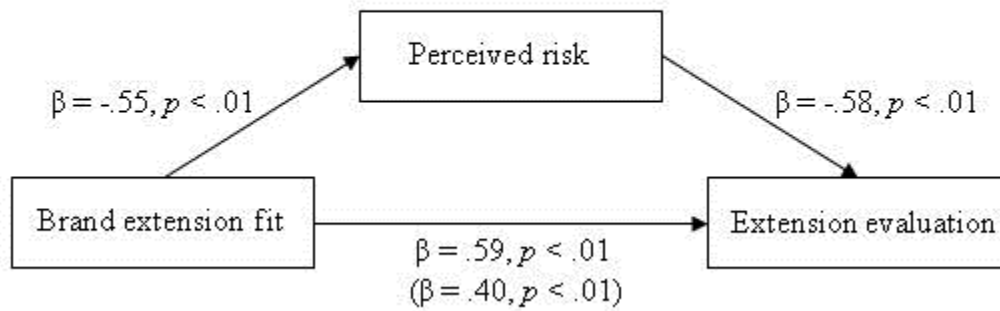
Sobel test for this mediation effect was also significant (Sobel  $z = 6.00, p < .01$ ). These findings provide partial mediation, supporting H4a.

Similar results were found in the negative comparative frame condition. Specifically, the results of the regression analyses showed that (1) brand extension fit significantly influenced extension evaluations ( $\beta = .33, t = 4.29, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = -.48, t = -6.74, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.38, t = -5.17, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = .19, t = 2.23, p < .05$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.29, t = -3.54, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = 4.11, p < .01$ ). These results indicate partial mediation, supporting H4b. As shown in Figure 3, perceived risk partially mediates the effect of brand extension fit on extension evaluations for both positive and negative comparison conditions.

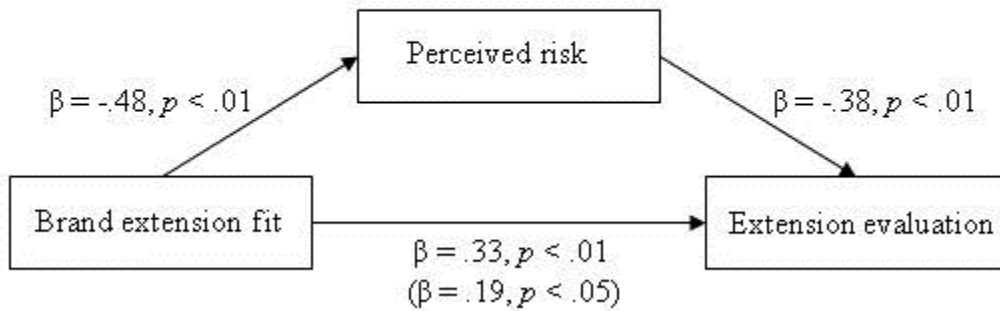
Figure 3

Mediation Analysis for Comparative Valence (Experiment 1)

**Positive comparative frame condition**



**Negative comparative frame condition**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension.



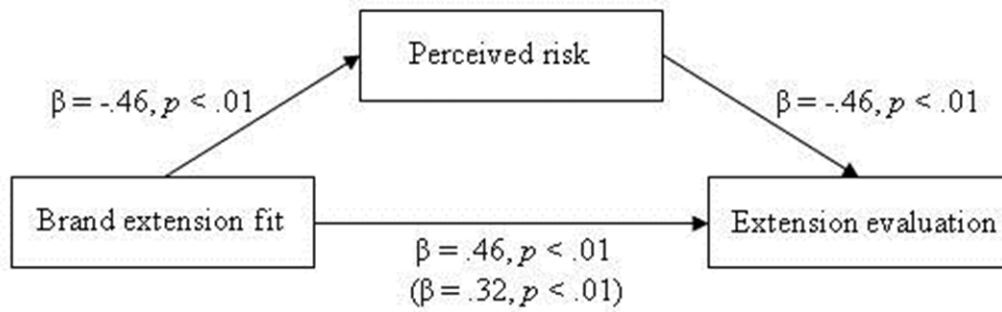
As shown in Figure 4, the results of regression analyses in the promotion focus condition indicated that (1) brand extension fit significantly influenced extension evaluations ( $\beta = .46, t = 6.29, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = -.46, t = -6.35, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.46, t = -6.24, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = .32, t = 4.01, p < .01$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.31, t = -3.94, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = 4.46, p < .01$ ). These results support partial mediation, supporting H5a. It is suggested that brand extension fit exerts both direct and indirect effects on extension evaluations through perceived risk when individuals are promotion focused.

The results of the regression analyses in the prevention focus condition indicated that (1) brand extension fit significantly influenced extension evaluations ( $\beta = .46, t = 6.59, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = -.57, t = -8.71, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.48, t = -7.10, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = .27, t = 3.36, p < .01$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.33, t = -4.15, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = 5.51, p < .01$ ). These results indicate partial mediation. Hence, H5b was supported. In conclusion, a summary of the findings from Experiment 1 can be seen in Table 6.

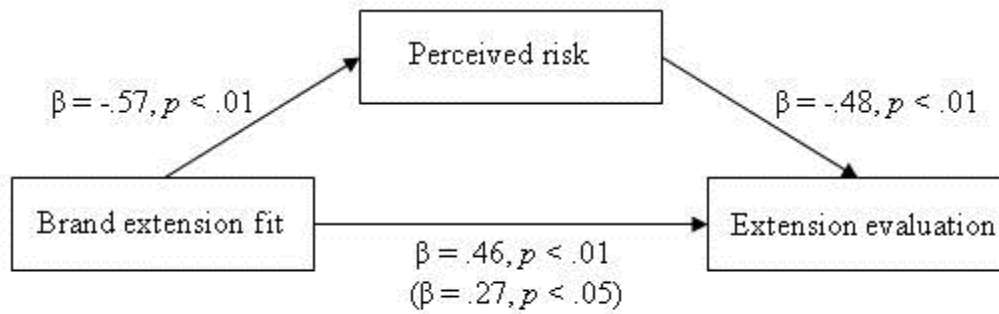
Figure 4

Mediation Analysis for Regulatory Focus (Experiment 1)

**Promotion-focused consumers**



**Prevention-focused consumers**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension.

Table 6  
Summary of Hypotheses and Results (Experiment 1)

Hypothesis	Result
H1a For a similar brand extension, positive comparison frames will lead to more favorable extension evaluations than negative comparison frames.	Supported
H1b For a similar brand extension, positive comparison frames will lead to greater purchase intentions than negative comparison frames.	Supported
H2a For a dissimilar brand extension, negative comparison frames will lead to more favorable extension evaluations than positive comparison frames.	Not supported
H2b For a dissimilar brand extension, negative comparison frames will lead to greater purchase intentions than positive comparison frames.	Not supported
H3a For a similar brand extension, prevention-focused consumers will lead to more favorable extension evaluations than promotion-focused consumers.	Not supported
H3b For a similar brand extension, prevention-focused consumers will lead to greater purchase intentions than promotion-focused consumers.	Not supported
H4a For positive comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported
H4b For negative comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported
H5a For promotion-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported
H5b For prevention-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported

## **Discussion**

The results from Experiment 1 demonstrated the interaction patterns of comparative ad frame and perceived fit on brand extension evaluations and purchase intentions. Specifically, when a brand extension fit is relatively high, participants exposed to positive comparison frame had more favorable brand extension evaluations and greater purchase intentions than those exposed to negative comparison frame. However, when a brand extension fit is low, both positive and negative comparison frames appeared to have equally positive brand extension evaluations and purchase intentions. On the other hand, no significant interaction effects of regulatory focus and perceived fit on extension evaluations and purchase intentions were observed.

Furthermore, Experiment 1 confirmed that participants' evaluations of brand extension were influenced in part by perceived extension risk as brand extension fit increased. The findings provide empirical evidence that perceived extension risk can function as a critical mediator underlying the effects of brand extension fit. However, a question arises as to whether the results are replicated across different extension product categories affiliated with the parent brand. It is possible that there is something unique to each product category. This issue is the focus of Experiment 2.

## CHAPTER 6

### EXPERIMENT 2

#### Research Design

A 2 (brand extension fit: similar versus dissimilar) X 2 (comparative valence frame: positive versus negative) X 2 (regulatory focus: promotion versus prevention) between-subjects factorial design was employed. Experiment 2 was also conducted online. Participants were randomly assigned to the eight experimental conditions. Each session lasted for approximately 30 minutes.

As in Experiment 1, the same procedures used were applied here to manipulate independent variables, with the following exception. That is, Experiment 2 used a different set of extension product categories (i.e., laptop computer and handheld vacuum) affiliated with the parent brand (i.e., Motorola) to assess the robustness of the effects obtained in Experiment 1. As such, Motorola laptop computer was used as the similar extension, while Motorola handheld vacuum was employed as the dissimilar extension.

The ad stimuli were presented in the same format of direct comparative advertisement designed to elicit either a positive or negative comparison of the target extension with the competitive brand. The positive comparative ad message highlighted the advantages of the target extension's attributes and benefits without any derogative words (e.g., *Why the new Motorola laptop is superior to the Dell laptop. The new Motorola laptop outperforms the Dell laptop with stellar performance, superior graphic capabilities, longer battery life, and lighter weight*). In

contrast, the negative comparative ad message focused on the disadvantages of the competitive brand by using derogatory words (e.g., *Why the Dell laptop is inferior to the new Motorola laptop. The Dell laptop's performance ranks below the new Motorola laptop with inferior graphic capabilities, shorter battery life, and heavier weight*). Following Chang and Chou's (2008) manipulation of comparative valence, the hypothetical comparative advertisements cited evaluation scores for both extension and competitive brands from *Consumer Reports*. The ad stimuli were invariant with respect to size, layout, and background.

Otherwise, the two methods for priming manipulation of self-regulatory focus were virtually identical to that of Experiment 1. First, participants were asked to think about and write down their past and current ideals, hopes, and aspirations (i.e., promotion-focused condition) or their past and current duties, responsibilities, and obligations (i.e., prevention-focused condition). Next, they were instructed to read a public service advertisement to prime their self-regulatory goals to be either promotion (i.e., emphasizing the positive outcomes achieved by drinking orange juice) or prevention focused (i.e., emphasizing the negative outcomes avoided by drinking orange juice).

### **Participants and Procedure**

A total of 315 undergraduate students (36.0% male and 64.0% female) recruited from a large U.S. university in the Southeast participated in Experiment 2 in exchange for extra credit. Participants ranged in age from 18 to 33 ( $M = 20.6$ ). Similar to Experiment 1, participants first completed the priming manipulations of self-regulatory focus and then viewed a comparative advertisement for brand extensions framed in terms of either positive appeal or negative appeal. Next, they completed the dependent measures, manipulation checks, and demographic questions.

## Dependent Measures

As in Experiment 1, participants' extension evaluation, purchase intention, and perceived risk were measured. With respect to brand extension evaluation, five, seven-point semantic differential items anchored with "bad/good," "inferior/superior," "unfavorable/favorable," "poor quality/good quality," and "dislikable/likable" were used for Motorola (laptop computer or handheld vacuum). Coefficient alpha for these five items was .93. The five items were averaged to form an index for brand extension evaluations.

Purchase intention was measured by asking participants to indicate their agreement with each of the following statements on a 1 to 7 scale (1 = strongly disagree and 7 = strongly agree): "I am likely to purchase a Motorola laptop computer (handheld vacuum) next time I need a new laptop computer (handheld vacuum)," "If I were going to buy a laptop computer (handheld vacuum), I would consider buying a Motorola laptop computer (handheld vacuum)," "I would never buy a Motorola laptop computer (handheld vacuum) (R)," and "I would recommend a Motorola laptop computer (handheld vacuum) to my friends or relatives who are going to buy a laptop computer (handheld vacuum)." Cronbach's alpha for this scale was .87. The four items were averaged to form an index for purchase intentions.

Perceived risk was measured by the three-item Likert scale (1 = strongly disagree and 7 = strongly agree): "I am sure that I will make a mistake if I purchase a Motorola laptop computer (handheld vacuum)," "Purchasing a Motorola laptop computer (handheld vacuum) will cause me lots of trouble," and "I am sure that I will incur some risk if I buy a Motorola laptop computer (handheld vacuum)." Cronbach's alpha for this five-item measure was .86. The three items were averaged to form an index for perceived risk. Finally, participants were asked about their

familiarity with the parent brand and the competing brand included in Experiment 2 on a seven-point semantic differential scale (1 = Not at all familiar and 7 = Very familiar).

## **Results**

### *Manipulation Checks*

As evidence of the success of the manipulation check for brand extension fit, there was a significant difference between the similar and dissimilar extension conditions,  $F(1, 313) = 97.52$ ,  $p < .001$ . Participants perceived the extension as more congruent to the parent brand when it was a similar extension ( $M = 4.28$ ,  $SD = 1.31$ ) than when it was a dissimilar extension ( $M = 2.82$ ,  $SD = 1.30$ ). Furthermore, participants in the positive comparison condition ( $M = 4.95$ ,  $SD = 1.25$ ) perceived less derogation than did those in the negative comparative condition ( $M = 5.35$ ,  $SD = 1.20$ ). A significant difference between the positive and negative comparison conditions emerged,  $F(1, 313) = 8.31$ ,  $p < .01$ , suggesting that the comparative valence manipulation was successful. As intended by the priming manipulation, promotion-focused participants ( $M = 5.80$ ,  $SD = 1.02$ ) rated significantly higher on promotional goals than prevention-focused participants ( $M = 3.65$ ,  $SD = 1.45$ ). There was also a significant difference between the two regulatory focus conditions,  $F(1, 313) = 222.97$ ,  $p < .001$ . Therefore, the regulatory focus manipulation was successful.

### *Brand Extension Evaluation (H1a, H2a, H3a, RQ1a, and RQ2a)*

As in Experiment 1, an analysis of covariance (ANCOVA) was performed for each dependent variable. Parent and competitor brands' familiarity was included as a covariate. As expected, a significant main effect of brand extension fit surfaced for extension evaluations,  $F(1, 306) = 23.51$ ,  $p < .001$ . However, the analysis revealed an unexpected pattern, demonstrating that



participants evaluated brand extensions less favorably in the similar extension condition ( $M = 4.41$ ,  $SD = 1.04$ ) than in the dissimilar extension condition ( $M = 5.01$ ,  $SD = 1.11$ ). There were not significant main effects of comparative valence,  $F(1, 306) = .08$ ,  $p = .77$ , and regulatory focus,  $F(1, 306) = 1.27$ ,  $p = .25$ .

In contrast to the results of Experiment 1, the interaction of perceived fit and comparative valence frame emerged for brand extension evaluations in the opposite direction,  $F(1, 306) = 10.57$ ,  $p < .01$ . As presented in Table 7, planned comparisons showed that in the similar extension condition, negative comparative frame led to more favorable brand extensions than positive comparative frame ( $M$  positive comparison = 4.15 versus  $M$  negative comparison = 4.62,  $F(1, 306) = 4.17$ ,  $p < .05$ ). Therefore, H1a was not supported (see Figure 5). On the other hand, in the dissimilar extension, positive comparative frame led to more favorable brand extensions than negative comparative frame ( $M$  positive comparison = 5.24 versus  $M$  negative comparison = 4.71,  $F(1, 306) = 6.65$ ,  $p < .05$ ), rejecting H2a.

Furthermore, a significant interaction effect of perceived fit and regulatory focus emerged for extension evaluations,  $F(1, 306) = 3.79$ ,  $p < .05$ . As shown in Table 8, in the similar extension condition, promotion-focused participants reported more favorable brand extensions than prevention-focused participants ( $M$  promotion = 4.62 versus  $M$  prevention = 4.14,  $F(1, 306) = 4.21$ ,  $p < .05$ ). Thus, H3a was not supported. Regarding RQ1a, no significant difference in extension evaluations between promotion- and prevention-focused participants was found in the dissimilar extension condition ( $M$  promotion = 4.98 versus  $M$  prevention = 5.07,  $F(1, 306) = .32$ ,  $p = .57$ ) (see Figure 6). In clarifying RQ2a, there was no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus on extension evaluations,  $F(1, 306) = 1.26$ ,  $p = .26$ .

*Purchase Intention (H1b, H2b, H3b, RQ1b, and RQ2b)*

A significant main effect of brand extension fit emerged for purchase intention,  $F(1, 306) = 204.60, p < .001$ . Participants reported stronger purchase intention in the dissimilar extension condition ( $M = 4.55, SD = 1.13$ ) than in the similar extension condition ( $M = 2.76, SD = 1.10$ ). There were not significant main effects of comparative valence,  $F(1, 306) = .09, p = .76$ , and regulatory focus,  $F(1, 306) = 1.20, p = .27$ .

The interaction of perceived fit and comparative valence frame emerged for purchase intentions,  $F(1, 306) = 12.36, p < .01$ . Planned comparisons revealed that in the similar extension condition, negative comparative frame led to stronger purchase intentions than positive comparative frame ( $M$  positive comparison = 2.56 versus  $M$  negative comparison = 2.96,  $F(1, 306) = 4.72, p < .05$ ). Thus, H1b was not supported. On the other hand, in the dissimilar extension, positive comparative frame led to stronger purchase intentions than negative comparative frame ( $M$  positive comparison = 4.79 versus  $M$  negative comparison = 4.31,  $F(1, 306) = 7.99, p < .01$ ). Interestingly, the contradictory experimental results were observed in Experiment 2, rejecting H2b.

In addition, no interaction effect of perceived fit and regulatory focus emerged for purchase intentions,  $F(1, 306) = 1.16, p = .28$ . Specifically, in the similar extension condition, both promotion- and prevention-focused participants had equally strong purchase intentions ( $M$  promotion = 2.90 versus  $M$  prevention = 2.63,  $F(1, 306) = 2.17, p = .14$ ). Accordingly, H3b could be rejected. In answering RQ1b, similar results were found in the dissimilar extension condition ( $M$  promotion = 4.56 versus  $M$  prevention = 4.55,  $F(1, 306) = .00, p = .99$ ).

Regarding RQ2b, there was no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus on purchase intentions,  $F(1, 306) = .02, p = .87$ .

Table 7

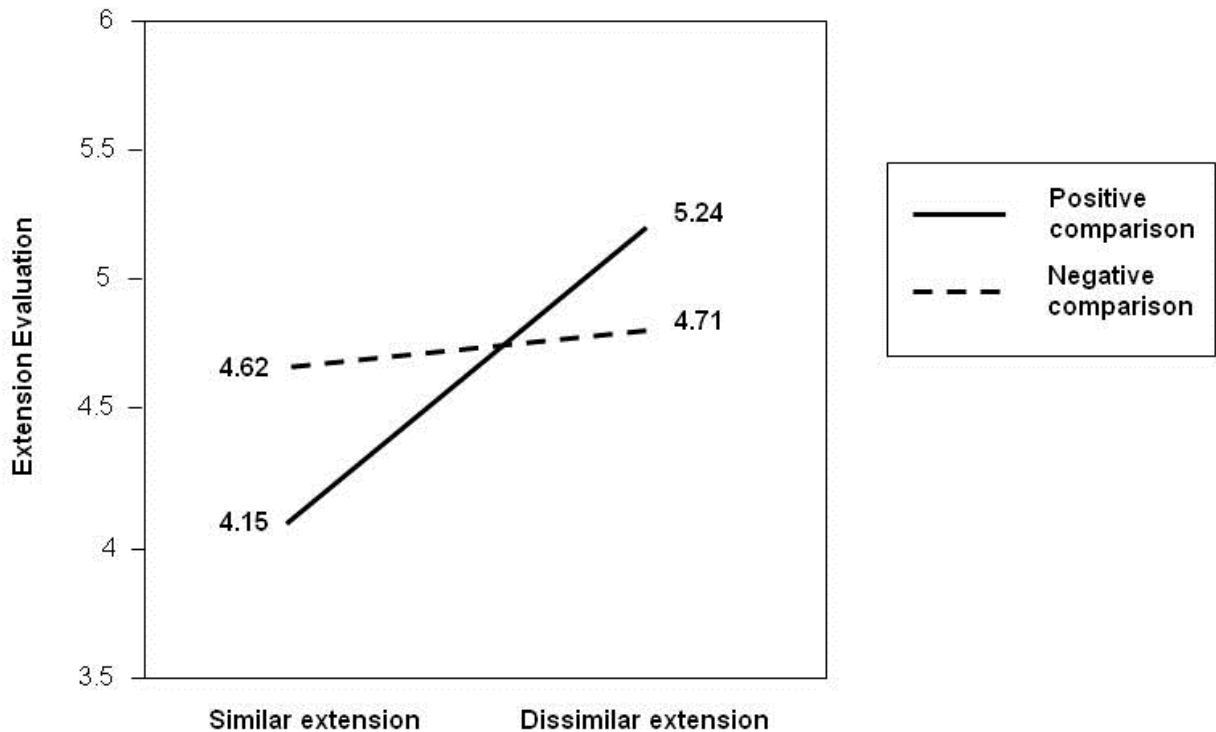
Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Comparative Valence (Experiment 2)

	Similar extension		Dissimilar extension	
	Positive comparison (n = 79)	Negative comparison (n = 77)	Positive comparison (n = 79)	Negative comparison (n = 80)
<b>Extension evaluation</b>	4.15 (1.11)	4.62 (.93)	5.24 (1.15)	4.71 (1.04)
	$F = 4.17, p < .05$		$F = 6.65, p < .05$	
<b>Purchase intention</b>	2.56 (1.10)	2.96 (1.07)	4.79 (1.11)	4.31 (1.28)
	$F = 4.72, p < .05$		$F = 7.99, p < .01$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

Figure 5

Interaction Effect of Brand Extension Fit and Comparative Valence (Experiment 2)



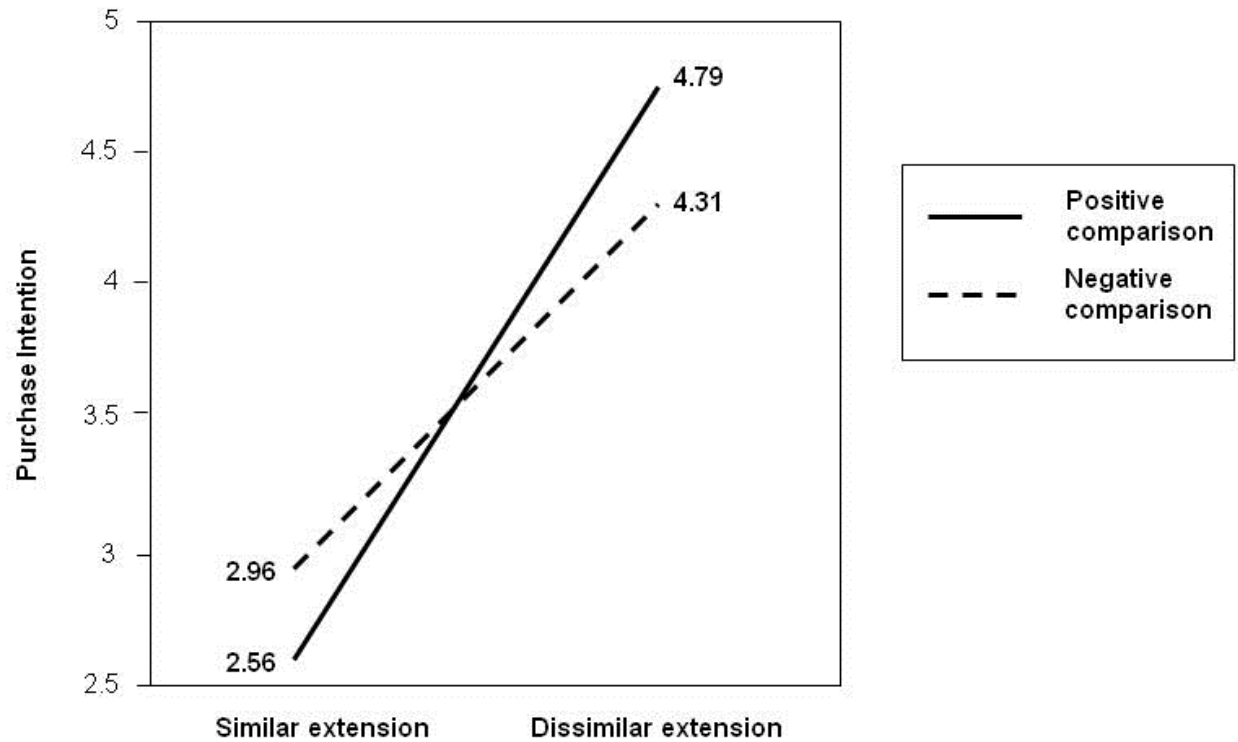


Table 8

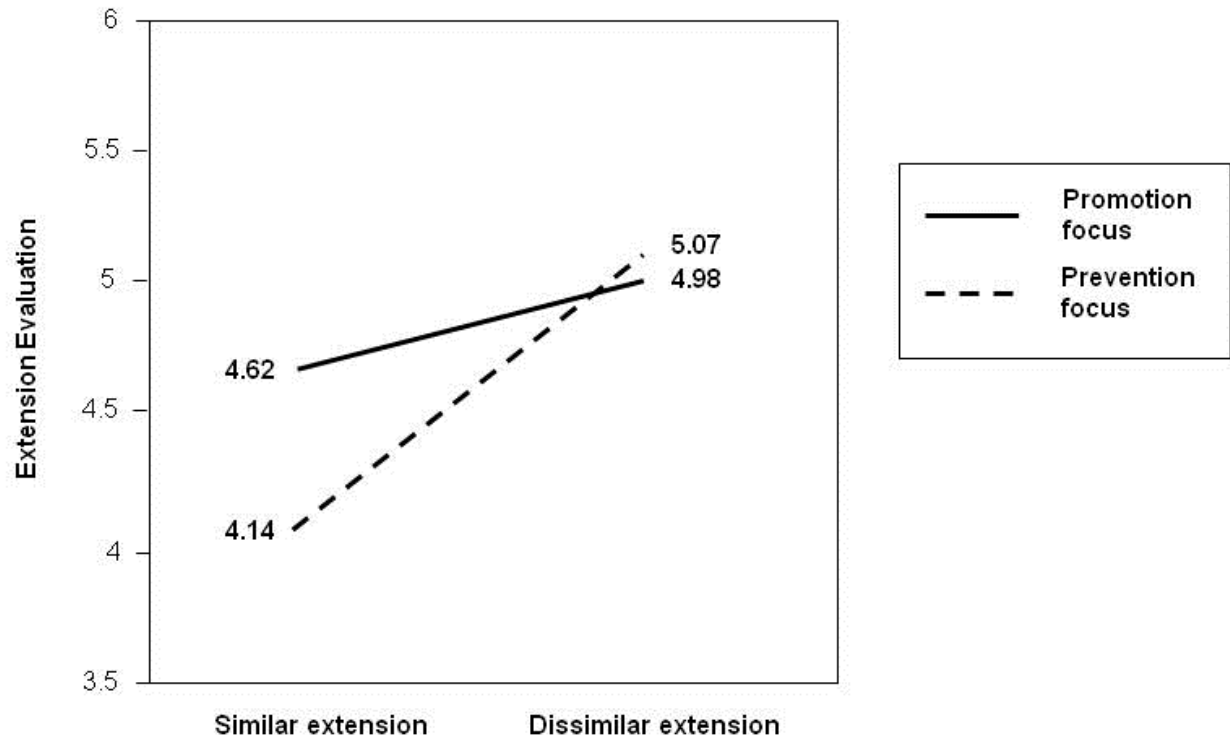
Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Regulatory Focus (Experiment 2)

	Similar extension		Dissimilar extension	
	Promotion focus (n = 81)	Prevention focus (n = 75)	Promotion focus (n = 79)	Prevention focus (n = 80)
<b>Extension evaluation</b>	4.62 (.96)	4.14 (1.10)	4.98 (1.12)	5.07 (1.12)
	$F = 4.21, p < .05$		$F = .32, p = n.s.$	
<b>Purchase intention</b>	2.90 (1.11)	2.63 (1.09)	4.56 (1.03)	4.55 (1.23)
	$F = 2.17, p = n.s.$		$F = .00, p = n.s.$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

Figure 6

Interaction Effect of Brand Extension Fit and Regulatory Focus (Experiment 2)



#### *Mediation Analysis (H4a, H4b, H5a, and H5b)*

Experiment 2 attempts to test whether perceived risk mediates the relationship between brand extension fit and extension evaluations, separately for each of the comparative frame and regulatory focus conditions. Consistent with the approach of Baron and Kenny (1986), a series of mediation analyses was conducted.

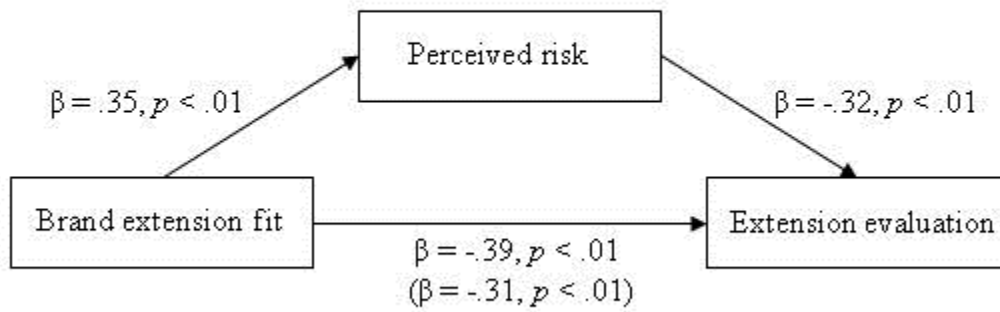
First, the results of regression analyses in the positive comparative frame condition indicated that (1) brand extension fit (1 = similar extension, 0 = dissimilar extension) had a significant impact on extension evaluations ( $\beta = -.39, t = -5.39, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = .35, t = 4.79, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.32, t = -4.30, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations continued to be significant ( $\beta = -.31, t = -4.19, p < .01$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.21, t = -2.77, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = -3.18, p < .05$ ). These findings meet the requirement for partial mediation in the positive comparative frame condition, supporting H4a.

However, this pattern was not found in the negative comparative frame condition. Since the impact of brand extension fit on extension evaluations was no longer significant at conventional levels ( $\beta = -.09, t = -1.19, p = .23$ ), one of the four necessary conditions of mediation analyses was not satisfied, suggesting lack of mediation by perceived risk when the comparative ad was framed in a negative fashion. Consequently, H4b was not supported (see Figure 7).

Figure 7

Mediation Analysis for Comparative Valence (Experiment 2)

**Positive comparative frame condition**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension.

On the other hand, the results of regression analyses in the promotion focus condition revealed that (1) brand extension fit significantly influenced extension evaluations ( $\beta = -.18, t = -2.29, p < .05$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = .24, t = 3.21, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.21, t = -2.70, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became nonsignificant ( $\beta = -.13, t = -1.71, p = .09$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.17, t = -2.22, p < .05$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = -2.07, p < .05$ ). These results confirmed complete mediation for promotion-focused consumers, supporting H5a.

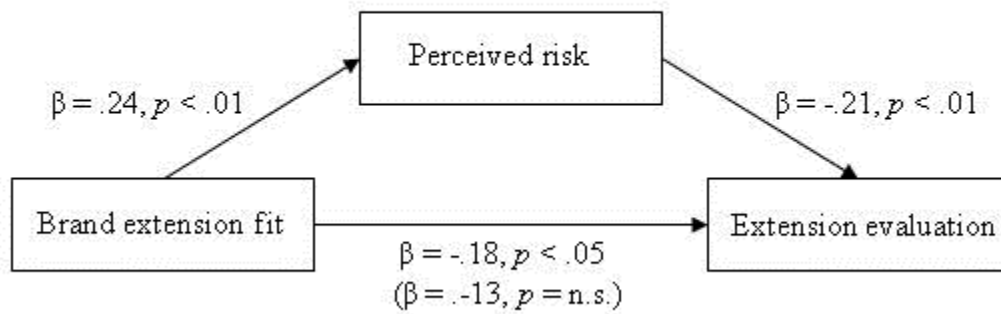
Another set of regression analyses in the prevention focus condition revealed that (1) brand extension fit significantly influenced extension evaluations ( $\beta = -.35, t = -4.55, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = .33, t = 4.35, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.44, t = -5.99, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = -.23, t = -2.98, p < .01$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.37, t = -4.78, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = -3.51, p < .01$ ). These results confirmed partial mediation for prevention-focused consumers, supporting H5b. As shown in Figure 8, perceived risk significantly mediates the effect of brand extension fit on extension evaluations for both promotion and prevention-focused consumers. In sum, the results from Experiment 2 are summarized in Table 9.



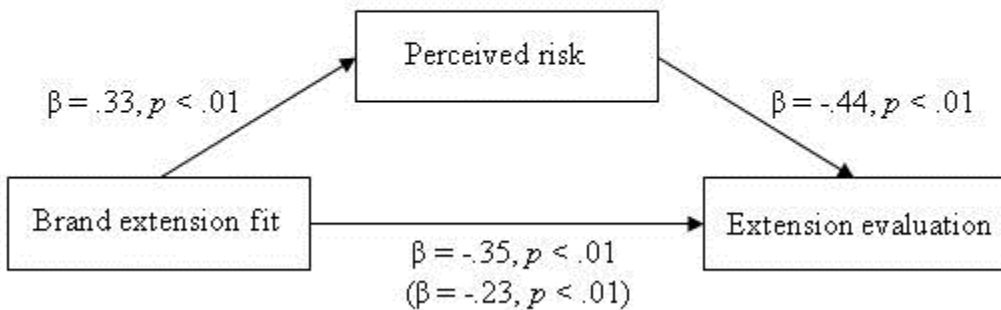
Figure 8

Mediation Analysis for Regulatory Focus (Experiment 2)

**Promotion-focused consumers**



**Prevention-focused consumers**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension; *n.s.* = not significant.

Table 9  
Summary of Hypotheses and Results (Experiment 2)

Hypothesis	Result
H1a For similar brand extensions, positive comparison frames will lead to more favorable extension evaluations than negative comparison frames.	Not supported
H1b For similar brand extensions, positive comparison frames will lead to greater purchase intentions than negative comparison frames.	Not supported
H2a For dissimilar brand extensions, negative comparison frames will lead to more favorable extension evaluations than positive comparison frames.	Not supported
H2b For dissimilar brand extensions, negative comparison frames will lead to greater purchase intentions than positive comparison frames.	Not supported
H3a For similar brand extensions, prevention-focused consumers will lead to more favorable extension evaluations than promotion-focused consumers.	Not supported
H3b For similar brand extensions, prevention-focused consumers will lead to greater purchase intentions than promotion-focused consumers.	Not supported
H4a For positive comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported
H4b For negative comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Not supported
H5a For promotion-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Supported
H5b For prevention-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported

## **Discussion**

Experiment 2 extended the main findings of the first experiment to a broader range of extension products. Contrary to Experiment 1, the results from Experiment 2 regarding the interactive effects of comparative valence frame and brand extension fit were in the opposite direction. Specifically, a negative comparative message elicited more favorable brand extensions and greater purchase intentions than a positive comparative message under the similar extension. The effects of a positive versus a negative comparative message are reversed under the dissimilar extension.

In addition, the findings are suggestive regarding the boundary conditions for the combined effects of self-regulatory focus and brand extension fit. It is found that promotion-focused consumers are likely to evaluate brand extension more favorably than prevention-focused participants under the similar extension condition, whereas they are equally responsive to the dissimilar extension. These effects could be attributed to the function of self-regulatory focus that contributes to a difference in risk propensity. Evidence regarding the underlying process of brand extension fit responsible for perceived extension risk also emerged.

## CHAPTER 7

### EXPERIMENT 3

#### **Research Design**

A 2 (brand extension fit: similar versus dissimilar) X 2 (comparative valence frame: positive versus negative) X 2 (chronic regulatory focus: promotion versus prevention) between-subjects factorial design was utilized. Experiment 3 was also conducted online. Participants were randomly assigned to the eight experimental conditions. Each session lasted for approximately 30 minutes.

As in Experiment 2, the same procedures used were applied here to manipulate independent variables. However, Experiment 3 included two critical modifications. First, self-regulatory focus was measured rather than manipulated. Much of the previous research has suggested that self-regulatory goals can be manipulated by momentary situations that help to activate a promotion or prevention focus (Cesario, Higgins, & Scholer, 2008), or can be chronically measured as a stable individual difference variable (Higgins et al., 2001). With respect to a chronic regulatory focus, Higgins (1997) asserted that individuals have a natural tendency to demonstrate promotion or prevention preferences. Thus, Experiment 3 used the chronic regulatory focus measure to divide participants into subgroups on the basis of being promotion-oriented or prevention-oriented.

Second, the ad stimuli were changed from a direct comparison to an indirect comparison between the extension and the competitor (without mentioning a specific competitive brand).

Recall that comparative advertising can be executed by making an explicit or implicit comparison. To provide a stronger test of the predictions obtained from Experiments 1 and 2, there was a need to change the direct comparative advertising to the indirect comparative format.

As such, the ad stimuli were presented in the format of the indirect comparative advertisement designed to manipulate either a positive or negative comparison between the extension and its competitors without mentioning the specific name. The positive comparative ad message highlighted the advantages of the target extension's attributes and benefits without any derogative words (e.g., *Why the new Motorola laptop is superior to other brands. The new Motorola laptop outperforms its competitors with stellar performance, superior graphic capabilities, longer battery life, and lighter weight*). In contrast, the negative comparative ad message focused on the disadvantages of the competitive brand by using derogatory words (e.g., *Why other brands are inferior to the new Motorola laptop. Other brands' performance ranks below the new Motorola laptop with inferior graphic capabilities, shorter battery life, and heavier weight*). Similar to Experiment 2, the hypothetical comparative advertisements cited evaluation scores for the extension and its competitive brands from *Consumer Reports*. The ad stimuli were invariant with respect to size, layout, and background.

### **Participants, Procedure, and Dependent Measures**

A total of 184 undergraduate students (31.0% male and 69.0% female) recruited from a major U.S. university in the Southeast participated in Experiment 3 in exchange for extra credit. Participants ranged in age from 18 to 26 ( $M = 20.1$ ).

Participants first completed the chronic regulatory focus questionnaire. The chronic regulatory focus measure has been validated in previous research (Lockwood, Jordon, & Kunda,

2002). The scale consisted of 18 items, half of which measured promotion focus (e.g., “In general, I am focused on obtaining positive consequences when making a decision,” “I frequently imagine how I will achieve my hopes and aspirations”) and the other half of which measured prevention focus (e.g., “In general, I am focused on preventing negative consequences when making a decision,” “I frequently imagine how I can prevent failure in my life”). Using a 7-point scale (1 = not at all true and 7 = very true), participants were asked to rate how they see themselves on each of these chronic regulatory focus questions. Following prior research (e.g., Lockwood, Jordon, & Kunda, 2002; Zhao & Pechmann, 2007), participants’ ratings along promotion items and prevention items were averaged to create a composite index of dominant regulatory focus by subtracting the prevention focus score ( $\alpha = .81$ ) from the promotion focus score ( $\alpha = .88$ ). It is important to note that high scores reflect a relative stronger promotion focus than prevention focus. Based on a median split of the measure of dominant regulatory focus, participants were divided into a promotion-focused or prevention-focused subgroup.

Next, participants were instructed to read an indirect comparative advertisement for brand extensions framed in terms of either positive appeal or negative appeal. After the ad exposure, they were also asked about extension evaluation ( $\alpha = .94$ ) and purchase intention ( $\alpha = .85$ ) using the same questions as in Experiment 2.

On the other hand, measures of perceived risk were adopted from other existing literature (Dholakia, 2001; Stone & Grønhaug, 1993), with some modification in wording to accommodate the variation in the specific extension context. In Experiment 3, perceived risk ( $\alpha = .82$ ) was measured by its five components, including performance risk (e.g., “If I buy a Motorola laptop computer, I would feel uncertain as to whether it will really perform”), financial risk (e.g., “I would be concerned that I really would not get my money’s worth buying a Motorola laptop

computer”), physical risk (e.g., “If I buy a Motorola laptop computer, I would worry about potential physical risks, such as backache and eye strain”), psychological risk (e.g., “The thought of buying a Motorola laptop computer would make me feel uncomfortable”), and social risk (e.g., “My friends’ and family’s opinions about my purchasing a Motorola laptop computer would cause me to feel concern”). Participants were asked to indicate how much they agreed with each statement concerning perceived risk-related components on a 1 to 7 scale (1 = strongly disagree and 7 = strongly agree). Due to the absence of direct competitors in Experiment 3, only parent brand familiarity was considered as a covariate.

## **Results**

### *Manipulation Checks*

A short series of manipulation checks indicated that the manipulations were perceived as intended. First, participants in the similar extension condition ( $M = 4.14$ ,  $SD = 1.40$ ) perceived a higher degree of extension fit than those in the dissimilar extension condition ( $M = 2.81$ ,  $SD = 1.39$ ). There was a statistically significant difference between the similar and dissimilar extension conditions,  $F(1, 182) = 41.11$ ,  $p < .001$ . Thus, these results confirmed that the manipulation of brand extension fit was successful. Next, participants exposed to the positive comparison condition ( $M = 3.42$ ,  $SD = 1.33$ ) perceived less derogation than did those in the negative comparison condition ( $M = 4.68$ ,  $SD = 1.69$ ). The difference between the positive and negative comparison conditions was also statistically significant,  $F(1, 182) = 34.13$ ,  $p < .001$ . Hence, comparison valence manipulation was found to be successful.

*Brand Extension Evaluation (H1a, H2a, H3a, RQ1a, and RQ2a)*

An analysis of covariance (ANCOVA) was performed for each dependent variable. As I noted previously, parent brand familiarity was included as a covariate. As expected, a significant main effect of brand extension fit surfaced for extension evaluations,  $F(1, 175) = 10.19, p < .01$ . Participants evaluated brand extensions less favorably in the similar extension condition ( $M = 4.67, SD = 1.15$ ) than in the dissimilar extension condition ( $M = 5.21, SD = 1.02$ ). There was also a significant main effect of chronic regulatory focus where promotion-focused participants ( $M = 5.14, SD = 1.03$ ) elicited more favorable extension evaluations than prevention-focused participants ( $M = 4.75, SD = 1.07$ ),  $F(1, 175) = 5.14, p < .05$ . However, no main effect of comparative valence frame emerged for extension evaluations,  $F(1, 175) = 2.61, p = .11$ .

As shown in Table 10, the interaction between perceived fit and comparison valence frame was statistically significant for brand extension evaluations:  $F(1, 175) = 3.81, p < .05$ . Specifically, planned contrasts revealed that when the fit between the parent brand and the extension was perceived to be high (i.e., similar extension), the negative comparative ad message elicited more favorable extension evaluations as compared to the positive comparative ad message ( $M$  positive comparison = 4.36 versus  $M$  negative comparison = 4.98,  $F(1, 175) = 6.25, p < .05$ ). Hence, H1a was not supported. However, when the fit between the parent brand and the extension product was perceived to be relatively low (i.e., dissimilar extension), there was no significant difference between positive and negative comparative ad messages for brand extension evaluations ( $M$  positive comparison = 5.24 versus  $M$  negative comparison = 5.19,  $F(1, 175) = .04, p = .83$ ), rejecting H2a. The interaction effect between brand extension fit and comparative valence frame is displayed in Figure 9.



As presented in Table 11, the interaction effect of brand extension fit and self-regulatory goals on brand extension evaluation was significant:  $F(1, 175) = 4.24, p < .05$ . Specifically, planned contrasts revealed that when the fit between the parent brand and the extension was perceived to be high (i.e., similar extension), promotion-focused participants evaluated brand extension more favorably than did prevention-focused participants. ( $M_{\text{promotion}} = 5.04$  versus  $M_{\text{prevention}} = 4.30, F(1, 175) = 8.77, p < .01$ ). Thus, H3a was not supported.

Regarding RQ1a, when the fit between the parent brand and the extension product was perceived to be relatively low (i.e., dissimilar extension), no significant difference between promotion-focused and prevention-focused respondents emerged for brand extension evaluation ( $M_{\text{promotion}} = 5.23$  versus  $M_{\text{prevention}} = 5.19, F(1, 175) = .03, p = .86$ ) (see Figure 10). For RQ2a, there was no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus on extension evaluations,  $F(1, 175) = .06, p = .81$ .

#### *Purchase Intention (H1b, H2b, H3b, RQ1b, and RQ2b)*

A significant main effect of brand extension fit emerged for purchase intention,  $F(1, 175) = 41.85, p < .001$ . Participants reported stronger purchase intention in the dissimilar extension condition ( $M = 4.18, SD = 1.11$ ) than in the similar extension condition ( $M = 2.87, SD = 1.03$ ). However, there were no significant main effects of comparative valence,  $F(1, 175) = .32, p = .57$ , and regulatory focus,  $F(1, 175) = .34, p = .63$ .

There was no interaction effect of perceived fit and comparative valence frame on purchase intentions,  $F(1, 175) = 1.59, p = .21$ . More precisely, no significant difference between positive and negative comparative frames emerged for purchase intentions regardless of the level of brand extension fit (similar extension -  $M_{\text{positive comparison}} = 2.68$  versus  $M_{\text{negative comparison}} = 3.05, F(1, 175) = 1.55, p = .21$ ; dissimilar extension -  $M_{\text{positive comparison}} = 4.23$

versus M negative comparison = 4.12,  $F(1, 175) = .22, p = .64$ ). Therefore, both H1b and H2b were not supported.

In addition, no interaction effect of perceived fit and regulatory focus emerged for purchase intentions,  $F(1, 175) = .46, p = .49$ . Specifically, in the similar extension condition, both promotion- and prevention-focused participants had equally strong purchase intentions (M promotion = 2.98 versus M prevention = 2.75,  $F(1, 175) = .64, p = .42$ ). Hence, H3b was not supported. Regarding RQ1b, similar results were found in the dissimilar extension condition (M promotion = 4.16 versus M prevention = 4.19,  $F(1, 175) = .01, p = .91$ ). In addressing RQ2b, there was no indication of a three-way interaction of perceived fit, comparative valence frame, and regulatory focus on purchase intentions,  $F(1, 175) = .13, p = .72$ .

Table 10

Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Comparative Valence (Experiment 3)

	Similar extension		Dissimilar extension	
	Positive comparison (n = 46)	Negative comparison (n = 45)	Positive comparison (n = 47)	Negative comparison (n = 46)
<b>Extension evaluation</b>	4.36 (1.10)	4.98 (1.20)	5.24 (1.13)	5.19 (1.32)
	$F = 6.25, p < .05$		$F = .04, p = n.s.$	
<b>Purchase intention</b>	2.68 (1.19)	3.05 (1.31)	4.23 (1.33)	4.12 (1.29)
	$F = 1.55, p = n.s.$		$F = .22, p = n.s.$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

Figure 9

Interaction Effect of Brand Extension Fit and Comparative Valence (Experiment 3)

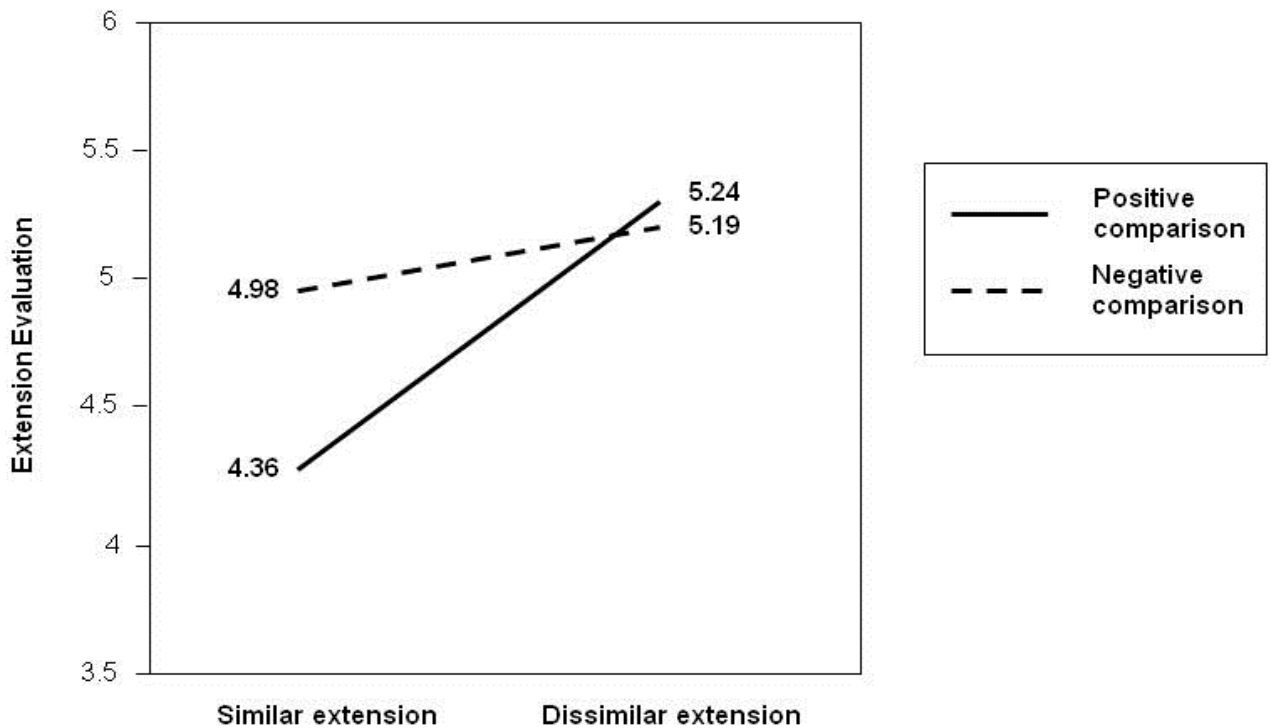


Table 11

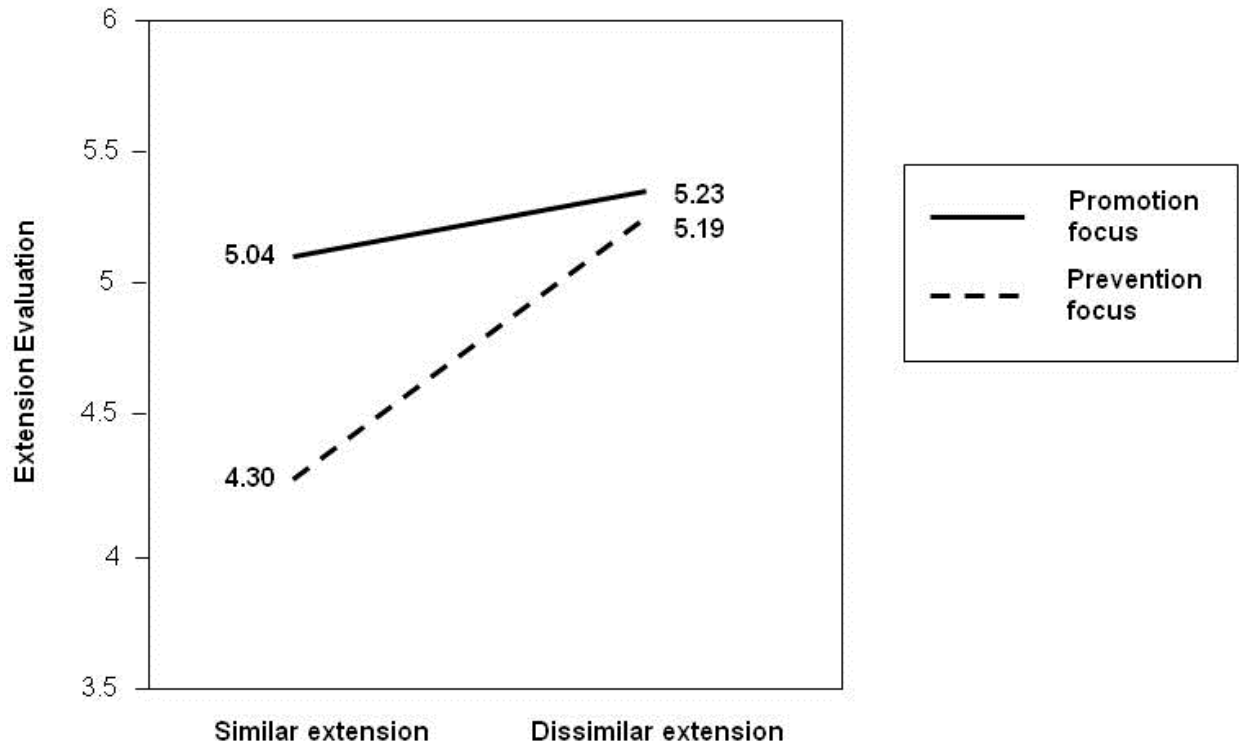
Extension Evaluation and Purchase Intention as a Function of Brand Extension Fit and Regulatory Focus (Experiment 3)

	Similar extension		Dissimilar extension	
	Promotion focus	Prevention focus	Promotion focus	Prevention focus
	(n = 46)	(n = 44)	(n = 46)	(n = 48)
<b>Extension evaluation</b>	5.04 (.97)	4.30 (1.26)	5.23 (1.28)	5.19 (1.26)
	$F = 8.77, p < .01$		$F = .03, p = n.s.$	
<b>Purchase intention</b>	2.98 (1.24)	2.75 (1.28)	4.16 (1.36)	4.19 (1.30)
	$F = .64, p = n.s.$		$F = .01, p = n.s.$	

Notes: Numbers in parentheses represent standard deviations; *n.s.* = not significant.

Figure 10

Interaction Effect of Brand Extension Fit and Regulatory Focus (Experiment 3)



#### *Mediation Analysis (H4a, H4b, H5a, and H5b)*

In Experiment 3, the mediating role of perceived risk in the relationship between brand extension fit and extension evaluations was tested separately for each of the comparative frame and regulatory focus conditions. Following Baron and Kenny's (1986) recommendation, a series of mediation analyses was performed with perceived risk as the mediator.

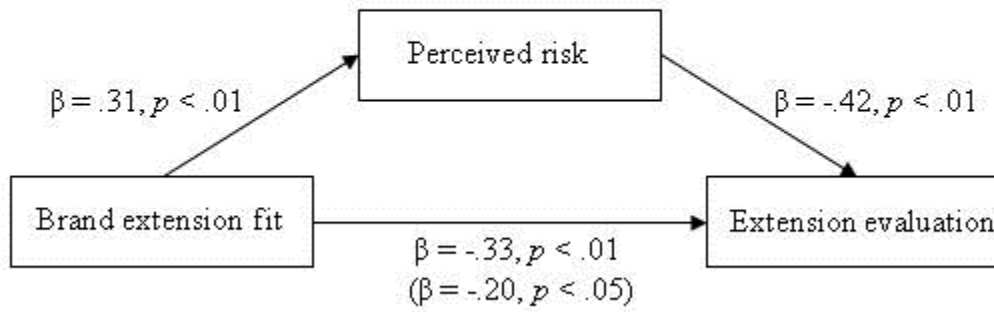
In the positive comparative frame condition, the results of regression analyses indicated that (1) brand extension fit (1 = similar extension, 0 = dissimilar extension) significantly influenced extension evaluations ( $\beta = -.33, t = -3.39, p < .01$ ); (2) brand extension fit had a significant impact on perceived risk ( $\beta = .31, t = 3.11, p < .01$ ); (3) perceived risk significantly affected extension evaluations ( $\beta = -.42, t = -4.50, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations continued to be significant ( $\beta = -.20, t = -2.08, p < .05$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.36, t = -3.73, p < .01$ ). A Sobel test confirmed that the mediation by perceived risk was significant (Sobel  $z = -2.56, p < .05$ ). These findings support partial mediation in the positive comparative frame condition, supporting H4a.

In contrast, this pattern was not found in the negative comparative frame condition. That is, brand extension fit was not related to extension evaluations ( $\beta = -.09, t = -.85, p = .39$ ) and to perceived risk ( $\beta = .15, t = 1.41, p = .16$ ). Thus, it is concluded that perceived risk does not mediate the effect of brand extension fit on extension evaluations in the negative comparative frame condition, rejecting H4b (see Figure 11).

Figure 11

Mediation Analysis for Comparative Valence (Experiment 3)

**Positive comparative frame condition**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension.

The results of regression analyses for promotion-focused participants suggested that the mediation by perceived risk was no longer significant because brand extension fit was not related to extension evaluations ( $\beta = -.05, t = -.49, p = .62$ ) and perceived risk was not associated with extension evaluations ( $\beta = -.17, t = -1.54, p = .13$ ). Thus, H5a was not supported.

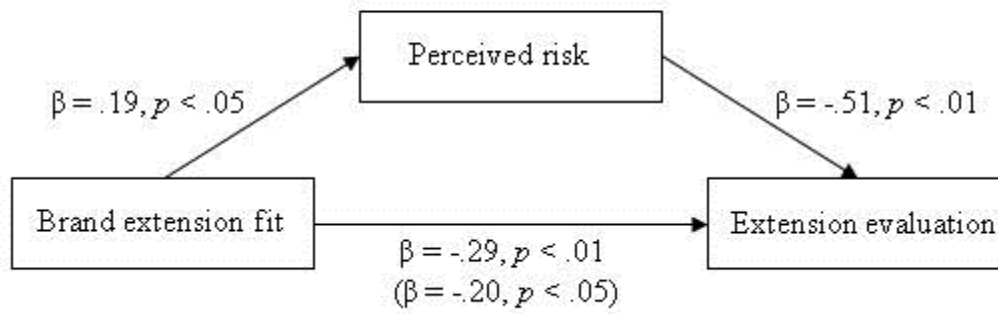
However, the results of regression analyses for prevention-focused participants showed that (1) brand extension fit had a significant impact on extension evaluations ( $\beta = -.29, t = -3.03, p < .01$ ); (2) brand extension fit significantly influenced perceived risk ( $\beta = .19, t = 1.99, p < .05$ ); (3) perceived risk had a significant effect on extension evaluations ( $\beta = -.51, t = -5.94, p < .01$ ); and (4) the effect of brand extension fit on extension evaluations became significant ( $\beta = -.20, t = -2.30, p < .05$ ), while the effect of perceived risk on extension evaluations remained significant ( $\beta = -.47, t = -5.49, p < .01$ ). A Sobel test for this mediation effect was also significant (Sobel  $z = -1.90, p < .05$ ). These results support partial mediation of perceived risk for prevention-focused participants, supporting H5b.

As displayed in Figure 12, perceived extension risk mediates the effect of brand extension fit on extension evaluations for prevention-focused consumers, while there is no mediating effect of perceived risk in the relationship between brand extension fit and extension evaluations for promotion-focused consumers. A summary of hypotheses and results can be presented in Table 12.

Figure 12

Mediation Analysis for Regulatory Focus (Experiment 3)

**Prevention-focused consumers**



*Notes:* Values in parentheses indicate the effects from the simultaneous regression that included both brand extension fit and perceived risk as predictors; Measured with 1 = similar extension and 0 = dissimilar extension.



Table 12

## Summary of Hypotheses and Results (Experiment 3)

Hypothesis	Result
H1a For similar brand extensions, positive comparison frames will lead to more favorable extension evaluations than negative comparison frames.	Not supported
H1b For similar brand extensions, positive comparison frames will lead to greater purchase intentions than negative comparison frames.	Not supported
H2a For dissimilar brand extensions, negative comparison frames will lead to more favorable extension evaluations than positive comparison frames.	Not supported
H2b For dissimilar brand extensions, negative comparison frames will lead to greater purchase intentions than positive comparison frames.	Not supported
H3a For similar brand extensions, prevention-focused consumers will lead to more favorable extension evaluations than promotion-focused consumers.	Not supported
H3b For similar brand extensions, prevention-focused consumers will lead to greater purchase intentions than promotion-focused consumers.	Not supported
H4a For positive comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported
H4b For negative comparison frames, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Not supported
H5a For promotion-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Not supported
H5b For prevention-focused consumers, perceived extension risk will mediate the effect of brand extension fit on consumer evaluations of brand extensions.	Partially supported

## Discussion

Experiment 3 was executed in a more stringent environment including different measures of perceived extension risk (i.e., performance risk, financial risk, physical risk, psychological risk, and social risk), chronic measures of self-regulatory focus, and indirect comparison contexts. Overall, the results from Experiment 3 are in line with those of Experiment 2 that provide support for the interaction effects of comparative valence frame and brand extension fit on extension evaluations. Specifically, when the fit between the parent brand and the extension was perceived to be high (i.e., similar extension), a negative comparative ad message elicited more favorable extension evaluation as compared to the positive comparative ad message. When the fit between the parent brand and the extension product was perceived to be relatively low (i.e., dissimilar extension), no significant difference between positive and negative comparative ad messages emerged for brand extension evaluations. The results suggest that some boundary conditions for the comparative message framing effects might occur in different extension fit conditions.

Furthermore, the findings indicate that self-regulatory goals significantly interacted with brand extension fit. Namely, when the fit between the parent brand and the extension was perceived to be high (i.e., similar extension), promotion-focused participants evaluated brand extensions more favorably than did prevention-focused participants. However, under the dissimilar extension condition, both promotion-focused and prevention-focused participants evaluated brand extensions equally. The findings also broaden the understanding of the mediating role of perceived extension risk in the effects of brand extension fit on extension evaluations.

## CHAPTER 8

### GENERAL DISCUSSION

The overarching objective of this dissertation is to examine how comparative advertising frame and self-regulatory goals influence brand extension evaluations and purchase intentions depending on the level of brand extension fit. Extant literature (Völckner & Sattler, 2006) has shown that the success of brand extensions relies on several factors, including the relationship between parent brand and extension product (e.g., perceived fit between the parent brand and the extension, linkage of the utility of the parent brand to product attributes of the original product category), the parent brand characteristics (e.g., quality of the parent brand, history of previous brand extensions, parent brand conviction, parent brand experience), type of marketing/advertising support (e.g., promotional strategies, retailer acceptance), and the extension product category characteristics (e.g., perceived risk, consumer innovativeness). Among these determinants of brand extension success, the dominant approach has emphasized the role of perceived fit between the parent brand and the extension in the extension evaluation process.

Notwithstanding some mixed results, the accumulated evidence to date has indicated that similar extensions are evaluated more favorably than dissimilar extensions, acknowledging the importance of brand extension fit as one of the crucial determinants of brand extension success (e.g., Aaker & Keller, 1990; Barone, Miniard, & Romeo, 2000; Boush & Loken, 1991; Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991; Yeo & Park, 2006; Zhang & Sood,

2002). However, additional considerations arise when an extension is introduced into an increasingly competitive marketplace. Since competition may be relevant both in the parent brand's flagship product categories and also in the target extension category (Loken, Joiner, & Houston, 2010), extant research has dynamically shifted from an emphasis on the congruity of an extension with the parent to an emphasis on the role of competition that impacts brand extension evaluations (Han, 1998; Kapoor & Heslop, 2009; Milberg, Sinn, & Goodstein, 2010). For instance, Oakley, Duhachek, Balachander, and Sriram (2008) found that the presence or absence of competing brands in the extension product category (i.e., whether the extension is a pioneer or a follower in the category) can influence consumer reactions to brand extensions.

Given the importance of competition in determining brand extension acceptance, the current research is one of the first to demonstrate the extent to which an extension's evaluation could depend not only on comparative advertising strategies but also on consumers' motivational orientations in a competitive marketplace. Experiment 1 found that respondents evaluated brand extensions more favorably in a similar extension condition than in a dissimilar extension condition, suggesting the robustness of the parent brand-extension similarity effect. The findings also provided support for the interactive patterns of brand extension fit and comparative valence frame. That is, a positive comparative frame elicited more favorable extension evaluations and greater purchase intentions than a negative comparative frame under the similar extension condition, while both positive and negative comparative frames contributed equally to brand extension evaluations and purchase intentions under the dissimilar extension condition. The results also indicated that the relationship between fit and extension evaluations was partially mediated by perceived extension risk in both comparative message framing conditions.

The findings from Experiment 1 could be explained by the evaluative reactions to brand extensions through category-based versus piecemeal-based processing that distinguish between less and more effortful and extensive processing of information. Fiske's categorization theory (Fiske, 1982; Fiske & Pavelchak, 1986) distinguishes between impressions formed relatively easily on the basis of a target person's category membership and its associated evaluation on the one hand, and impressions formed more extensively and with more effort by integrating evaluations of the target's individual attributes on the other hand (Brewer & Feinstein, 1999; Fiske, Lin, & Neuberg, 1999; Higgins, 1999). Applied to the context of brand extensions, if an extension is viewed as belonging to the same product category as the parent brand, it may be evaluated more favorably because positive associations with the parent brand will be easily transferred to the extension, independent of its specific attributes (Aaker & Keller, 1990; Shine, Park, & Wyer, 2007). That is, consumers tend to generate increasingly positive inferences about a new brand extension through category-based processing as the perceived fit or similarity between the parent brand and the extension increases. In contrast, when the level of perceived fit decreases, piecemeal processing is likely to occur and consumers' elaborations about a new extension will be more detailed and focus on its individual attributes.

Consistent with the basic principles of categorization theory (Fiske, 1982; Fiske, Lin, & Neuberg, 1999; Fiske & Pavelchak, 1986), similarity can serve as a *heuristic cue* used in making extension evaluation-based inferences and judgments under certain conditions, especially when consumers lack the motivation or ability to critically evaluate such information (Loken, Barsalou, & Joiner, 2008). The heuristic value of category membership based on increased perceived fit is in accordance with the notion of the "representativeness heuristic," namely the extent to which two stimuli are considered to belong to the same overall category based on shared similarities

(Tversky & Kahneman, 1974). As suggested by Kardes (2002), the representativeness heuristic might be used to predict whether consumers categorize a new product as a true innovation (and hence place it in a category of innovative products) or perceive it as similar to existing products (and place it in a category of established products) (see, Fennis & Stroebe, 2010, for a review). Simply put, high perceived similarity provides a heuristic means of evaluating brand extensions through category-based processing, whereas a dissimilar brand extension may activate greater elaboration (or careful scrutiny) than a similar brand extension through piecemeal processing.

Within the framework of dual-process models, the distinction between category-based and piecemeal-based evaluative processes resembles two different modes of information processing described in Chaiken's (1980) heuristic-systematic model (see, Maheswaran & Chaiken, 1991, for a review). Similar to the central assumptions of Petty and Cacioppo's (1981) elaboration likelihood model, the heuristic-systematic model considers how different kinds of information processing influence attitudinal reactions to a persuasive message, one of which is relatively more effortful and extensive than the other. In other words, heuristic processing is viewed as a holistic, simple decision rule that entails a more limited model of information processing (Chen & Chaiken, 1999). In this sense, the categorization decisions may be formed on the basis of overall parent-extension similarity through category-based processing. On the other hand, systematic processing is conceptualized as an analytical, comprehensive orientation to judgment-related information in which people carefully scrutinize the actual content of the message (Chen & Chaiken, 1999). Thus, it is possible that categorization decisions are established based on diagnostic cues (e.g., specific attributes) of category membership through piecemeal processing.

In the context of persuasion, heuristic cues (e.g., parent-extension similarity) have been intimately associated with the relative effectiveness of a positive versus a negative message (e.g., Block & Keller, 1995; Maheswaran & Meyers-Levy, 1990; Rothman et al. 1993; Shiv, Britton, Payne, 2004; Shiv, Edell, & Payne, 1997). An abundance of research on message framing supports that such heuristics tend to favor positive framing over negative framing. Specifically, when the level of elaboration is low (i.e., heuristic processing), positive framing has generally been found to be more effective than negative framing (Maheswaran & Meyers-Levy, 1990; Rothman et al., 1993). Conversely, when the level of elaboration is high (i.e., systematic processing), negative framing tends to be more persuasive than positive framing (Block & Keller, 1995; Maheswaran & Meyers-Levy, 1990; Rothman et al., 1993).

Though some research yields contradictory and inconsistent predictions regarding the joint effects of message framing and cognitive elaboration (Shiv, Britton, Payne, 2004; Shiv, Edell, & Payne, 1997), the findings of this dissertation present some evidence that the persuasive effects of comparative ad messages framed either positively or negatively on brand extension evaluations and purchase intentions vary according to the consistency between the parent brand and the extension. Since a similar extension may increase individuals' reliance on heuristics that reduces the amount of cognitive elaboration processing, a positive comparative frame is more effective than a negative comparative frame. Yet, when the extension product is not congruent with the parent brand, both positive and negative comparative advertisements are equally effective because participants under the dissimilar extension might engage in a combination of category-based (reflecting heuristic inferences from parent brand associations) and piecemeal-based processing (reflecting careful scrutiny of the specific extension attributes).

In fact, a considerable body of evidence has supported the view that neither message frame is inherently more persuasive than the other (e.g., Salovey, Schneider, & Apanovitch, 2002; Yan, Dillard, & Shen, 2010), thus the direction of message framing effects depends on certain moderators (O’Keefe & Jensen, 2006, 2007, 2009). The findings of this dissertation suggest that parent brand-extension consistency plays a moderating role in consumers’ responses to comparative message framing for increasing acceptance of brand extensions.

In Experiments 2 and 3, however, the interactive patterns of brand extension fit and comparative valence frame were observed in the opposite direction. The findings from Experiments 2 and 3 suggest that a negative comparative message leads to more favorable brand extensions and greater purchase intentions than a positive comparative message under the similar extension. The effects of positive versus negative comparative messages were reversed and even eliminated when the fit between the parent brand and the extension was perceived to be low. Unexpectedly, the findings from Experiments 2 and 3 revealed that a similar extension (e.g., Motorola laptop) was perceived as more risky than a dissimilar one (e.g., Motorola handheld vacuum), and thus resulted in unfavorable extension evaluations. These results suggest that regardless of whether the fit between the parent brand and the extension is high or low, risk perception inherent in purchasing extension products could influence the relative effectiveness of a positive versus a negative comparative message on brand extension evaluations and purchase intentions.

The conflicting findings that emerged from Experiments 2 and 3 could be attributed to differences in perceived extension risk that might influence consumers’ reactions to comparative valence, and thus brand extension evaluations and purchase intentions. This view is consistent with prospect theory (Kahneman & Tversky, 1979; Tversky and Kahneman, 1981), which was



originally proposed to describe consumer choice under risk. Based on prospect theory, there is empirical evidence to conclude that product perceived risk moderates the effects of message framing (e.g., Chang, 2007a; Cox, Cox, & Zimet, 2006). Specifically, negatively framed messages should be more effective than positive framed messages for product categories with high perceived risk because people are generally risk seeking in the domain of potential losses (Burnkrant & Sawyer, 1983; Chang, 2007b). Given that risk-averse options are preferred when people take into consideration potential gains or benefits, positively framed messages may be more likely to activate the promotion of products with low perceived risk (Burnkrant & Sawyer, 1983; Chang, 2007b).

One possible explanation may be due to the technological hierarchy effect (Jun, Mazumdar, & Raj, 1999), which suggests that consumers tend to evaluate brand extensions more favorably in downward extensions (e.g., Saab's extension from aircraft engine to automobile) than in upward extensions (e.g., Hewlett-Packard's extension from printers to desktop computers) in terms of the technology level of a parent product category. As in Experiments 2 and 3, participants might consider a laptop computer to be a higher technological level than the parent brand's core product category, such as a Motorola cellular phone. However, they might view a handheld vacuum to be on a lower technological level than the cellular phone. When the parent brand's core product and its extension product are at different technological levels, consumers tend to use their general knowledge about the technology competence of the parent brand as an anchor or reference point for evaluating brand extensions. For an upward extension to a higher level of technology (e.g., Motorola's extension from cellular phones to laptop computers), participants might anchor their evaluative judgment based on the existing technological competence of the parent brand and might doubt the firm's manufacturing capacity

to incorporate a higher level of technology in the extension (Kapferer, 1994). Therefore, their risk perception or uncertainty about the extension product's quality would arise from the imperfect transferability of the parent brand's technology competence to the extension.

In contrast, for a downward extension to a lower level of technology (e.g., Motorola's extension from cellular phones to handheld vacuums), participants might be less likely to question the quality of the extension because they could make positive inferences about the superior technology of the parent brand and manufacturing credibility. Thus, downward extensions might be perceived to be less risky than upward extensions. In support of this view, Jun, Mazumdar, and Raj (1999) found that regardless of brand extension consistency, technology hierarchy level regarding the parent brand and extension product categories is also an important factor that influences consumers' evaluations of brand extensions.

Another possibility that comes into play to account for the conflicting findings may be due to other extension product category characteristics, such as the price range (e.g., \$500 to \$1,500 for laptop computers and \$30 to \$100 for handheld vacuums) and product involvement. DelVecchio and Smith (2005) asserted that the impact of brand extension fit should be sensitive to the degree of risk (e.g., financial, performance, and social risk) associated with the extension category. As for high-involvement products, a laptop computer could be inherently more expensive and a higher risk purchase than a handheld vacuum. Furthermore, it may be attributed to participants' past experiences. Compared with the purchase of handheld vacuums, undergraduate participants had more past experiences buying or using laptop computers, which might have produced relatively higher levels of involvement. Therefore, they are more likely to engage in more cognitive elaboration processing to reduce risky choice through an extensive

information search when buying a new laptop computer relative to when buying a new handheld vacuum.

On the other hand, although the hypothesized effects of brand extension fit and consumers' regulatory focus were not supported in Experiment 1, the results from Experiments 2 and 3 reported that promotion-focused participants evaluated brand extension more favorably than did prevention-focused participants under the similar extension condition, whereas they were equally responsive to the dissimilar extension. Overall, the impact of brand extension fit on extension evaluations was shown to be mediated by perceived extension risk under the regulatory focus conditions.

Theoretically, the findings provide further evidence that risk perception may vary as a function of regulatory focus (Herzenstein, Posavac, & Brakus, 2007). Similar to the dual-process models of evaluative reactions, such as categorization theory and heuristic-systematic model, regulatory focus (Higgins, 1997, 2002) constitutes a motivational duality concerning two types of self-regulation that may pertain to risk propensity. Most importantly, self-regulatory systems contribute to a difference in risk propensity; the activation of promotion engenders greater risk taking, while the activation of prevention engenders greater risk aversion (Zhou & Pham, 2004). Given that brand extensions themselves will spontaneously trigger different risk propensities, promotion-focused and prevention-focused consumers may respond differently to parent brand-extension similarity. As our preceding theorization demonstrates, Yeo and Park (2006) reported that promotion-focused consumers are likely to evaluate dissimilar brand extensions more favorably than similar brand extensions. It seems likely that promotion-focused consumers might interpret the inconsistent extensions as more adventurous because they are less risk-averse (either

chronically or situationally) and more attuned to hedonic values (Loken, Joiner, & Houston, 2010; Yeo & Park, 2006).

Put differently, the results of this dissertation suggest that promotion-focused consumers could generate even more favorable evaluations of similar extensions than prevention-focused consumers, particularly when the level of perceived extension risk is high. It is justified that promotion-focused consumers tend to focus on gains and thus may be relatively insensitive to the risky nature of brand extensions. Yet, prevention-focused consumers tend to have a conservative preference for stability (Herzenstein, Posavac, & Brakus, 2007).

### **Theoretical and Managerial Implications**

The findings of this dissertation have several theoretical and managerial implications. From a theoretical standpoint, the current research takes the important conceptual step of untangling the underlying mechanisms through which brand extension fit influences consumer evaluations of brand extensions across different conditions that represent either comparative ad frame (positive versus negative) or consumers' self-regulatory goals (promotion versus prevention). Perceived extension risk is shown to serve as a key mediator between perceived fit and consumer evaluations of brand extensions. As suggested by Campbell and Godstein (2001), perceived risk is an important driver that directly influences consumers' preferences, choices, and behaviors. This view leads to the interpretation of Yeo and Park's (2006) findings that indicate the boundary conditions of parent-extension similarity effects. Namely, prevention-focused consumers would give greater weight to the perceived risk dimension than to the perceived hedonic value dimension in establishing overall extension evaluations, whereas the reverse would hold true for promotion-focused consumers.

Inspired by Yeo and Park's (2006) study supporting the moderating effect of self-regulatory goals on consumers' evaluations of similar and dissimilar extensions, the current research extended their findings to add the notion of perceived extension risk as a critical mediator. This approach is also similar to those of Milberg, Sinn, and Goodstein (2010), who separately observed that perceived risk mediates the effects of perceived fit on extension preferences in noncompetitive settings as well as the effects of competitor brand familiarity in competitive settings. However, the findings of this dissertation indicated that perceived extension risk plays a mediating role in explicit or implicit competitive settings by including competitor brand familiarity as a covariate.

The mediating role of perceived extension risk proposed here is intended to contribute to a more systematic theory on how perceived fit between the parent brand and its extension product works in competitive contexts. The perceived risk factor, when integrated into a unifying framework, can account for the boundary effects of brand extension fit (i.e., not every extension product that is highly consistent with the parent brand would be successful). Such an integrated framework of brand extension fit and perceived extension risk will help enhance the understanding of how consumers evaluate brand extensions, especially when various competitive extension strategies and consumers' goal-orientations are under consideration.

From a managerial standpoint, the results of this dissertation can provide guidance to advertisers and brand managers. Given that competition is intense and constant in the consumer marketplace, past researchers have continued to investigate how competing brands in the target category might affect the evaluation of brand extensions (e.g., Han, 1998; Kapoor & Heslop, 2009; Milberg, Sinn, & Goodstein, 2010; Oakley et al., 2008). They have argued that competitive strategies for brand extensions are advisable by providing competitive information

along with comparative versus non-comparative brand positioning statements in the extension category. Particularly when different brand extensions and competing brands are paired in a comparative advertising setting, the current research sheds light on the strategic guidance of a firm's advertising execution that emphasizes either a positive or a negative comparative frame in inducing greater acceptance of brand extensions in a competitive marketplace.

On the other hand, advertisers and brand managers should be cautious, as launching a new product as part of a brand extension may be more or less likely to be risky. While brand extensions are often viewed as reducing the risk associated with purchasing a product (DeIvecchio & Smith, 2005), the findings from Experiments 2 and 3 suggested that brand extensions are riskier in high-technology product categories (e.g., Motorola laptop computers) regardless of brand extension fit. Accordingly, advertisers and brand managers would be advised to overcome a risky extension by fine-tuning their comparative message strategies. Understanding comparative message framing effects may help develop creative and effective advertising copy and layout for brand extensions.

Another managerial implication is that consumers' regulatory focus may be used as an effective segmentation tool for competitive brand extension strategies. To this extent, it is critical to determine whether the target audience is heterogeneous with respect to regulatory focus. Though consumers' promotion or prevention focus would be viewed as an individual trait, their self-regulatory focus orientations could also be altered temporarily by specific situations (Higgins, 1997). Armed with the findings of this dissertation, advertisers and brand managers may be able to make salient or prime a single regulatory focus by selecting appropriate media vehicles that match the audiences' regulatory focus in order to facilitate the success of new brand extensions in the competitive context. For example, in situations where target audiences'

regulatory focus can be tied to a particular media vehicle, advertisers could devise comparative advertising messages toward consumers who exhibit either a promotion focus or a prevention focus. The television show *American's Next Top Model*, in which a number of women compete to become a professional model, would tend to engender a promotion focus, whereas the television show *Sleeper Cell*, which deals with the issues of safety and terrorism, would tend to activate a prevention focus. Hence, it is feasible that comparative advertising messages for brand extensions may be aired on a certain television show that makes it possible to prime the desired regulatory focus.

In addition to the strategic selection of environmental contexts that help induce the regulatory focus, parallel versions of the same ad message combined with self-regulatory goals may be more advantageous to accommodate different consumers' goal orientation because advertising for brand extensions has to constantly deal with a mixture of consumers with different motivational orientations. In line with this suggestion that a regulatory focus system could be primed by specific messages, extant research has extended the concept of regulatory focus to message framing with respect to promotion- and prevention-related messages (e.g., Aaker & Lee, 2001; Kim, 2006; Lee & Aaker, 2004; Wang & Lee, 2006). In making these different versions of regulatory focus-priming ad messages, advertisers and brand managers need to keep in mind the importance of perceived extension risk that might influence the effects of brand extension fit.

## **Limitations and Directions for Future Research**

As with all studies, the findings of this dissertation have several limitations. First, the samples were drawn from a population of college students which limits the generalizability of the findings. Although college-age consumers are frequently targeted using competitive strategies for brand extensions and are purchasers of the product categories tested, they are not the only intended audience for ads for different extension product categories used across the experimental designs. Thus, further research is needed to replicate the effects of competitive advertising strategies for brand extensions using non-student samples with a broader demographic or psychological spectrum to enhance external validity.

Second, the results of this dissertation were based on a limited number of product categories affiliated with the parent brands. In particular, the present research tested only four extension products (e.g., handheld vacuum, laptop computer, digital camera, and bike) that were classified as relatively high-involvement categories. By the same token, it is unclear whether or not similar results will occur when a parent brand known for high-tech products (e.g., Motorola) develops a product line of a completely unrelated type (e.g., disposable AA battery, energy drinks). As product involvement differences are known to affect consumers' perceptions of brand extension fit and risk (Maoz & Tybout, 2002), an important next step would be to examine the extent to which the findings may be generalized to low involvement or nondurable product/service categories extended from such parent brands. In sum, further research should be aimed at investigating the robustness and generalizability of these results across multiple product and service categories that reflect different levels of involvement and durability.

Third, competing brand selection was limited due to several considerations in the experimental designs (e.g., market share, brand awareness, and brand preference across



extension categories). It is possible that some competing brands originated from extension product categories are more or less familiar to respondents. Although potential confounds were controlled statistically, competing brand familiarity was not properly manipulated. Future research should attempt to manipulate the degree of competing brand familiarity. Furthermore, a potentially fruitful direction for future research may be the inclusion of a non-comparative condition (i.e., no other competing brand is mentioned). A comparison with the control condition enables us to further examine whether the relative effects of comparative valence frames truly vary as a function of perceived fit between the parent brand and the extension product.

Fourth, participants were asked to evaluate extension products solely on the basis of relatively limited attribute information. Not surprisingly, limiting the amount of attribute information about extension products may restrict the generalizability of the experimental results. It is possible that participants who had limited information made inferences about a proposed extension based on their prior purchase/usage experiences or parent brand preference that might result in a dilution of intended treatment effects. It is important to acknowledge current marketplace conditions where consumers have access to a wealth of attribute information. Consistent with Klink and Smith (2001), future research is needed to provide additional information cues designed to approximate marketplace conditions more closely.

Fifth, the current experimental design of this dissertation limited participants to a single exposure to the ad stimulus for controlling the effects of ad repetition on brand extension acceptance. Prior literature has suggested that when the extension product is not a strong fit to the parent brand, advertising repetition can be useful for making consumers aware of a credible connection between the parent brand and its extension (Klink & Smith, 2001; Lane, 2000; see, Loken, Joiner, & Houston, 2010, for a review). For instance, direct evidence has been reported

by Klink and Smith (2001)'s study which found that multiple exposures (three versus one) increased consumers' evaluations of a moderately dissimilar extension even when only the brand name and extension product category information were provided. However, it is questionable whether the results of the current study hold true when participants are exposed to more than one repetition of the ad stimulus. According to Klink and Smith (2001), "greater levels of exposure may help consumers identify or create more shared attributes between the extension and the brand schema" (p. 327). Since new extension products typically are launched with repeated exposures to brand extension information in a real marketplace, additional research is needed to examine how comparative message framing interacts with frequency of exposure to brand extension advertising in altering the level of perceived fit and thus enhancing brand extension evaluations.

Sixth, as the findings of this dissertation identified that perceived extension risk is critical to the evaluative processes underlying the effects of brand extension fit, more qualitative approaches, such as in-depth interviews or intensive focus groups, are needed for future research to address the questions of how and why consumers are more or less risk averse in response to certain extension products. Such alternative supplemental approaches may help provide richer meanings and interpretations of the results obtained from well-controlled experiments as part of the quantitative approach.

Seventh, there is a need to articulate what dimensions of the parent brand's equity could possibly influence the interactive patterns of brand extension fit, comparative advertising frame and self-regulatory focus. Generally speaking, brand equity refers to the incremental utility of added-value to a product (or service) by its brand name (Yoo & Donthu, 2001). Aaker (1991) viewed brand equity as a multi-dimensional concept that consists of brand associations, brand

awareness, perceived quality, brand loyalty, and other proprietary brand assets (e.g., patents). Using an associative memory framework, Keller (1993) also highlighted “brand knowledge” (i.e., brand awareness and images) as a key component of consumer-based brand equity. Existing literature has shown that the parent brand’s equity can be leveraged to develop appropriate brand extensions (e.g., Pitta & Katsanis, 1995; Rangaswamy, Burke, & Oliva, 1993). For example, Aaker and Keller (1990) found that higher perceived quality of the parent brand (as one of the key dimensions of brand equity) results in more favorable attitudes toward the extension and thereby would enhance brand extension acceptance. However, the current research did not take into account the relative importance of the parent brand’s equity dimensions when testing the interplay of perceived fit, ad message features, and consumer goal orientation. Future research should carefully analyze the underlying dimensions of parent brand equity (e.g., brand loyalty, perceived quality) that could be included in the analysis to attain more insights about the impact of comparative-valenced ad message on brand extension success.

Finally, personality and individual trait variables that may enhance the potential of a brand to be extended should be considered in future research. Prior literature suggests that an audience’s regulatory focus is closely related to the conceptualization of their behavioral inhibition system (BIS) and behavioral activation system (BAS) (e.g., Carver, 2006; Cunningham, Raye, & Johnson, 2005). According to Gray’s (1990) theory, BIS refers to aversive motivation in response to cues of punishment, non-reward, and negative effects (e.g., fear, anger, and anxiety), while BAS represents appetitive motivation in response to cues of non-punishment, reward, and positive effects (e.g., hope, elation, and happiness) (e.g., Carver & White, 1994; Davidson, 1993; Gray, 1990; Higgins, 1997; Yan & Dillard, 2010).

It is noteworthy that inhibition and approach motivation systems are considered to be responsive to stimuli that are indicative of reward and punishment, respectively (see, Yan & Dillard, 2010, for a review). Given that the primary function of the BIS/BAS activation is to engender goal-directed behavior that may regulate approach and withdrawal motivations (Sherman, Mann, & Updegraff, 2006; Yan, Dillard, & Shen, 2010), empirical evidence for the effects of message framing on BIS/BAS sensitivity has been observed by Shen and Dillard (2007). In their study, negatively-framed messages are more likely to activate the BIS sensitive to situational cues associated with punishment and non-reward, whereas positively-framed messages tend to stimulate the BAS corresponding to cues associated with reward and non-punishment. In accordance with the assumption that the notions of BIS/BAS and regulatory focus are intertwined in fundamental ways, it would be interesting to investigate whether BIS/BAS sensitivity that can be induced by either positive or negative comparative advertising for brand extensions influences the perceived fit of an extension and thus a brand's potential to stretch to successfully impact brand extensions. In this respect, future research should consider the BIS/BAS traits as a moderator to better understand some boundary conditions under which consumers' motivation factors influence the consistency effects of brand extensions.

Despite these limitations that might be addressed in future research, the findings of this dissertation provide valuable insights into understanding the dynamic patterns of comparative ad frame and self-regulatory goals when brand extension fit matters.

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## APPENDICES

## APPENDIX A

### Questionnaire for Pretest 1

**Instructions:** I would like to ask you questions about frequency of product usage and familiarity below the product categories. Please answer the following questions.

*1. Please rate how often you use the following product categories, using a scale where 1 = rarely and 7 = frequently.*

Product Category	Rarely							Frequently
Ice cream	1	2	3	4	5	6	7	
Athletic shoes	1	2	3	4	5	6	7	
Yogurt	1	2	3	4	5	6	7	
Frozen pizza	1	2	3	4	5	6	7	
Orange juice	1	2	3	4	5	6	7	
Facial tissue	1	2	3	4	5	6	7	
Digital camera	1	2	3	4	5	6	7	
MP3 player	1	2	3	4	5	6	7	
Breakfast cereal	1	2	3	4	5	6	7	
Anti-virus software	1	2	3	4	5	6	7	
Desktop computer	1	2	3	4	5	6	7	
Wrist watch	1	2	3	4	5	6	7	
Cellular phone	1	2	3	4	5	6	7	
Jeans	1	2	3	4	5	6	7	
Chocolate	1	2	3	4	5	6	7	
Pain reliever	1	2	3	4	5	6	7	

**2. Please rate how familiar you are with the following product categories, using a scale where 1 = not at all familiar and 7 = very familiar.**

<b>Product Category</b>	<b>Not at all Familiar</b>						<b>Very Familiar</b>
Ice cream	1	2	3	4	5	6	7
Athletic shoes	1	2	3	4	5	6	7
Yogurt	1	2	3	4	5	6	7
Frozen pizza	1	2	3	4	5	6	7
Orange juice	1	2	3	4	5	6	7
Facial tissue	1	2	3	4	5	6	7
Digital camera	1	2	3	4	5	6	7
MP3 player	1	2	3	4	5	6	7
Breakfast cereal	1	2	3	4	5	6	7
Anti-virus software	1	2	3	4	5	6	7
Desktop computer	1	2	3	4	5	6	7
Wrist watch	1	2	3	4	5	6	7
Cellular phone	1	2	3	4	5	6	7
Jeans	1	2	3	4	5	6	7
Chocolate	1	2	3	4	5	6	7
Pain reliever	1	2	3	4	5	6	7

**Instructions:** I would like to ask you questions about your general involvement in various product categories. Using a scale where 1 = strongly disagree and 7 = strongly agree, please answer the following questions.

**3. In general, this product category is relevant to me.**

Product Category	Strongly Disagree						Strongly Agree
Ice cream	1	2	3	4	5	6	7
Athletic shoes	1	2	3	4	5	6	7
Yogurt	1	2	3	4	5	6	7
Frozen pizza	1	2	3	4	5	6	7
Orange juice	1	2	3	4	5	6	7
Facial tissue	1	2	3	4	5	6	7
Digital camera	1	2	3	4	5	6	7
MP3 player	1	2	3	4	5	6	7
Breakfast cereal	1	2	3	4	5	6	7
Anti-virus software	1	2	3	4	5	6	7
Desktop computer	1	2	3	4	5	6	7
Wrist watch	1	2	3	4	5	6	7
Cellular phone	1	2	3	4	5	6	7
Jeans	1	2	3	4	5	6	7
Chocolate	1	2	3	4	5	6	7
Pain reliever	1	2	3	4	5	6	7

4. In general, this product category is important to me.

Product Category	Strongly Disagree						Strongly Agree
Ice cream	1	2	3	4	5	6	7
Athletic shoes	1	2	3	4	5	6	7
Yogurt	1	2	3	4	5	6	7
Frozen pizza	1	2	3	4	5	6	7
Orange juice	1	2	3	4	5	6	7
Facial tissue	1	2	3	4	5	6	7
Digital camera	1	2	3	4	5	6	7
MP3 player	1	2	3	4	5	6	7
Breakfast cereal	1	2	3	4	5	6	7
Anti-virus software	1	2	3	4	5	6	7
Desktop computer	1	2	3	4	5	6	7
Wrist watch	1	2	3	4	5	6	7
Cellular phone	1	2	3	4	5	6	7
Jeans	1	2	3	4	5	6	7
Chocolate	1	2	3	4	5	6	7
Pain reliever	1	2	3	4	5	6	7



**5. Please write down the names of the first brands that come to mind when you think of each product category. For example, for the soft drink product category you might list Coca-Cola and Pepsi.**

<b>Product Category</b>	<b>Brand Names</b>
Ice cream	
Athletic shoes	
Yogurt	
Frozen pizza	
Orange juice	
Facial tissue	
Digital camera	
MP3 player	
Breakfast cereal	
Anti-virus software	
Desktop computer	
Wrist watch	
Cellular phone	
Jeans	
Chocolate	
Pain reliever	

**6. What is your age?** \_\_\_\_\_

**7. What is your sex?** Male \_\_\_\_\_ Female \_\_\_\_\_

## APPENDIX B

### Questionnaire for Pretest 2

**Instructions:** Brand extension is a marketing strategy in which a new product is brought to the market under an existing brand name. Assuming that the dominant attributes associated with the “Häagen-Dazs” brand are creamy, rich, sweet and eating for dessert, for example, it is possible that “chocolate cake” would be a similar extension for Häagen-Dazs. However, “potato chips” might be a dissimilar extension for Häagen-Dazs.

## Nike

(Athletic shoes)

**1. How familiar are you with Nike?**

Not at all familiar	<div style="display: flex; justify-content: space-between; align-items: center;"><div style="border-bottom: 1px solid black; width: 100%;"></div><div style="display: flex; justify-content: space-around; width: 100%;"><span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span></div></div>	Very familiar
---------------------	---	---------------

**2. Please write down the attribute associations (e.g., product feature, benefit, usage, and brand image) that first come to mind when you think about Nike.**

**3. Please write down three product categories that might be similar to Nike in terms of its attribute associations (e.g., product feature, benefit, usage, and brand image).**

Product Category 1: \_\_\_\_\_

Product Category 2: \_\_\_\_\_

Product Category 3: \_\_\_\_\_

**4. Please write down three product categories that might be dissimilar to Nike in terms of its attribute associations (e.g., product feature, benefit, usage, and brand image).**

Product Category 1: \_\_\_\_\_

Product Category 2: \_\_\_\_\_

Product Category 3: \_\_\_\_\_

# Motorola

(Cellular phone)

**1. How familiar are you with Motorola?**

Not at all familiar	_____	_____	_____	_____	_____	_____	_____	Very familiar
	1	2	3	4	5	6	7	

**2. Please write down the attribute associations (e.g., product feature, benefit, usage, and brand image) that first come to mind when you think about Motorola.**

**3. Please write down three product categories that might be similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, usage, and brand image).**

Product Category 1: \_\_\_\_\_

Product Category 2: \_\_\_\_\_

Product Category 3: \_\_\_\_\_

**4. Please write down three product categories that might be dissimilar to Motorola in terms of its attribute associations (e.g., product feature, benefit, usage, and brand image).**

Product Category 1: \_\_\_\_\_

Product Category 2: \_\_\_\_\_

Product Category 3: \_\_\_\_\_

**6. What is your age?** \_\_\_\_\_

**7. What is your sex?** Male \_\_\_\_\_ Female \_\_\_\_\_

## APPENDIX C

### Questionnaire for Pretest 3

**Instructions:** Brand extension is a marketing strategy in which a new product is brought to the market under an existing brand name. Assume that *Nike* is planning to introduce new product lines, such as bicycle, dress shoes, deodorant, and digital camera, whereas *Motorola* is planning to introduce new product lines, such as laptop computer, digital photo printer, anti-virus software, and handheld vacuum.

The next set of questions asks about your perceptions on extension product categories. Using a scale where 1 = strongly disagree and 7 = strongly agree, please answer the following questions.

## Nike

### 1. Nike Bicycle

Bicycles are an appropriate extension for Nike.

Strongly disagree      \_\_\_\_\_      Strongly agree  
1    2    3    4    5    6    7

In general, bicycles from Nike make sense.

Strongly disagree      \_\_\_\_\_      Strongly agree  
1    2    3    4    5    6    7

Bicycles are similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree      \_\_\_\_\_      Strongly agree  
1    2    3    4    5    6    7

I can understand the connection between Nike and bicycles.

Strongly disagree      \_\_\_\_\_      Strongly agree  
1    2    3    4    5    6    7

## 2. *Nike Dress Shoes*

Dress shoes are an appropriate extension for Nike.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

In general, dress shoes from Nike make sense.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

Dress shoes are similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

I can understand the connection between Nike and dress shoes.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

## 3. *Nike Deodorant*

Deodorants are an appropriate extension for Nike.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

In general, deodorants from Nike make sense.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

Deodorants are similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

I can understand the connection between Nike and deodorants.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

#### 4. Nike Digital Camera

Digital cameras are an appropriate extension for Nike.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

In general, digital cameras from Nike make sense.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

Digital cameras are similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree

I can understand the connection between Nike and digital cameras.

Strongly disagree

           :            :            :            :            :            :             
1      2      3      4      5      6      7

Strongly agree



# Motorola

## 1. *Motorola Laptop Computer*

Laptop computers are an appropriate extension for Motorola.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

In general, laptop computers from Motorola make sense.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

Laptop computers are similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

I can understand the connection between Motorola and laptop computers.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

## 2. *Motorola Digital Photo Printer*

Digital photo printers are an appropriate extension for Motorola.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

In general, digital photo printers from Motorola make sense.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

Digital photo printers are similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

I can understand the connection between Motorola and digital photo printers.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
                                 1    2    3    4    5    6    7

### 3. *Motorola Anti-Virus Software*

Anti-virus softwares are an appropriate extension for Motorola.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

In general, anti-virus softwares from Motorola make sense.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

Anti-virus softwares are similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

I can understand the connection between Motorola and anti-virus softwares.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

### 4. *Motorola Handheld Vacuum*

Handheld vacuums are an appropriate extension for Motorola.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

In general, handheld vacuums from Motorola make sense.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

Handheld vacuums are similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

I can understand the connection between Motorola and handheld vacuums.

Strongly disagree                                                            Strongly agree  
                                 1    2    3    4    5    6    7

5. *What is your age?* \_\_\_\_\_

6. *What is your sex?*      *Male* \_\_\_\_\_      *Female* \_\_\_\_\_

## APPENDIX D

### Consent Form

Hello, my name is Tae Hyun Baek, and I am a Ph.D. Candidate in mass communication at the Grady College of Journalism and Mass Communication at the University of Georgia. I am working on my doctoral dissertation research, which is being conducted under the direction of Dr. Karen King (706-542-4791) from the Department of Advertising and Public Relations at the University of Georgia. The purpose of this study is to examine consumers' perceptions of different brands through comparative advertising. Please note that as a potential participant you must be 18 years of age or older to take part in the study.

You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. Your participation is voluntary. No discomforts, stresses or risks are expected from participating in this study. Your participation may earn you an extra credit for the course in which you sign up for the study, at the discretion of the instructor. If your instructor decides to provide an extra credit to the participants, please understand that there will be alternative methods of obtaining the equivalent credit. Therefore your grades and class standing will not be affected whether you choose to participate or not to participate. While you may not benefit directly from participation, your participation in this research project may contribute to advancing knowledge that will be helpful in developing effective advertising strategies for brand extensions. Through participation, you will have a great experience with respect to academic stand point and learn the protocol of social science research. The completed script of this study will be given to the participants who want to receive it.

Your e-mail will not be linked to your survey information and will be immediately erased from the database once the data gathering is conducted. It will take about 35 to 40 minutes to complete this questionnaire. Please note that Internet communications are insecure and that there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, once the researcher receives the completed questionnaire, standard confidentiality procedures will be employed. The data resulting from this study will be kept in secure office storage for purpose of data analysis. If you are not comfortable with the level of confidentiality provided by the Internet, please feel free to print out a copy of the survey, fill it out by hand, and mail it to me at the address given below, with no return address on the envelope. If you do not feel comfortable with a question, skip it and go on to the next question. You have the right to discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. Closing the survey window will erase your answers without submitting them. You will be given a choice of submitting or discarding your responses at the end of the survey. Thank you for your participation. If you have any questions about this study, please contact:

Tae Hyun Baek, Ph.D. Candidate  
Grady College of Journalism and Mass Communication  
University of Georgia Athens, GA 30602-3018  
E-mail: [taehyun@uga.edu](mailto:taehyun@uga.edu)

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Please note: Research at the University of Georgia that involves human participants is overseen by the Institutional Review Board. Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address: [IRB@uga.edu](mailto:IRB@uga.edu).

## APPENDIX E

### Questionnaire for Main Experiment 1

**Instructions:** I would like you to think about something you ideally would like to do. In other words, what accomplishments would you ideally like to meet at this point in your life?

Please write down your **PAST** hopes, aspirations, and dreams as much detail as possible.

--

Please write down your **CURRENT** hopes, aspirations, and dreams as much detail as possible.

--

**Now you will be presented with a public service advertisement.**

**Go onto the next section to proceed.**

Please carefully read the following ad message.

## Drink Orange Juice to Enhance Your Energy!



Drinking orange juice **contributes to the creation of greater energy, promotes your body's metabolism, improves your immune system.**

Orange juice is the richest source of Vitamin C.

According to research by the U.S. Department of Agriculture, **orange juice has more than three times the naturally-occurring Vitamin C than other juices.**

It leads to higher energy and metabolism levels.

1 888 200 4000. [www.drinkorangejuice.org](http://www.drinkorangejuice.org)

**Instructions:** Please place a check mark (✓) in the space that best reflects your opinion about the advertisement you just saw.

**This ad message emphasizes ...**

More ideas about prevention	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	More ideas about promotion
Avoiding something negative	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	Attaining something positive
More ideas about protection	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	More ideas about enhancement



Nike is planning the introduction of a new line of **digital cameras**. Now you will be presented with the ad, followed by a set of question. Please look at the following ad carefully.

---

A stimulus advertisement is placed in this page

---

Have you ever purchased or used the Nike brand? Yes \_\_\_\_ No \_\_\_\_

How familiar are you with Nike?

Not at all familiar	_____	Very familiar
	1 2 3 4 5 6 7	

How familiar are you with Canon?

Not at all familiar	_____	Very familiar
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

A digital camera is an appropriate extension for Nike.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

In general, a digital camera from Nike makes sense.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

A digital camera is similar to Nike in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

I can understand the connection between Nike and a digital camera.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

The ad was hostile to the comparison brand.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

The ad derogated the comparison brand.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

The ad criticized the comparison brand.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

The ad tried to damage the reputation of the comparison brand.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

The ad put down the comparison brand.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

**Instructions:** Please indicate your answer to each question by placing a check mark (✓) in the space that best reflects your opinion.

**How would you evaluate the Nike digital camera?**

Bad	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Good
	1    2    3    4    5    6    7	
Inferior	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Superior
	1    2    3    4    5    6    7	
Unfavorable	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Favorable
	1    2    3    4    5    6    7	
Poor quality	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Good quality
	1    2    3    4    5    6    7	
Dislikable	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Likable
	1    2    3    4    5    6    7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

I am likely to purchase a Nike digital camera next time I need a new digital camera.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

If I were going to buy a digital camera, I would consider buying a Nike digital camera.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

I would never buy a Nike digital camera.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

I would recommend a Nike digital camera to my friends or relatives who are going to buy a digital camera.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

I am sure that I will make a mistake if I purchase a Nike digital camera.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

Purchasing a Nike digital camera will cause me lots of trouble.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

I am sure that I will incur some risk if I buy a Nike digital camera.

Strongly disagree

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Strongly agree

**Instructions:** Please answer the following questions. The answers to these questions will be kept confidential.

What is your age? \_\_\_\_\_

What is your sex?    Male \_\_\_\_\_    Female \_\_\_\_\_

What is your year in college?

- |              |                                  |
|--------------|----------------------------------|
| (1) Freshman | (2) Sophomore                    |
| (3) Junior   | (4) Senior                       |
| (5) Graduate | (6) Other (Please specify) _____ |

What is your race?

- |                                      |                             |
|--------------------------------------|-----------------------------|
| (1) American Indian or Alaska native | (2) African American/ Black |
| (3) Hispanic or Latino               | (4) Asian                   |
| (5) Caucasian/ White                 | (6) Biracial or multiracial |
| (7) Other (Please specify) _____     |                             |

**Thank you for your participation.**

## APPENDIX F

### Questionnaire for Main Experiment 2

**Instructions:** I would like you to think about something you think you ought to do. In other words, what responsibilities do you think you ought to meet at this point in your life?

Please write down your **PAST** duties, obligations, and responsibilities as much detail as possible.

--

Please write down your **CURRENT** duties, obligations, and responsibilities as much detail as possible.

--

**Now you will be presented with a public service advertisement.**

**Go onto the next section to proceed.**



Please carefully read the following ad message.

A clear glass filled with bright orange juice stands next to a halved orange, showing its juicy segments. The background is a clean, light gradient.

## Drink Orange Juice to Prevent Heart Disease!

Drinking orange juice **contributes to healthy cardiovascular function, prevents you from heart disease, reduces the risk of some cancers.**

Orange juice is the richest source of antioxidant.  
According to research by the U.S. Department of Agriculture, orange juice has **more than three times the naturally-occurring antioxidant capacity than other juices.**  
It leads to lower cholesterol and blood pressure levels.

1 888 200 4000. [www.drinkorangejuice.org](http://www.drinkorangejuice.org)

**Instructions:** Please place a check mark (✓) in the space that best reflects your opinion about the advertisement you just saw.

**This ad message emphasizes ...**

More ideas about prevention	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	More ideas about promotion
Avoiding something negative	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	Attaining something positive
More ideas about protection	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>1234567</div>	More ideas about enhancement

Motorola is planning the introduction of a new line of **laptop computers**. Now you will be presented with the ad, followed by a set of question. Please look at the following ad carefully.

---

A stimulus advertisement is placed in this page

---

Have you ever purchased or used the Motorola brand? Yes \_\_\_\_ No \_\_\_\_

How familiar are you with Motorola?

Not at all familiar	_____	Very familiar
	1 2 3 4 5 6 7	

How familiar are you with Dell?

Not at all familiar	_____	Very familiar
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

A laptop computer is an appropriate extension for Motorola.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

In general, a laptop computer from Motorola makes sense.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

A laptop computer is similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

I can understand the connection between Motorola and a laptop computer.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

The ad was hostile to the comparison brand.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad derogated the comparison brand.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad criticized the comparison brand.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad tried to damage the reputation of the comparison brand.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad put down the comparison brand.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

**Instructions:** Please indicate your answer to each question by placing a check mark (✓) in the space that best reflects your opinion.

**How would you evaluate the Motorola laptop computer?**

Bad	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Good
	1    2    3    4    5    6    7	
Inferior	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Superior
	1    2    3    4    5    6    7	
Unfavorable	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Favorable
	1    2    3    4    5    6    7	
Poor quality	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Good quality
	1    2    3    4    5    6    7	
Dislikable	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Likable
	1    2    3    4    5    6    7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

I am likely to purchase a Motorola laptop computer next time I need a new laptop computer.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

If I were going to buy a laptop computer, I would consider buying a Motorola laptop computer.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

I would never buy a Motorola laptop computer.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

I would recommend a Motorola laptop computer to my friends or relatives who are going to buy a laptop computer.

Strongly disagree	<u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u> : <u>      </u>	Strongly agree
	1    2    3    4    5    6    7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

I am sure that I will make a mistake if I purchase a Motorola laptop computer.

Strongly disagree                                                            Strongly agree  
                                 1     2     3     4     5     6     7

Purchasing a Motorola laptop computer will cause me lots of trouble.

Strongly disagree                                                            Strongly agree  
                                 1     2     3     4     5     6     7

I am sure that I will incur some risk if I buy a Motorola laptop computer.

Strongly disagree                                                            Strongly agree  
                                 1     2     3     4     5     6     7

**Instructions:** Please answer the following questions. The answers to these questions will be kept confidential.

What is your age? \_\_\_\_\_

What is your sex?    Male \_\_\_\_\_    Female \_\_\_\_\_

What is your year in college?

- |              |                                  |
|--------------|----------------------------------|
| (1) Freshman | (2) Sophomore                    |
| (3) Junior   | (4) Senior                       |
| (5) Graduate | (6) Other (Please specify) _____ |

What is your race?

- |                                      |                             |
|--------------------------------------|-----------------------------|
| (1) American Indian or Alaska native | (2) African American/ Black |
| (3) Hispanic or Latino               | (4) Asian                   |
| (5) Caucasian/ White                 | (6) Biracial or multiracial |
| (7) Other (Please specify) _____     |                             |

**Thank you for your participation.**



## APPENDIX G

### Questionnaire for Main Experiment 3

**Instructions:** The next set of questions asks you how you see **yourself**. Please answer the following questions.

In general, I am focused on preventing negative events in my life.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I am anxious that I will fall short of my responsibilities and obligations.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I frequently imagine how I will achieve my hopes and aspirations.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I often think about the person I am afraid I might become in the future.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I often think about the person I would ideally like to be in the future.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I typically focus on the success I hope to achieve in the future.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I often worry that I will fail to accomplish my academic goals.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I often think about how I will achieve academic success.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I often imagine myself experiencing bad things that I fear might happen to me.

Not at all true

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
1      2      3      4      5      6      7

Very true

I frequently think about how I can prevent failures in my life.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

I am more oriented toward preventing losses than I am toward achieving gains.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

My major goal in school right now is to achieve my academic ambitions.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

My major goal in school right now is to avoid becoming an academic failure.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

I see myself as someone who is primarily striving to reach my “ideal self” – to fulfill my hopes, wishes, and aspirations.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

I see myself as someone who is primarily striving to become the self I “ought” to be – to fulfill my duties, responsibilities, and obligations.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

In general, I am focused on achieving positive outcomes in my life.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

I often imagine myself-experiencing good things that I hope will happen to me.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

Overall, I am more oriented toward achieving success than preventing failure.

Not at all true

       :        :        :        :        :        :         
1    2    3    4    5    6    7

Very true

Motorola is planning the introduction of a new line of **handheld vacuums**. Now you will be presented with the ad, followed by a set of question. Please look at the following ad carefully.

---

A stimulus advertisement is placed in this page

---

Have you ever purchased or used the Motorola brand? Yes \_\_\_\_ No \_\_\_\_

How familiar are you with Motorola?

Not at all familiar	_____	Very familiar
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

A handheld vacuum is an appropriate extension for Motorola.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

In general, a handheld vacuum from Motorola makes sense.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

A handheld vacuum is similar to Motorola in terms of its attribute associations (e.g., product feature, benefit, or brand image).

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

I can understand the connection between Motorola and a handheld vacuum.

Strongly disagree	_____	Strongly agree
	1 2 3 4 5 6 7	

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

The ad was hostile to the comparison brands.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad derogated the comparison brands.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad criticized the comparison brands.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad tried to damage the reputation of the comparison brands.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

The ad put down the comparison brands.

Strongly disagree      1 : 2 : 3 : 4 : 5 : 6 : 7      Strongly agree

**Instructions:** Please indicate your answer to each question by placing a check mark (✓) in the space that best reflects your opinion.

**How would you evaluate the Motorola handheld vacuum?**

Bad	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Good
Inferior	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Superior
Unfavorable	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Favorable
Poor quality	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Good quality
Dislikable	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Likable

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

I am likely to purchase a Motorola handheld vacuum next time I need a new handheld vacuum.

Strongly disagree	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Strongly agree
-------------------	---	----------------

If I were going to buy a handheld vacuum, I would consider buying a Motorola handheld vacuum.

Strongly disagree	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Strongly agree
-------------------	---	----------------

I would never buy a Motorola handheld vacuum.

Strongly disagree	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Strongly agree
-------------------	---	----------------

I would recommend a Motorola handheld vacuum to my friends or relatives who are going to buy a handheld vacuum.

Strongly disagree	<div style="display: flex; justify-content: space-between; border-top: 1px solid black; border-bottom: 1px solid black; margin: 0 10px;"> <span>1</span><span>2</span><span>3</span><span>4</span><span>5</span><span>6</span><span>7</span> </div>	Strongly agree
-------------------	---	----------------

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements.

If I buy a Motorola handheld vacuum, I would feel uncertain as to whether it will really perform.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
   1    2    3    4    5    6    7

I would be concerned that I really would not get my money's worth buying a Motorola handheld vacuum.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
   1    2    3    4    5    6    7

If I buy a Motorola handheld vacuum, I would worry about potential physical risks, such as muscle strain.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
   1    2    3    4    5    6    7

The thought of buying a Motorola handheld vacuum would make me feel uncomfortable.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
   1    2    3    4    5    6    7

My friends' and family's opinions about my purchasing a Motorola handheld vacuum would cause me to feel concern.

Strongly disagree             :        :        :        :        :        :             Strongly agree  
   1    2    3    4    5    6    7



**Instructions:** Please answer the following questions. The answers to these questions will be kept confidential.

What is your age? \_\_\_\_\_

What is your sex?     Male \_\_\_\_\_     Female \_\_\_\_\_

What is your year in college?

- |              |                                  |
|--------------|----------------------------------|
| (1) Freshman | (2) Sophomore                    |
| (3) Junior   | (4) Senior                       |
| (5) Graduate | (6) Other (Please specify) _____ |

What is your race?

- |                                      |                             |
|--------------------------------------|-----------------------------|
| (1) American Indian or Alaska native | (2) African American/ Black |
| (3) Hispanic or Latino               | (4) Asian                   |
| (5) Caucasian/ White                 | (6) Biracial or multiracial |
| (7) Other (Please specify) _____     |                             |

**Thank you for your participation.**

## APPENDIX H

### Stimulus Material

#### **Experiment 1**

- 1) Positive Comparative Ad for Similar Brand Extension
- 2) Negative Comparative Ad for Similar Brand Extension
- 3) Positive Comparative Ad for Dissimilar Brand Extension
- 4) Negative Comparative Ad for Dissimilar Brand Extension


#### **Experiment 2**

- 5) Positive Comparative Ad for Similar Brand Extension
- 6) Negative Comparative Ad for Similar Brand Extension
- 7) Positive Comparative Ad for Dissimilar Brand Extension
- 8) Negative Comparative Ad for Dissimilar Brand Extension


#### **Experiment 3**

- 9) Positive Comparative Ad for Similar Brand Extension
- 10) Negative Comparative Ad for Similar Brand Extension
- 11) Positive Comparative Ad for Dissimilar Brand Extension
- 12) Negative Comparative Ad for Dissimilar Brand Extension

## 1. Experiment 1 - Positive Comparative Ad for Similar Brand Extension



Introducing the new Nike bike  
with 26-inch aluminum frame,  
downhill suspension fork,  
and 21-speed shifters



# THE TRUTH IS OUT!

NIKE'S BIKE IS SUPERIOR TO THE TREK MOUNTAIN BIKE


In recent tests conducted by *Consumer Reports*, 9 out of 10 consumers preferred the new Nike bike over the Trek mountain bike.

Compared to the Trek mountain bike, the new Nike bike provides **higher** performance drive, **more comfortable** ride, **more durable** frameset, and **lighter** weight.

This is why the new Nike bike is an ideal choice for you.

For more information, visit us at [www.nike.com](http://www.nike.com)

## 2. Experiment 1 - Negative Comparative Ad for Similar Brand Extension



Introducing the new Nike bike  
with 26-inch aluminum frame,  
downhill suspension fork,  
and 21-speed shifters



# THE TRUTH IS OUT!

THE TREK MOUNTAIN BIKE IS INFERIOR TO NIKE'S BIKE

In recent tests conducted by *Consumer Reports*, 9 out of 10 consumers preferred the new Nike bike over the Trek mountain bike.

Compared to the new Nike bike, the Trek mountain bike provides **lower** performance drive, **less comfortable** ride, **less durable** frameset, and **heavier** weight.

This is why the new Nike bike is an ideal choice for you.

For more information, visit us at [www.nike.com](http://www.nike.com)

### 3. Experiment 1 - Positive Comparative Ad for Dissimilar Brand Extension

Introducing the new Nike digital camera  
with 12.1 megapixel resolution,  
4X optical zoom,  
and large 2.5-inch LCD



**THE TRUTH IS OUT!**

**NIKE'S DIGITAL CAMERA IS SUPERIOR TO THE CANON POWERSHOT**

In recent tests conducted by *Consumer Reports*, 9 out of 10 consumers preferred the new Nike digital camera over the Canon PowerShot.

Compared to the Canon PowerShot, the new Nike digital camera provides **higher** image quality, **wider** dynamic range, **faster** shutter speed, and **longer** battery life.

This is why the new Nike digital camera is an ideal choice for you.

For more information, visit us at [www.nike.com](http://www.nike.com)

#### 4. Experiment 1 - Negative Comparative Ad for Dissimilar Brand Extension

Introducing the new Nike digital camera  
with 12.1 megapixel resolution,  
4X optical zoom,  
and large 2.5-inch LCD



**THE TRUTH IS OUT!**

**THE CANON POWERSHOT IS INFERIOR TO NIKE'S DIGITAL CAMERA**

In recent tests conducted by *Consumer Reports*, 9 out of 10 consumers preferred the new Nike digital camera over the Canon PowerShot.


Compared to the new Nike digital camera, the Canon PowerShot provides **lower** image quality, **narrower** dynamic range, **slower** shutter speed, and **shorter** battery life.

This is why the new Nike digital camera is an ideal choice for you.


For more information, visit us at [www.nike.com](http://www.nike.com)



## 5. Experiment 2 - Positive Comparative Ad for Similar Brand Extension

**MOTOROLA**

Introducing the new **Motorola** laptops  
with Intel Core i5 Processor  
and Turbo Boost Technology



# Why the new **Motorola** laptop is superior to Dell laptop

Laptop computer comparisons from **Consumer Reports**

Excellent

Good

Fair


Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Performance	Display	Battery life	Weight
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
Dell	<div></div>				Fair	Fair	Fair	Fair


The new Motorola laptop outperforms the Dell laptop with **stellar performance, superior graphic capabilities, longer battery life, and lighter weight.** These are among the reasons why more and more people trust the new Motorola laptop.

For more information visit us at [www.motorola.com](http://www.motorola.com)

## 6. Experiment 2 - Negative Comparative Ad for Similar Brand Extension

 **MOTOROLA**

Introducing the new **Motorola** laptops  
with Intel Core i5 Processor  
and Turbo Boost Technology



# Why Dell laptop is inferior to the new **Motorola** laptop

Laptop computer comparisons from **Consumer Reports**

Excellent

Good

Fair

Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Performance	Display	Battery life	Weight
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
Dell	<div></div>				Fair	Fair	Fair	Fair

Dell laptop's performance ranks below the new Motorola laptop  
**with inferior graphic capabilities, shorter battery life, and heavier weight.**  
These are among the reasons  
why more and more people trust the new Motorola laptop.

For more information visit us at [www.motorola.com](http://www.motorola.com)



## 7. Experiment 2 - Positive Comparative Ad for Dissimilar Brand Extension



Introducing the new **Motorola** handheld vacuum with Cyclonic Action Filtration



### Why the new **Motorola** handheld vacuum is superior to Dirt Devil

Handheld vacuum comparisons from *Consumer Reports*

Excellent Good Fair Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Carpet	Bare floors	Easy of use	Noise
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
Dirt Devil	<div></div>				Fair	Fair	Fair	Fair

The new Motorola handheld vacuum outperforms Dirt Devil with more suction power to remove surface debris on both carpets and bare floors.

It is easier to operate and quieter than Dirt Devil.

These are among the reasons

why more and more people trust the new Motorola handheld vacuum.

For more information visit us at [www.motorola.com](http://www.motorola.com)

## 8. Experiment 2 - Negative Comparative Ad for Dissimilar Brand Extension



Introducing the new **Motorola** handheld vacuum with Cyclonic Action Filtration



### Why Dirt Devil is inferior to the new **Motorola** handheld vacuum

Handheld vacuum comparisons from *Consumer Reports*

Excellent Good Fair Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Carpet	Bare floors	Easy of use	Noise
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
Dirt Devil	<div></div>				Fair	Fair	Fair	Fair


Dirt Devil's performance ranks below the new Motorola handheld vacuum **with less suction power to remove surface debris on both carpets and bare floors.**

**It is more difficult to operate with more noise.**


These are among the reasons why more and more people trust the new Motorola handheld vacuum.

For more information visit us at [www.motorola.com](http://www.motorola.com)

## 9. Experiment 3 - Positive Comparative Ad for Similar Brand Extension











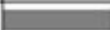



Introducing the new **Motorola** laptops  
with Intel Core i5 Processor  
and Turbo Boost Technology



# Why the new **Motorola** laptop is superior to other brands

Laptop computer comparisons from *Consumer Reports*

 Excellent  Good  Fair  Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Performance	Display	Battery life	Weight
Motorola								
X								
Y								

The new Motorola laptop outperforms its competitors with **stellar performance, superior graphic capabilities, longer battery life, and lighter weight.** These are among the reasons why more and more people trust the new Motorola laptop.

For more information visit us at [www.motorola.com](http://www.motorola.com)

## 10. Experiment 3 - Negative Comparative Ad for Similar Brand Extension



Introducing the new **Motorola** laptops  
with Intel Core i5 Processor  
and Turbo Boost Technology



# Why other brands are inferior to the new **Motorola** laptop

Laptop computer comparisons from *Consumer Reports*

Excellent Good Fair Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Performance	Display	Battery life	Weight
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
X	<div></div>				Good	Good	Fair	Good
Y	<div></div>				Fair	Fair	Fair	Fair

Other brands' performance ranks below the new Motorola laptop  
**with inferior graphics capabilities, shorter battery life, and heavier weight.**  
These are among the reasons  
why more and more people trust the new Motorola laptop.

For more information visit us at [www.motorola.com](http://www.motorola.com)

## 11. Experiment 3 - Positive Comparative Ad for Dissimilar Brand Extension



Introducing the new **Motorola** handheld vacuum with Cyclonic Action Filtration



### Why the new **Motorola** handheld vacuum is superior to other brands

Handheld vacuum comparisons from *Consumer Reports*

Excellent Good Fair Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Carpet	Bare floors	Easy of use	Noise
Motorola	<div></div>				Excellent	Excellent	Excellent	Excellent
X	<div></div>				Good	Good	Fair	Good
Y	<div></div>				Fair	Fair	Fair	Fair

The new Motorola handheld vacuum outperforms its competitors **with more suction power to remove surface debris on both carpets and bare floors.**

**Easier to operate and quieter than other handheld vacuum brands.**

These are among the reasons

why more and more people trust the new Motorola handheld vacuum.

For more information visit us at [www.motorola.com](http://www.motorola.com)



## 12. Experiment 3 - Negative Comparative Ad for Dissimilar Brand Extension



Introducing the new **Motorola** handheld vacuum with Cyclonic Action Filtration



### Why other brands are inferior to the new **Motorola** handheld vacuum

Handheld vacuum comparisons from *Consumer Reports*

Excellent Good Fair Poor

Brand	Overall Score				Attribute Rating			
	Poor	Fair	Good	Excellent	Carpet	Bare floors	Easy of use	Noise
Motorola								
X								
Y								

Other brands' performance ranks below the new Motorola handheld vacuum with less suction power to remove surface debris on both carpets and bare floors.

More difficult to operate with more noise.

These are among the reasons

why more and more people trust the new Motorola handheld vacuum.

For more information visit us at [www.motorola.com](http://www.motorola.com)