

DRIVERS OF BRAND EXTENSION SUCCESS AND
THE ROLE OF BRAND RELATIONSHIP QUALITY

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THE ROLE OF BRAND RELATIONSHIP QUALITY

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Thesis Abstract

Esra (Sönmezler) Arıkan, “Drivers of Brand Extension Success and the Role of Brand Relationship Quality”

Given the importance of brands and the strategy of brand extensions, the primary purpose of this study is to determine the key drivers of brand extension success. The proposed model not only incorporates the success factors such as parent brand quality, brand portfolio breadth, brand portfolio quality variance, corporate image and perceived fit that are widely discussed in prior research, but also introduces brand relationship quality that emphasizes the strength and depth of consumer-brand relationships as a potential success factor. In order to avoid any faulty interpretation of the significance and the relative importance of these factors under investigation, the study considers both the direct relationships between success factors and brand extension success and the structural relationships between perceived fit and other success factors.

To test the proposed model, three national brands from the white goods sector are determined as the parent brands and for these brands, three hypothetical extension products are selected with varying levels of fit (high, moderate and low). The survey data is collected from a sample of approximately five hundred consumers living in Istanbul by means of house or workplace visits and is analyzed by conducting a series of structural equation modeling analyses. The findings not only show that most of the hypothesized relationships are at least conditionally supported but also reveal the significant role that brand relationship quality plays both directly and indirectly on brand extension success , especially in the context of moderate fit extension products.

Tez Özeti

Esra (Sönmezler) Arıkan, “Marka Yayma Başarısını Belirleyen Faktörler ve Marka İlişki Kalitesinin Rolü”

Markaların ve marka yayma stratejisinin önemi göz önüne alınarak bu çalışmanın temel amacı marka yayma başarısında belirleyici olan faktörleri tanımlanmaktadır. Önerilen model geçmiş araştırmalarda sıkça değinilen asıl marka kalitesi, marka portföy genişliği, marka portföy kalite uyumsuzluğu, kurumsal imaj ve algılanan benzerlik gibi başarı faktörlerini içermekle birlikte tüketici-marka arasındaki ilişkilerin gücünü ve derinliğini vurgulayan müşteri ilişki kalitesini potansiyel bir başarı faktörü olarak sunmaktır. Modelde incelenen bu faktörlerin anlamlarının ve göreceli önemlerinin doğru yorumlanabilmesi için bu çalışma başarı faktörleri ile marka yayma başarısı arasındaki doğrudan ilişkilerin yanı sıra algılanan benzerlikle diğer başarı faktörleri arasındaki yapısal ilişkileri de göz önünde bulundurmaktadır.

Önerilen modeli test edebilmek için beyaz eşya sektöründen üç ulusal marka asıl marka olarak belirlenmiş ve bu markalar için üç adet farklı benzerlik seviyesinde (yüksek, orta ve düşük) hayali yayma ürün seçilmiştir. Anket verisi İstanbul’da yaşayan yaklaşık beş yüz tüketiciden ev veya işyeri ziyareti yoluyla toplanmış ve bir dizi yapısal eşitlik analizi yürütülerek incelenmiştir. Bulgular ön görülen hipotezlerin büyük çoğunluğunun en azından şartlı kabul edildiğini göstermekle birlikte müşteri-marka ilişki kalitesinin yayma ürün başarısında oynadığı hem doğrudan hem de dolaylı rolü, özellikle de orta benzerlik seviyesindeki yayma ürünlerde, ortaya koymaktadır.

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CHAPTER ONE

INTRODUCTION

The use of brands has been central to marketing for more than a century. As defined by American Marketing Association (2007), a brand is a name, signal, sign, design or a combination of these that intends to identify the goods or services of one producer and distinguish them from others'. It is a complex symbol that can communicate various levels of meanings such as attributes, benefits, values, culture and personality (Kotler and Keller, 2009). Playing an integral part in marketing strategy, brands are considered to be among a firm's most important assets. Brands help firms not only differentiate and position their products through rational (tangible) and/or emotional (intangible) elements but also maintain a stable relationship with their customers (Fournier, 1998).

Brands offer a number of benefits to both customers and firms. They create value for customers by facilitating decision-making, reducing search costs, decreasing the risk inherent to product acquisition, enabling the attribution of responsibility to the producer or distributor and acting as symbolic devices that create emotional benefits. They also perform valuable functions to firms other than differentiation such as serving an identification purpose to simplify product handling or tracing, enabling the legal protection of unique features, signaling a certain level of quality to satisfied customers and protecting the firm's market position by increasing barriers of entry (Keller, 2008).

The tremendous value attached to a brand is often stated in terms of brand equity. In today's competitive business environment, brand equity is regarded as a very important concept in business practice as well as in academic research because marketers can gain competitive advantage through successful brands. The advantages of firms that have brands with high equity include the opportunity for successful extensions, resistance against competitors' promotional pressures and creation of barriers to competitive entry (Wood, 2000).

In a general sense, brand equity can be defined as the added value a brand gives to a product (Farquhar, 1989). This added value can be examined from two different perspectives- financial and customer-based. The financial perspective of brand equity is concerned with the financial asset value it creates to business and it measures the outcomes of brand equity such as market share or relative price as in the study of Chaudhuri and Holbrook (2001). Compared to the financial perspective, the customer-based perspective is the one that is more prevalent in the brand equity literature. It defines brand equity as the differential effect that brand knowledge has on consumer responses to the marketing of that brand. A brand is said to have positive consumer-based brand equity when consumers react more favorably to a product and the way it is marketed when the brand is identified as compared to when it is not (Keller, 2008).

Leveraging brand equity through brand extensions is a strategic option for firms looking to grow (Aaker, 1991). In today's competitive business environment, marketers need to create competitive advantage by constantly adapting to and bringing about change (Shocker, Srivastava, and Ruekert, 1994), yet new products are quite expensive to introduce and have a high rate of market failure. Therefore, it is not surprising that in order to both reduce the costs of introduction and improve the likelihood of a successful launch, firms

often resort to brand extension strategies in an attempt to make their new offers more attractive for customers and distributors.

Typically, brand extensions are products or services that a firm offers beyond its parent product or service. In other words, they are new products or services in a completely different category from the one the parent brand is currently involved in (Keller, 2008). As well as stimulating demand, such an equity transfer from a parent brand to its extension avoids the high costs of developing and communicating a new brand name. Due to these and many other yet unmentioned advantages, brand extensions are one of the most common strategies among marketing managers (Völckner and Sattler, 2006).

Scope and Significance of the Study

Given the importance of brands and the strategy of brand extensions, it is important to understand what constitutes a successful brand extension. Hence, it is not surprising that the thrust of most research on brand extensions has been the identification of the set of factors determining their success, generally discussed in the form of positive consumer evaluations of brand extensions. In these studies, several variables have been found to play a significant role in explaining consumers' evaluations, including parent brand quality (e.g., Aaker and Keller, 1990; Smith and Park, 1992), brand portfolio breadth (e.g., Boush and Loken, 1991; Dacin and Smith, 1994), brand portfolio quality variance (e.g., Dacin and Smith, 1994; DelVecchio, 2000), perceived fit between the parent brand and its extension (e.g., Aaker and Keller, 1990; Park, Milberg, and Lawson, 1991), extension's marketing context (e.g., Nijssen, 1999; Reddy, Holak, and Bhat, 1994; Taylor and Bearden, 2002), and various individual differences such as expertise/product knowledge with regard to product category

(e.g., Broniarczyk and Alba, 1994; Muthukrishnan and Weitz, 1991), innovativeness (e.g., Klink and Smith, 2001), culture (e.g., Han and Schmitt, 1997), mood (e.g., Barone, Miniard, and Romeo, 2000) and age (e.g., Zhang and Sood, 2002).

Even if many studies on the various potential determinants of brand extension success have been conducted, Völckner and Sattler (2006) claim that there are still two key issues that have received little or no attention in prior work. First, little is known about the relative importance of the success factors in explaining brand extension success because previous studies mostly investigate the effects of only a small fraction of all relevant success factors at a time. Second, in those studies, only the direct relationships between brand extension success (dependent variable) and potential success factors (independent variables) are tested, disregarding the fact that some success factors may constitute dependent variables in other structural relationships.

Prior research suggests that consumers' evaluations of a brand extension is affected mainly by the perceived fit between the extension and the parent brand (e.g., Aaker and Keller, 1990; Boush and Loken, 1991; Keller and Aaker, 1992). Yet, it is possible that this effect of perceived fit is overstated due to the fact that the structural relationships between perceived fit and other success factors that indirectly contribute to brand extension success are mostly neglected in prior research. In order to avoid any faulty interpretation of the significance and relative importance of the success factors under investigation, this study aims to consider not only the direct relationships between success factors and extension success, but also the structural relationships between perceived fit and other success factors.

Prior research also tends to measure consumers' evaluations of brand extensions by consumers' general attitude toward the extension, their perception of the extension's quality and their purchase intention of the extension (e.g., Dacin and Smith, 1994;

Keller and Aaker, 1992; Sheinin and Schmitt, 1994). In this context, the possibility of consumer responses with behavioral components other than purchase intention is mostly overlooked. However, there are two recent studies- one by Völckner and Sattler (2006) and the other by Fedorikhin, Park, and Thomson (2008)- that investigate the influence of success factors on the consumers' behavioral responses to brand extensions such as willingness to search, pay, word-of-mouth and forgive. Building on these research efforts, this study aims to enrich the limited measurement of brand extension success and investigates the effect of various success factors on attitudinal and behavioral responses separately.

Finally and most importantly, the majority of the research efforts in the brand literature concentrate on understanding the role of perceived fit between a brand and its extensions, that is, why some brand extensions succeed while others do not. The general finding concerning perceived fit is that extension evaluations are more favorable when there is high perceived fit between the extension and the parent brand (Aaker and Keller, 1990; Boush and Loken, 1991; Park, Milberg, and Lawson, 1991). These results suggest that marketers should launch brand extensions characterized by high levels of perceived fit and avoid introducing extensions marked by low levels of fit. Yet, in the real life, it is not difficult to find examples of brands that have been extended successfully into “perceptually distant” domains (Klink and Smith, 2001). Drawing on the brand relationship quality (BRQ) concept developed by Fournier (1994), this current study introduces BRQ as a new potential driver of brand extension success that may help explain this discrepancy between prior research and marketplace observations. With the exception of a few recent attempts (e.g., Park and Kim, 2001; Park, Kim, and Kim, 2002), BRQ has by no means been fully

investigated in this field of research. Thus, this study aims to add to the current body of knowledge by clarifying how BRQ operates in the context of brand extension introductions.

Building on these research aims, this study proposes an integrative model on brand extension success and empirically tests it conducting a survey to a large-scale sample randomly selected from consumers living in Istanbul.

Organization of the Remainder of the Dissertation

The rest of the study is organized as follows: Chapter Two reviews the available literature on brand extensions and develops the theoretical background for this study. In Chapter Three, a model for evaluating brand extensions is developed and the important points from the literature are explicated as they apply to the various hypotheses offered. Chapter Four focuses on the research design and methodology used. In Chapter Five, the statistical methods used are explained and the results of the study are reported. Chapter Six summarizes the findings of the study, discusses the theoretical and managerial implications of the findings along with the limitations of the study and presents some suggestions for future research.

CHAPTER TWO

LITERATURE SURVEY

This chapter reviews the available literature on brand extensions and develops the theoretical background for the study. It begins with a general discussion of brand extensions as a strategy and their associated benefits and risks. In the next section, the process of attitude transfer in brand extensions is reviewed with a significant emphasis on categorization theory to lay a sound groundwork. Then, a general overview on brand extension literature is presented. In the final section, the factors that are hypothesized to affect consumers' evaluations of brand extensions in prior research are classified into five major groups and each of these groups is discussed in detail to serve as the basis for the model proposed in the next chapter.

Brand Extensions: Benefits and Risks

As a firm's most valuable asset, a good brand costs money and years to build. Meanwhile, high failure rates dramatically increase the cost of new product introduction. Brand extensions provide an alternative to enter a new product category with an established brand, leveraging the current brand equity. As a strategy for new product introduction, brand extension has gained in popularity such that they account for the eighty percent of all new consumer product introductions in the United States (Keller, 2008).

Depending on the relationship between the new and the existing products, the strategy of using the existing brand name can be termed as either a brand extension or a line extension. It is important to distinguish between these two strategies. A line extension is the use of an existing brand name in a product category already served (such as a different flavor or a different form of an existing product), presumably to target new market segments (Keller, 2008). For example, Coca-Cola extended its soft drink product line in that it introduced Coca-Cola Diet and Coca-Cola Zero. When a brand name is used to enter a new product category, the strategy is called brand extensions. Tauber (1988) defines brand extensions as the process of applying an existing brand name to products introduced by the same firm into product categories that are new to that firm. Sony computers or Arçelik kitchen furniture are just few examples for brand extensions.

There are great benefits associated with introducing products to the market in the form of brand extensions. Given the high cost of launching a new product under a new brand name and the low percentage of success of newly introduced products, brand extensions are considered a relatively safe strategy with higher survival rates (Tauber, 1988). When a brand uses its established name to introduce a new product, the risk associated with the launch of the new offering as well as the investment needed are lowered and there are higher chances that the new product will be successful (Aaker, 1990). Trusting in an established brand with which they may have had prior experience, consumers are generally more willing to purchase the extension because of the quality assurance they receive from the known brand name (Romeo, 1991). Another advantage of introducing extension products is increased efficiency of promotional and advertising expenditures. Brand extensions do not require as much promotional support and advertising investment as new products, because consumers are already familiar with the brand name

(Smith and Park, 1992). The existing relationships with distributors also provide greater distribution capability and facilitate the new product introduction (Keller, 2008).

The benefits stated above illustrate the different ways in which a brand can help a brand extension be successful. Another aspect of brand extension strategies discussed in the literature, though, has to do with the reciprocal effect, that is, the effect that the extension product can have on the parent brand. A successful brand extension not only helps a firm strengthen its brand equity but also creates additional revenues through expanded consumer base and increased market share (Balachander and Ghose, 2003). Furthermore, extension products can reinforce the image, the visibility, the name recognition and the associations related to the parent brand name (Aaker, 1990).

However, brand extensions as a strategy do not always guarantee product success, considering the large number of extensions that are included in the list of failed product extensions (Farquhar, 1994). The failure of a brand extension can lead to negative consequences beyond the direct and immediate financial implications generally involved with the product failure (Sharp, 1993). A poorly executed brand extension strategy can result in weakening parent brand and diluting brand equity by creating harmful associations (Aaker, 1990).

The negative feedback effects on the parent brand of launching brand extensions have received much attention in the academia. The studies conducted in this context mostly agree that a negative impact occurs to a parent brand when extension information related to product attributes and/or quality is inconsistent with the parent brand image (e.g., Gürhan-Canlı and Maheswaran, 1998; Lane and Jacobson, 1997; Loken and Roedder-John, 1993; Roedder-John, Loken, and Joiner, 1998). For example, examining situations where brand extensions are more likely to dilute beliefs associated with the parent brand, Loken and

Roedder-John (1993) argue that dilution effects occur when brand extension attributes are inconsistent with the parent brand beliefs but they also point out that these effects are less likely to occur when consumers perceive the brand extension as atypical of the parent brand. Roedder-John, Loken, and Joiner (1998) contribute further to these findings by demonstrating that beliefs about flagship products which are most closely associated with the parent brand are likely to be strongly held, resistant to change and thus, less vulnerable to dilution in case of inconsistent brand extensions.

Another significant risk of unsuccessful extensions concerns the opportunity cost of the loss of time and resources (Aaker and Keller, 1990). Smith and Park (1992) argue that when a firm relies heavily on brand extensions, it might miss opportunities to launch new successful brands, which could prove more beneficial for the long-term viability of the firm. In addition, even if brand extensions are ideally designed to expand a firm's consumer base and generate marginal revenue, there is always the possibility that an extension product might take away consumers and sales from the parent brand. This phenomenon is known as cannibalization of the parent brand. Sharp (1993) describe cannibalization as a risk that comes from the success of a new category extension. Reddy, Holak, and Bhat (1994), who study this topic as it relates to line extensions, suggest that cannibalization effects are particularly evident when the extension is first introduced in the market, but that "the incremental sales generated by line extensions may more than compensate for the loss in sales due to cannibalization" (p. 257).

The Process of Attitude Transfer in Brand Extensions

To introduce a successful brand extension into the market, it is important to understand how consumers evaluate brand extensions and the associated decision processes.

Researchers have advanced several theoretical explanations to justify the transfer of attitude from a parent brand to its extensions. Some of the processes of attitude transfer that have been examined in the context of brand extension evaluations are semantic generalization (e.g., Kerby, 1967), affect generalization (e.g., Boush, Shipp, Loken, Gencturk, Crockett, Kennedy et al., 1987) and categorization theories (e.g., Boush et al., 1987; Aaker and Keller, 1990).

Very limited research has examined the role of semantic generalization in the process of attitude transfer from a brand to its extension. Semantic generalization is informed by research in psycholinguistics (Osgood, 1988), which states that two objects can be judged similar, regardless of their physical differences, if they carry a similar name. Based on this view, Kerby (1967) hypothesizes that attitude should be transferred between two or more products that are physically dissimilar, if they share a common brand name. However, the results fail to support the expected attitude transfer based merely on the brand names. The findings are not surprising, as semantic generalization appears to provide an overly simplistic view of the attitude transfer process.

As another process of attitude transfer, affect generalization from a parent brand to its extension denotes a process in which individuals retain an overall affective impression about a brand and transfer it to the object(s) associated with it. However, it is argued that consumers may hold positive affect toward a brand but the affect cannot be transferred to dissimilar products because affective generalizations are not free from informational

content (Boush et al., 1987). That is, if affect generalization were the process whereby attitude transfers from a brand to its extension, then all extensions would be equally evaluated regardless of their similarity with the parent brand. However, some brand extensions are evaluated more favorably than the others, therefore, pointing to a process of extension evaluation that is more complex than a simple process of affect transfer from a parent brand to its extension.

Categorization theory provides the theoretical underpinning to explain the transfer of attitude between a parent brand and an extension (Aaker and Keller, 1990).

Categorization involves the process of classifying objects and drawing inferences about them. Categories provide a mechanism to treat different objects/events equivalently (Mervis and Rosch, 1981). They are formed for various reasons. First, they bring cohesion and meaning to diverse objects that individuals encounter in their day-to-day lives. With categories, individuals do not have to remember details of every category member separately; instead, they can generalize about the category, benefiting from cognitive economy (Medin, 1989). Second, using their knowledge about categories, individuals can draw inferences about the new instances of the category and make predictions about them. That is, categorization helps them transfer and apply the knowledge associated with a category to draw inferences about other instances of that category (Dube, Schmitt, and Bridges, 1992).

Categorization theory hypothesizes that when people encounter a new stimulus (person, thing or product), this new stimulus is checked against an existing category. The categorization process is based on an individual's ability to recognize explanatory links between the new stimulus and the existing knowledge held in memory (Murphy and Medin, 1985). The greater the number of links between the existing knowledge and the new

stimulus is, the greater the likelihood that the stimulus will be perceived as fitting with the existing knowledge (Mervis and Rosch, 1981; Rosch, 1978). If the new stimulus is perceived as fitting to the existing category, the new stimulus is categorized with the existing schema and the components of the category (i.e., affect and cognition associations) are transferred to this stimulus (Fiske and Neuberg, 1990; Fiske and Pavelchak, 1986).

Applying categorization theory to brand management, it is argued that consumers use their knowledge of brands to simplify, structure and interpret their purchasing environment (Myers-Levy and Tybout, 1989). In other words, consumers see brands as categories that over time have come to be associated with a number of specific attributes based on the attributes of products offered under that brand name (Keller, 2008). Thus, the extension evaluation research based on categorization theory suggests that consumers evaluate an extension favorably if the parent brand and the brand extension fit each other. Previous research (e.g., Aaker and Keller, 1990; Boush and Loken, 1991) has shown that if a parent brand enjoys high quality perceptions, then this positive affect associated with the parent brand is more likely to be transferred to an extension when the parent brand and extension categories are fitting. In other words, a high degree of similarity between the categories of parent brand and extension allows for the transfer of positive attitudes from the parent brand to the extension.

It is important to note that categorization theory consists of a dual process mechanism for attitude formation. Fiske and Pavelchak (1986) state that categorization theory is a continuum of impression formation that goes from categorization to piecemeal integration. When faced with an evaluative task, people first attempt to classify the object with a certain category. If the classification is successful, affect associated with the category is transferred to the object. However, if the classification is unsuccessful, the

evaluation of this new stimulus is undertaken through piecemeal processing in which the individual merits of the new stimulus is considered attribute by attribute and evaluated in a relatively thoughtful manner (Fiske and Pavelchak, 1986; Fiske and Neuberg, 1990).

Even if the earlier studies argue that piecemeal processing occurs when consumers encounter atypical, poor fitting stimulus, some researchers (e.g., Boush and Loken, 1991; Fedorikhin, Park, and Thomson, 2008) demonstrate that piecemeal processing occurs only for moderately fitting new category members. New members that are either a clear match or a clear mismatch of the parent category are quickly processed in a category-based manner. In cases of moderate fit, however, consumers attempt to reconcile the differences between the new product and the parent category and thus, they evaluate the extension in a more detailed, piecemeal fashion.

A General Overview of Prior Research on Brand Extensions

Given the importance of brands and the strategy of brand extensions, it is not surprising that brand extensions as a research interest is very popular in the academia. Researchers assess this strategy mainly from two perspectives: consumers' evaluations of an extension product and market's response to the strategy. A review of the literature reveals that even if the studies from the market's perspective are important, the studies from the consumers' perspective play a more dominant role.

From the market's perspective, the studies generally examine the influence of brand extensions as a strategy on shareholder value (e.g., Lane and Jacobson, 1995) or on market share (e.g., Smith and Park, 1992) and mostly emphasize the role of parent brand. For example, Lane and Jacobson (1995) suggest that the perceived quality and

familiarity of the parent brand positively influence the stock market responses to brand extension announcements. In a similar vein, Smith and Park (1992) claim that the parent brand strength increases the market share of the extension product.

From the consumers' perspective, various factors influence consumers' evaluations of brand extensions. However, researchers generally coincide in pointing out the degree of perceived similarity or fit between the parent brand and the extension as the decisive factor. In addition to perceived fit, which is indicated by almost all studies, there are an endless number of other variables identified, but among these perceived brand quality holds a prominent role and hence, needs to be highlighted as perceived fit (Bottomley and Doyle, 1996; Sunde and Brodie, 1993).

These two factors lie at the heart of the studies by Boush et al. (1987) and Aaker and Keller (1990) that have shaped the theoretical basis for empirical research in brand extension literature. The University of Minnesota Consumer Behavior Seminar by Boush and his colleagues (1987) is the first study conducted to help determine if perceived fit between a parent brand and its extension has an effect on consumers' evaluations of an extension. The study tests the effects of product category similarity, along with attitude toward the parent brand, on consumer evaluations and finds that the greater the perceived similarity between the parent product category and the extended product category, the greater the transfer of positive brand affect.

Expanding this study by Boush et al. (1987), Aaker and Keller (1990) also investigate the role of perceived fit on consumers' attitudes toward brand extensions. Their analysis reveals that attitudes toward brand extensions are more favorable when the parent brand is perceived to have high quality and when there is high perceived fit between the parent brand and the extension. The study of Aaker and Keller (1990) is seen as the state

of the art in the brand extension literature because of the three sources of similarity features proposed. These three sources of similarity are complementarity (i.e., the extent to which consumers view two product classes as complements), substitutability (i.e., the extent to which consumers view two product classes as substitutes), and transferability (i.e., sharing manufacturing resources with the existing product). According to many researchers in this stream of research, this is a significant improvement from the widespread use of one-item measures (Hem and Iversen, 2002).

Given the importance of this study by Aaker and Keller (1990) to brand extension research, numerous replications have been conducted in the following years to examine the empirical generalizability of these results (e.g., Bottomley and Doyle, 1996; Sunde and Brodie, 1993) and they all have generated disparate results. The important evolution of these replications is reflected in the empirical generalization conducted by Bottomley and Holden (2001). Based on eight data sets used by previous studies, the researchers not only claim general support for the model suggested by Aaker and Keller (1990) but also find that the level of contribution of each explanatory variable varies depending on the brands used in the experiments and cultures in which these experiments are conducted.

Even if research on brand extension focuses primarily on the significant role perceived fit and parent brand quality play in explaining consumer evaluations, several other variables are also identified, including brand portfolio breadth (e.g., Boush and Loken, 1991; Dacin and Smith, 1994), brand portfolio quality variance (e.g., Dacin and Smith, 1994; DelVecchio, 2000), extension's marketing context (e.g., Nijssen, 1999; Reddy, Holak, and Bhat, 1994; Taylor and Bearden, 2002) and various individual differences such as expertise/ product knowledge with regard to product category (e.g., Broniarczyk and Alba, 1994; Muthukrishnan and Weitz, 1991), innovativeness (e.g.,

Klink and Smith, 2001), culture (e.g., Han and Schmitt, 1997), mood (e.g., Barone, Miniard, and Romeo, 2000) and age (e.g., Zhang and Sood, 2002).

As the empirical research on brand extensions has extensively accumulated, comprehensive studies synthesizing prior findings have become significantly needed and highly valued in the academia. As a result, in recent years, a group of researchers has exclusively focused on building such comprehensive models. For example, screening the articles published in major marketing journals between 1985 and 1999, Sattler, Völckner, and Zatloukal (2002) build a model integrating the sixteen significant main effects and nine significant interaction effects identified in prior studies and test this comprehensive model using a large scale of consumer sample.

The main effects tested in this study include (1) quality of the parent brand, (2) number of previous brand extensions, (3) brand portfolio breadth, (4) variance in quality among previous brand extensions in the brand portfolio, (5) positioning of previous brand extensions, (6) difficulty of making the product class of the extension, (7) variance in quality across the products of the extension's product class, (8) consumers' knowledge of the product class of the extension, (9) involvement toward the extension, (10) fit between parent brand and extension product, (11) relevance of the extended associations for the extension product, (12) symbolic value of the parent brand (i.e. image orientation of extended information), (13) linkage of the utility of the parent brand to product attributes of the original product category, (14) firm size, (15) marketing competence and (16) advertising support.

The interaction effects include (1) quality of the parent brand and fit, (2) quality of the parent brand and involvement toward the extension, (3) portfolio breadth of the parent brand and quality of the parent brand, (4) fit and portfolio breadth of the parent

brand, (5) number of previous brand extensions and variance in quality among previous extensions in the brand portfolio, (6) quality of the parent brand and success of previous brand extensions, (7) difficulty of making the product class of the extension and involvement, (8) fit and involvement, and (9) fit and relevance of the extended associations for the extension product.

The results show that the perceived fit between the between parent brand and extension product and the quality of the parent brand are the most important explanatory variables. Significant but relatively less relevant variables include the variance in quality among previous brand extensions in the brand portfolio, the positioning of previous extensions, the relevance of the extended associations for the extension product, the linkage of the utility of the parent brand to product attributes of the original product category and the firm size. Compared to main effects, interactions between the success factors are found to be of minor importance. Based on the findings of this research, Völckner and Sattler (2006; 2007) conduct similar studies in the following years.

Summarizing marketing advantages of strong brands, Hoeffler and Keller (2003) also provide a list of factors affecting brand extension evaluations. Based on a review of previous literature, the researchers suggest a group of variables such as (1) quality perception of parent brand, (2) parent brand reputation, (3) perceived value of parent brand, (4) price premium of parent brand, (5) symbolic value of parent brand, (6) symbolic associations of parent brand, (7) brand knowledge, (8) breadth of the family brand, (9) brand familiarity, (10) ownership of parent brand and (11) attitude toward parent brand. Similarly, based on a comprehensive survey of previous literature, Czellar (2003) provide a model containing five categories of explanatory variables affecting attitude toward brand extensions. These categories are (1) external information

(competitor activity, distributor activity and other sources), (2) extension marketing strategy (information amount, information type and exposure), (3) attitude toward parent brand (brand knowledge and brand affect), (4) perceived fit and (5) attitude toward extension category.

Similar to the studies reviewed above, this study also conducts a systematic review of previous literature based on predetermined procedures. First, only consumers' responses toward brand extensions (e.g., purchase intention, attitude toward brand extension and quality perception of brand extension) are chosen as dependent variables, because this study focuses only on consumers' evaluations. Therefore, some research that adopts different types of success criteria such as stock market reaction or market share (e.g., Lane and Jacobson, 1995; Smith and Park, 1992) is not analyzed. Second, only empirical studies that use either experiments or surveys are included for the purpose of empirical generalization of brand extension literature. Third, the analysis period is chosen to be from 1987 to March 2010. The year 1987 is chosen, because the seminar paper by Boush and his colleagues (1987) can be considered as the starting point of brand extension literature. Fourth, the Social Science Citation Index is used as the database for searching brand extension studies, because the Social Science Citation Index is easy to use and covers most of major marketing journals. Using "brand extension" as the search term, approximately two hundred articles that contain "brand extension" in their titles, key words or abstracts are retrieved from the database. A summary of the articles that pass the selection criteria is presented in Table 1.

Table 1. Selected Studies in the Brand Extension Literature

Year	Author(s)	Study Title (Journal)	Major Findings
1987	Boush, Shipp, Loken, Gencturk, Crockett, and Kennedy et al.	Affect Generalization to Similar And Dissimilar Brand Extensions (P&M)	The greater the similarity between the current and new product, the greater the transfer of positive and negative affect to that new product.
1990	Aaker and Keller	Consumer Evaluations of Brand Extensions (JM)	- Subjects' perceptions of the quality of the parent brand and the fit between the parent and extension product classes have an interactive effect on evaluation of an extension. - The relationship of a positive quality image for the parent brand with the evaluation of a brand extension is strong only when there is a basis of fit between the two product classes. - Subjects' perceptions of the difficulty of making the extension has a positive relationship with evaluations of an extension - Potentially negative associations can be neutralized more effectively by elaborating on the attributes of the brand extension than by reminding consumers of the positive associations with the original brand.
1991	Boush and Loken	A Process-Tracing Study of Brand Extension Evaluation (JMR)	- Evaluations of brand extensions are influenced both by brand extension typicality and by brand breadth. - There is an inverted U relationship between brand extension typicality and evaluation process measures. - Moderately typical extensions were evaluated in a more piecemeal and less global way than were either extremely typical or extremely atypical extensions. - Subjects' attitudes toward brand extensions were correlated highly with their ratings of brand extension typicality.
1991	Park, Milberg, and Lawson	Evaluation of Brand Extensions: The Role of Product Feature Similarity and Brand Concept Consistency (JCR)	- Consumers take into account not only information about the product- level feature similarity, but also the concept consistency between the brand concept and the extension. - When a brand's concept is consistent with those of its extension products, the prestige brand seems to have greater extendibility to products with low feature similarity than the functional brand does.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
1992	Keller and Aaker	The Effects of Sequential Introductions of Brand Extensions (JMR)	▪ Evaluations of a proposed extension when there are intervening extensions differ from evaluations when there are no intervening extensions only when there is a significant disparity between the perceived quality of the intervening extension (as judged by its success or failure) and the perceived quality of the parent brand. ▪ A successful intervening extension increases evaluations of a proposed extension only for an average quality parent brand; an unsuccessful intervening extension decreases evaluations of a proposed extension only for a high quality parent brand.
1993	Boush	How Advertising Slogans Can Prime Evaluations of Brand Extensions (P&M)	▪ Advertising slogans can play an important role in supporting or undermining a brand extension strategy by drawing attention to attributes that the new product either has in common with existing products or that conflict with existing products
1993	Sunde and Brodie	Consumer Evaluations of Brand Extensions: Further Empirical Results (IJRM)	▪ Brand extensions succeed when the brand is (1) perceived to be of high quality, (2) fit is positive in terms of transferability and complementarity, (3) is in the target category that is hard to make.
1994	Broniarczyk and Alba	The Importance of Brand in Brand Extension (JMR)	▪ Brand-specific associations moderate the effect of brand affect and product category similarity across several product categories. ▪ Brand-specific associations may dominate the effects of brand affect and category similarity, particularly when consumer knowledge of the brands is high.
1994	Dacin and Smith	The Effect of Brand Portfolio Characteristics on Consumers Evaluations of Brand Extensions (JMR)	▪ The number of extensions of a brand is positively related to consumers' evaluations of extension quality. ▪ Quality variance negatively affects the relationship between the extension numbers and extension evaluation.
1994	Dawar and Anderson	The Effects of Order and Direction of Multiple Brand Extensions (JBR)	▪ The order and direction of extension affect the perceived coherence of the brand and purchase likelihood of the extension. ▪ Undertaking extensions in a particular order allows distant extensions to be perceived as coherent ▪ Following a consistent direction in extension allows for greater coherence and purchase likelihood for the target extension.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
1994	Sheinin and Schmitt	Extending Brands with New Concepts: The Role of Category Attribute Congruity, Brand Affect, and Brand Breadth (JBR)	▪ Brand congruency affects brand extension evaluation, but this effect is subject to brand breadth and brand affect.
1996	Dawar	Extensions of Broad Brands: The Role of Retrieval in Evaluations of Fit (JCP)	▪ Brand breadth is a function of the number and variability of products associated with it, as well as, the strength of associations between a brand and its products. ▪ The strength of association is reflected in the retrievability from memory of product associations and this, in turn, influences the evaluation of fit of brand extensions.
1996	Herr, Farquhar, and Fazio	Impact of Dominance and Relatedness on Brand Extensions (JCP)	▪ Consumers learning and liking of proposed brand extensions is influenced by (1) the dominance of the brand in the parent category, and (2) relatedness of the parent category to the target category. ▪ Closeness of the target category to the parent category facilitates the affect transfer from the category dominant parent brand to the extension.
1997	Han and Schmitt	Product-Category Dynamics and Corporate Identity in Brand Extensions: A Comparison of Hong Kong and U.S. Consumers (JIM)	▪ For U.S. consumers, perceived fit is much more important than company size; for Hong Kong consumers, company size does not matter for high fit extensions, but does matter for low fit extensions. ▪ This is explained by the collectivist nature of the Hong Kong society whereas US consumers are individualists and make their own fit judgments.
1998	Glynn and Brodie	The Importance of Brand-Specific Associations in Brand Extension: Further Empirical Results (JP&BM)	▪ Brand-specific associations can dominate the effects of the parent brand to the point where they reverse extension evaluations.
1998	Han	Brand Extensions in a Competitive Context: Effects of Competitive Targets and Product Attribute Typicality on Perceived Quality (AMSR)	▪ Given high fit between the brand and the extension category, a brand extension should be positioned based on the typical category attribute. ▪ When the brand-category fit is low, a brand with typical attributes is evaluated favorably when positioned against the prototypical brand of the extension category.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
1998	Pryor and Brodie	How Advertising Slogans Can Prime Evaluations of Brand Extensions: Further Empirical Results (JP&BM)	▪ Advertising slogans prime evaluations of brand extensions. ▪ A brand extension is rated as more similar to existing family branded products if the advertising slogan primes attributes that the brand extension shares with existing products. ▪ A brand extension will be evaluated more positively if the advertising slogan primes features that the extension shares with existing family-branded products.
2000	Barone, Miniardi, and Romeo	The Influence of Positive Mood on Brand Extension Evaluations (JCR)	▪ Positive mood enhances evaluations of brand extensions viewed as moderately similar as opposed to very similar or very dissimilar for parent brands that are favorably evaluated. ▪ The influence of positive mood on extension evaluations is mediated by its effects on perceptions of the similarity between the parent brand and the extension as well as the perceived competency of the marketer in producing the extension.
2000	Bridges, Keller, and Sood	Communication Strategies for Brand Extensions: Enhancing Perceived Fit by Establishing Explanatory Links (JA)	▪ Explanatory links can enhance the perceived fit. Critical determinant is not the type of association but the salience and relevance of association.
2000	DeIVecchio	Moving Beyond Fit: The Role of Brand Portfolio Characteristics in Consumer Evaluations of Brand Reliability (JP&BM)	▪ In addition to fit, characteristics of the brand portfolio (number of products affiliated with the brand and the quality variance of these products) play an important role in affecting consumer impressions of brand reliability. ▪ Having a greater number of products affiliated with the brand has positive consequences when consumers evaluate a new extension.
2000	De Ruyter and Wetzels	The Role of Corporate Image and Extension Similarity in Service Brand Extensions (JEP)	▪ Consumers evaluate service extensions by providers with an innovative late mover image more favorably than service extensions by companies with a pioneer image. ▪ Consumers prefer service brand extensions to related rather than unrelated markets and the relative distance between service providers with an innovative late mover image and pioneers is larger in related markets

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
2000	Lane	The Impact of Ad Repetition and Ad Content on Consumer Perceptions of Incongruent Extensions (JM)	▪ Extension consistency is not a fixed property but is dynamic in nature. It varies with the ad content and ad repetition. ▪ Participants who viewed brand extension advertisements five times evaluated incongruent extensions more favorably.
2001	Bhat and Reddy	The Impact of Parent Brand Attribute Associations and Affect on Brand Extension Evaluation (JBR)	▪ There is a direct transfer of affect from parent brand to extensions only for non-durable symbolic extensions. ▪ Parent brand attributes have no impact on the evaluation, only overall product quality as a brand attribute is important. ▪ There is no difference in attribute-based evaluation for either durable or non-durable extension.
2001	Bottomley and Holden	Do We Really Know How Consumers Evaluate Brand Extensions? Empirical Generalizations Based on Secondary Analysis of Eight Studies (JMR)	▪ Consumers' evaluations of brand extensions are determined primarily by the quality of the parent brand and the fit between the original and extension product categories. ▪ Evaluations of brand extensions are further dependent, but to a lesser extent, on (a) interactions of the quality of the parent brand with the complementarity and transferability of assets and skills between the original and extension product categories and (b) the perceived difficulty of making the extension. ▪ Cultural differences do not change the fact that the main effects of quality and fit contribute significantly to extension evaluations, but they do influence the relative importance of these factors.
2001	Klink and Smith	Threats to the External Validity of Brand Extension Research (JMR)	▪ The effects of fit on extension evaluations diminish as the level of information about the extension increases. ▪ Under the high-information condition, the effects of fit are not sensitive to when consumers encounter the brand name. ▪ The effect of fit diminishes as consumer innovativeness increases. ▪ As a person's exposure to a brand extension increases, so too does their perception of fit between the brand and the extension product.
2001	Park and Kim	Role of Consumer Relationships with a Brand in Brand Extensions: Some Exploratory Findings (ACR)	▪ Consumers having a strong relationship with a brand react to its extensions more positively than those lacking such a relationship.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
2002	Maoz and Tybout	The Moderating Role of Involvement and Differentiation in the Evaluations of Brand Extensions (JCP)	▪ Incongruity per se does not lead to elaboration and enhance evaluation of the moderately incongruent extension. ▪ A congruent brand is judged more favorably compared to moderately incongruent or extremely incongruent extension when task involvement is low. ▪ An inverted U relationship occurs when task involvement is high and the extension is undifferentiated. ▪ A differentiated extension may form the basis of favorable evaluation regardless of the level of congruency.
2002	Park, Kim, and Kim	Acceptance of Brand Extensions: Interactive Influences of Product Category Similarity, Typicality of Claimed Benefits, and Brand Relationship Quality (ACR)	▪ The perceived consumer-brand relationship quality had a significant and positive impact on the brand extension evaluation.
2002	Taylor and Bearden	The Effects of Price on Brand Extension Evaluations: The Moderating Role of Extension Similarity (AMSJ)	▪ The effect of price on brand extension perceived quality evaluations is larger for dissimilar than similar brand extensions. ▪ A high introductory price has a positive impact on perceived quality evaluations for dissimilar extensions but not similar extensions.
2002	Zhang and Sood	Deep and Surface Cues: Brand Extension Evaluations by Children and Adults (JCR)	▪ Children and adults evaluate brand extensions differently with respect to the use of deep and surface cues. ▪ Adults use deep features such as category similarity while children tend to use surface features such as brand names and name characteristics as a basis for extension evaluations.
2003	Hem and Iversen	Transfer of Brand Equity in Brand Extensions: The Importance of Brand Loyalty (ACR)	▪ A high affective relationship towards the parent brand may reduce the evaluation of brand extensions. ▪ Loyal behavioral intention towards the parent brand is important for reaching a positive evaluation of extensions. ▪ Self-image relationship towards the parent brand is found to increase the evaluation of brand extensions.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
2003	Hem, De Chernatony, and Iversen	Factors Influencing Successful Brand Extensions (JMM)	▪ Extensions into categories more similar to the parent brand tend to be more readily accepted, across FMCG, durable goods and services brands. ▪ The reputation of the parent brand is an important factor influencing the success of the extension, across FMCG, durable goods and services brands. ▪ Perceived risk about the extension category is only found to enhance acceptability of extensions for durable goods and services. ▪ Innovative consumers are more positively disposed towards service extensions than FMGG and durable goods extensions.
2003	Swaminathan	Sequential Brand Extensions and Brand Choice Behavior (JBR)	▪ Experience with the parent brand and intervening extension has an impact on purchase behavior of a subsequent brand extension particularly among those with a lower level of loyalty towards the parent brand and among those who try the intervening extension more than once.
2005	Barone	The Interactive Effects of Mood and Involvement on Brand Extension Evaluations (JCP)	▪ Under conditions of high involvement, participants' mood influences their evaluations of extensions that are moderately similar to the parent brand, but does not affect evaluations of either very similar or dissimilar extensions. ▪ Under low-involvement conditions, the influence of positive mood is independent of parent brand-extension similarity
2005	Yeung and Wyer	Does Loving a Brand Mean Loving Its Products? The Role of Brand-Elicited Affect in Brand Extension Evaluations (JMR)	▪ When people have an opportunity to form an initial impression of an extension based on the parent brand, this impression can influence their subsequent evaluations independently of the extension's similarity to the parent brand. ▪ The affect that people experience and attribute to the brand exerts its influence through its impact on this impression.
2006	Echambadi, Arroniz, Reinartz, and Lee	Empirical Generalizations from Brand Extension Research: How Sure Are We? (IJRM)	▪ Although the simple effects of neither parent brand quality nor measures of fit affect evaluations of brand extensions, the interaction effects of parent brand quality with fit are important determinants of brand extension evaluations.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
2006	Völckner and Sattler	Drivers of Brand Extension Success (JM)	▪ Fit is the most important driver of brand extension success, followed by marketing support, parent-brand conviction, retailer acceptance, and parent-brand experience. ▪ There also exist several important structural relationships among the investigated success factors (e.g., marketing support → fit → retailer acceptance → extension success). ▪ The interaction terms of fit with the quality of the parent brand and with parent-brand conviction are statistically significant, albeit of relatively low importance.
2007	Monga and Roedder-John	Cultural Differences in Brand Extension Evaluation: The Influence of Analytic versus Holistic Thinking (JCR)	▪ Consumers from Eastern cultures perceive higher levels of brand extension fit and evaluate brand extensions more favorably than do consumers from Western cultures. ▪ These differences are robust for extensions that range from very low to moderate fits with the parent brand.
2007	Völckner and Sattler	Empirical Generalizability of Consumer Evaluations of Brand Extensions (IJRM)	▪ The authors investigated the empirical generalizability of existing brand extension research results (1) beyond the lab to conditions with real extensions, (2) across fast-moving consumer goods product categories, (3) across different types of parent brands, (4) across respondents and (5) across success measures. ▪ Many important results of brand extension research generalize, to a certain extent, across all five areas of empirical generalization.
2008	Fedorikhin, Park, and Thomson	Beyond Fit and Attitude: The Effect of Emotional Attachment on Consumer Responses to Brand Extensions (JCP)	▪ Brand attachment goes beyond attitude and fit in determining consumers' behavioral reactions to brand extensions. ▪ The effect is pronounced at high and moderate, but not low levels of fit. ▪ Attachment has an impact on the extent to which the extension is categorized as a member of the parent brand family, which partially mediates attachment's effects.

Table 1. continued

Year	Author(s)	Study Title (Journal)	Major Findings
2008	Oakley, Duhachek, Balachander, and Sriram	Order of Entry and the Moderating Role of Comparison Brands in Brand Extension Evaluation (JCR)	▪ Order of entry moderates the impact of fit on brand extension evaluation. Low fit brands are best served to enter the market as a pioneer—if the low fit brand is a later entrant, consumer evaluation of their brand extension is affected negatively. ▪ High fit brands should not be deterred by the presence of a lower fit pioneer, as the presence of a comparison brand of lower fit improves the evaluation of their extension relative to the singular evaluation context when entering as a pioneer.
2009	Hem and Iversen	Effects of Different Types of Perceived Similarity and Subjective Knowledge in Evaluations of Brand Extensions (IJRM)	▪ There are three types of perceived similarity (usage, associations, competence) and three areas of consumer knowledge (original brand, original category, extension category) on evaluations of brand extensions. ▪ Some types of perceived similarity and knowledge are more important than others.

ACR= Advances in Consumer Research

AMSJ= Academy of Marketing Science Journal

AMSR= Academy of Marketing Science Review

IJRM= International Journal of Research in Marketing

JAP= Journal of Applied Psychology

JBR= Journal of Business Research

JCP= Journal of Consumer Psychology

JCR= Journal of Consumer Research

JIM= Journal of International Marketing

JM= Journal of Marketing

JMM= Journal of Marketing Management

JMR= Journal of Marketing Research

JP&BM= Journal of Product & Brand Management

P&M= Psychology &Marketing

Factors Affecting Brand Extensions Evaluations

The systematic review of the selected articles suggests that consumers' evaluations of brand extensions are affected by a number of factors that can be classified into five major groups and these are:

- Relationship between parent brand and brand extension
- Parent brand characteristics
- Extension's marketing context
- Firm characteristics
- Consumer characteristics

Each of these groups is discussed in detail to serve as the basis for the model that will be proposed in the next chapter.

Relationship between Parent Brand and Brand Extension

Perceived Fit

The variable that has generated probably the most discussion in the brand extension literature is perceived fit that refers to the similarity between the parent brand and the extension. In line with categorization theory, many researchers (e.g., Aaker and Keller, 1990; Bottomley and Doyle, 1996; Boush and Loken, 1991; Chakravarti, MacInnis, and Nakamoto, 1990; Park, Milberg, and Lawson, 1991; Rangaswamy, Burke, and Oliva, 1993; Sheinin and Schmitt, 1994; Smith and Park, 1992; Sunde and Brodie, 1993) claim that the

more similar the extension is to a parent brand, the more likely are consumers to reflect the parent brand's positive associations on the extension. In the literature, there is growing evidence suggesting that consumers' fit perceptions dictate their evaluations of brand extensions and unless there is a recognizable basis for fit, consumers disapprove extensions (Lane, 2000).

Although it is almost unanimously agreed that perceived fit has a strong and direct influence on brand extension evaluations, there is little agreement among researchers on the nature and measurement of perceived fit. A review of the literature suggests that perceived fit has been manipulated and measured in a variety of ways. In the earlier studies, perceived fit is conceptualized as the similarity or feature overlap between the parent brand and extension category (e.g., Aaker and Keller, 1990; Boush et al., 1987; Keller and Aaker, 1992). In other words, perceived fit is considered high if the extension category shares important product attributes with the parent brand category.

In one of these earliest attempts, Boush and his colleagues (1987) investigate the brand extension evaluations and the role of product-category fit. They systematically manipulate the affect toward the parent brand (in terms of product quality) and the similarity between the parent brand and its extension. The results of their research indicate that if the parent brand and the extension are similar, the affect transfer from the parent brand to its extension is direct and positive. Similarity plays such a strong role in Boush et al.'s (1987) research that dissimilar extensions are rated very unfavorably even when the parent brand's existing products are perceived to be of very high quality. In other words, a favorable attitude toward the parent brand cannot help extension evaluations when the extension is perceived to be dissimilar to the parent brand.

Aaker and Keller (1990), through two experimental studies, put forward an explanation similar to that of Boush et al.'s (1987), yet the study of Aaker and Keller (1990) is seen as the state of the art in the product category fit research because of the three sources of similarity features they propose. According to many researchers in this stream of research, this is a significant improvement from the widespread use of one-item measures (Hem and Iversen, 2002). The three sources of similarity are complementarity (i.e., the extent to which consumers view two product classes as complements), substitutability (i.e., the extent to which consumers view two product classes as substitutes), and transferability (i.e., sharing manufacturing resources with the existing product). According to Aaker and Keller (1990), of the three fit variables, transferability of skills/assets and perceived complementarity are more important in predicting evaluations of brand extensions than product substitutability. The researchers also point to a negative interaction between complementarity and transferability. Thus, they state that fit on one of these two variables is adequate since little is gained by having a fit on both dimensions.

In another study, Chakravarti, MacInnis, and Nakamoto (1990) use a somewhat different approach to the concept of perceived fit. They emphasize four aspects of perceived fit that are shared features, shared benefits, usage complementarity and marketing- manufacturing synergy. Shared features involve physical similarities between the parent brand and the extension while shared benefits reflect the degree to which two product categories serve the same goal for consumers. Usage complementarity, however, deals with the complementarity of the extended product to the parent product, which is almost the same as the complementarity dimension suggested by Aaker and Keller (1990). Finally, marketing- manufacturing synergy reflects consumers' perceptions of the relatedness of skills between the extended product and the parent product.

On the other hand, some researchers (e.g., Broniarczyk and Alba, 1994; Park, Milberg, and Lawson, 1991) claim that product category similarity, though important, may represent only one facet of fit and suggest a broader view that is not driven by product category similarity alone, but by a variety of brand associations. As one of the most important studies conducted in this context, Park, Milberg, and Lawson (1991) extend the definition of perceived fit beyond category similarity by showing that two brands in the same category could have extensions that vary in fit. They argue that extension evaluations depend not only on category similarity but also on brand concept consistency.

Brand concept consistency refers to the congruence of the extension with the image of the parent brand. Since brand image is made up of specific associations that set the brand apart from other competing brands, these associations are not the same as the brand's product category associations. Thus, two objects may share many physical attributes but the underlying brand concepts for those products may be very different. For example, Seiko and Rolex watches share several product-level features, but the underlying concepts for the two brands are very different from each other - Seiko is a functional brand whereas Rolex is a prestige brand (Park, Milberg, and Lawson, 1991). Though there exist many different brand concepts, in their study, Park, Milberg, and Lawson (1991) focus on two major brand concepts: function-oriented brand concept (Seiko) versus prestige-oriented brand concept (Rolex). They mainly argue that for both function-oriented and prestige oriented brand names, the most favorable evaluations occur when brand extensions are realized with high product feature similarity and high brand concept consistency. However, they also claim that the nature of the brand concept moderates the relative importance of physical attribute similarity and brand concept consistency and reveal that when a brand's concept is

consistent with those of its extension products, a prestige brand seems to have greater extendibility to products with low feature similarity than a functional brand does.

Broniarczyk and Alba (1994) provide another base for extensions in distant categories and demonstrate that unique brand-specific associations that are valued in the extension category can dominate category similarity in predicting extension evaluations. In order to compare the relative influence of brand-specific associations against category similarity, the researchers conduct three experiments and find that a brand may compensate for its lack of category similarity and in fact fit into another category, regardless of its category of origin, if it is perceived to offer the benefits sought in the extended category. Afterwards, Glynn and Brodie (1998) replicate Broniarczyk and Alba's study and also find that relevant brand-specific associations dominate the impact of product similarity.

Summarizing much of this literature, Bridges, Keller, and Sood (2000) propose that consumers perceive fit when they understand the rationale (or explanatory link) for grouping an extension with the parent brand. The researchers examine the hypothesis that high perceived fit of a brand extension results when consumers can establish explanatory links that connect the parent brand and the extension. They find that extensions are poorly rated when the parent brand's dominant association is inconsistent with the extension's dominant association. The researchers suggest that when evaluating a brand extension, consumers use the three types of parent brand associations either independently or concurrently. These include category, brand concept or brand-specific associations. Their study reveals that the most important determinant in the process of brand extension evaluations is not the type of the association used, but whether the association is readily accessible from memory and determined to be appropriate and/or relevant to the parent brand.

Even if similarity is the most frequently referred dimension of fit, the typicality and the relatedness of the new product category to the existing product category are also mentioned in the related literature as other possible dimensions (Boush and Loken, 1991; Gürhan-Canlı and Maheswaran, 1998; Herr, Farquhar, and Fazio, 1996). Typicality is a measure of how representative an object is of a category (Nedungadi and Hutchinson, 1985). As suggested by Mervis and Rosch (1981), categories are graded structures, which mean that members vary in their degree of typicality (representativeness) of their categories. Since a brand can be viewed as a category composed of products offered under a brand name, it is not surprising that some extensions are more typical (representative) of a brand category and hence evaluated more favorably (Boush and Loken, 1991). Relatedness, however, refers to the strength of association between a parent brand category and its target extension category (Herr, Farquhar, and Fazio, 1996). The relatedness of two product categories can depend on the similarity of common features, substitutability in providing a common function or complementarity in a common usage situation. As there is a lack of concrete distinctions between similarity, relatedness and typicality, it is extremely difficult to differentiate these concepts and thus, similarity is more widely used in the brand extension literature.

In a world of rapid technological change, one element missing from these conceptualizations of perceived fit is technology. Recently, realizing this gap, some researchers (e.g., Jun, Mazumdar, and Raj, 1999; Story and Loroz, 2005) argue that the concept of perceived fit should be extended to encompass technological fit. Building on the work of Aaker and Keller (1990), Jun and his colleagues (1999) define technological similarity as the relative ease with which the existing technological competence acquired by the parent brand is transferred to the manufacturing of products in the extension

category. In a similar context, Story and Loroz (2005) study the effect of technological congruence and find that it serves as the basis of many higher-order fit judgments that affect brand extension evaluations. They claim that in cases in which the perceived technology level of the extension is congruent with the perceived technology level of the parent brand, beliefs concerning the firm's capabilities may transfer more easily from products currently associated with the brand to the new extension.

Perceived Difficulty of Making the Extension

Aaker and Keller (1990) argue that the perceived difficulty of making an extension also plays a significant role in extension evaluations. They reason that for many parent brands the ability to manufacture and deliver a high quality product is an integral part of the equity associated with the brand. As such, they believe that the level of manufacturing difficulty required to make the extension should parallel that of the parent brand. If the manufacturing process for the extension does not approximate the level of the parent brand (i.e., if the extension uses a much less sophisticated or difficult manufacturing process), a potential incongruence occurs and consumers evaluate an extension less favorably. This occurs mainly because consumers "view the combination of a quality brand and a trivial new product as inconsistent or even exploitative" (Aaker and Keller, 1990, p. 30). In such a case, consumers usually believe that the parent brand name is being added to exploit consumers by means of a premium pricing strategy.

While some researchers (e.g., Bottomley and Holden, 2001; Echambadi, Arroniz, Reinartz, and Lee, 2006; Sunde and Brodie, 1993) support that perceived difficulty of making the extension matters in consumers' evaluations of brand extensions, the influence

of this factor is relatively minor and thus will be excluded from this study, as suggested by Völckner and Sattler (2006).

Parent Brand Characteristics

Parent Brand Quality

Defined by Zeithaml (1988, p. 3) as the "global assessment of the consumer opinion about the superiority or excellence of a product", perceived quality has a broader meaning in the area of brand extensions, which transcends the mere dimension of the physical product and includes the quality perceptions associated with the brand. Perceived quality of parent brand is a variable that has received significant emphasis in the brand extension literature. In evaluating a brand extension, consumers generally use the parent brand as a basis on which to infer characteristics and attributes about the new product, which are unknown to them (Wernerfelt, 1988). That implies that because consumers have not actually tried the extension product to be able to judge its quality, they have to rely on the known brand name to make inferences about quality. Hence, consumer perceptions of the extension are expected to be positive if the parent brand is associated with high quality in the consumer's mind.

For many years, the expected relationship between the perceived quality of the parent brand and consumer evaluations of the brand extension has been an issue of major disagreement. Aaker and Keller's (1990) study forms the basis for the still enduring discussion. In contrast to their hypothesis, Aaker and Keller's analysis reveals that there is no direct link from perceived quality of the parent brand to the attitude toward the

extension. The researchers argue that this relationship is strong only when there is a basis of fit between the two product classes; when there is little basis of fit, extension evaluations are low regardless of the perceived quality of the parent brand.

Despite the wide acceptance and diffusion of Aaker and Keller's findings, some researchers (e.g., Bottomley and Doyle, 1996; Bottomley and Holden, 2001; Sunde and Brodie, 1993) replicate Aaker and Keller's model and instead find a direct positive relationship between the quality perceptions of the parent brand and its extensions. Other studies also demonstrate a positive and significant relation between a brand's superior quality and the success of its extension (e.g., Gronhaug, Hem, and Lines, 2002; Park and Kim, 2001; Van Riel, Lemmink, and Ouwersloot, 2001). Recently, Völckner and Sattler (2006) test a comprehensive model on drivers of brand extension success and find that even if perceived quality of parent brand is not among the most important drivers, it still plays a significant role on extension evaluations.

One explanation for this discrepancy can be traced to the measurement problems associated with the perceived quality construct. Aaker and Keller (1990) employ a single-item measure of perceived quality. In contrast, the studies reporting a positive effect mostly employ multi-item measures. Another explanation can be related to the nature of extensions chosen. In their study, Aaker and Keller (1990) mostly use non-durables as product class extensions. Investigating the impact of perceived quality on the success of brand extensions in consumer durables, non-durables and services, Lahiri and Gupta (2005) demonstrate that perceived quality of the parent brand is generally important when evaluating the impact of brand extensions, but the beta coefficient is higher for the services and the durables samples as compared to the non-durables sample. This is as predicted because services being intangible and consumer durables being of higher unit

price, consumers rely more on perceived quality of the brand to judge extensions as compared to non-durables which are of low unit value.

However, some recent studies take into consideration the potential reasons for discrepancy mentioned above and still find support for the findings of Aaker and Keller (1990). For example, Echambadi, Arroniz, Reinartz, and Lee (2006) re-examine Bottomley and Holden's (2001) conclusions and demonstrate analytically that the simple effects estimated by previous studies are incorrect, but the interaction effects of parent brand quality with fit are important determinants of brand extension evaluations.

Parent Brand Portfolio Characteristics

Due to the increased tendency of firms to leverage their brand equity through brand extensions, many brands have become affiliated with a portfolio of diverse products. Even if in the business world this is a highly preferred strategy, in the academia, the findings regarding the potential hazards of using a common brand on multiple products are quite mixed. While some researchers raise their concern that an enlarged portfolio can result in the dilution of brand equity (e.g., Loken and Roedder- John, 1993), others suggest that the value of a brand can be elevated as the number of products associated with it increases (e.g., Dacin and Smith, 1994; DelVecchio, 2000; Sheinin and Schmitt, 1994).

The rationale for the pessimistic position that a brand's effectiveness may diminish as the number of extensions associated with it increases can be found in categorization theory. As the number of products associated with a brand increases, the "meaning" of the brand becomes blurred in the minds of consumers and hence, it no longer provides a clear basis for categorizing subsequent extensions (Smith and Park, 1992). When the ability to

categorize an extension is limited as such, the likelihood of affect transfer from the parent brand to the extension is reduced.

The optimistic position, however, argue that the systematic extension of a brand can actually strengthen its position in the minds of consumers. For example, Wernerfelt (1988) suggests that as the number of products affiliated with the brand increases, so does the firm's investment in the brand. Recognizing the magnitude of the firm's investment and realizing its value as a signal of quality, consumers are more favorably inclined toward brands that are associated with a greater number of products. Similarly, Zajonc (1980) demonstrates that favorability of an attitude toward an object increases with increased exposure, as will be the case if a brand is used on multiple products. Because the exposure to a brand is likely to increase as the number of products affiliated with it increases, this can also improve the favorability of a brand and its associations. In their study, Nisbett, Krantz, and Jepson (1983) also support the optimistic position by claiming that individuals tend to be more confident in their judgments when their judgments are based on a large sample of instances than when based on a comparatively small sample. Building on these arguments, Dacin and Smith (1994) conduct two laboratory experiments and the results confirm a positive relationship between the number of products affiliated with a brand and consumers' confidence in and favorability of their evaluations of extension quality.

In their study, Dacin and Smith (1994) also point to the significant role that brand portfolio quality variance plays in consumer evaluations of brand extensions. Brand portfolio quality variance measures the extent to which consumers believe that the products affiliated with a brand vary in quality. Pointing to the fact that quality variance affects the extent to which a brand provides a reliable signal or summary of information about any of

the products affiliated with it, the researchers argue that while in the low variance case, consumers can generalize their brand associations to extensions confidently, in the case of high variance, the brand no longer provides a reliable summary of information. Using two laboratory experiments and a survey, the researchers show that if individuals perceive that products under the same brand have very different levels of quality, then the evaluations toward the new extension of the brand are negatively affected.

Influenced by the study of Dacin and Smith (1994), DelVecchio (2000) studies the role of brand portfolio characteristics on perceived brand reliability. He defines the outcome of brand reliability as the ability of an existing brand name to reduce the risk associated with the purchase of a brand extension. While acknowledging the primacy of perceived fit as an important determinant of consumers' impressions of brand reliability, he shows that the number of products affiliated with the core brand has a positive effect on brand reliability whereas perceived variance in brand quality has a negative effect.

In another study, Boush and Loken (1991) introduce brand breadth as another portfolio characteristic that they believe to affect consumers' evaluations of brand extensions. Brand breadth generally refers to the variability among product types represented in a brand's portfolio; broad brands are associated with a diverse range of products whereas narrow brands with very similar products. Claiming that narrow and broad brands are evaluated differently in case of a new product introduction, Boush and Loken (1991) show that there is a direct positive relationship between the breadth of the parent brand portfolio and consumer evaluations of brand extensions. Similarly, Sheinin and Schmitt (1994) observe that broad brands are perceived to produce more positive brand extensions than narrow brands and show that extremely incongruous extensions are evaluated more positively in case of broad brands compared to narrow brands. Wu

and Yen (2007) also investigate the effects of brand breadth. They find that when a brand extension is perceived as having a high degree of similarity to the parent brand, a narrow brand is viewed in a more positive light than a broad brand, while for low similarity extensions, consumers' evaluations of the extension of the broad brand is more favorable than to that of the narrow brand. Despite these supportive arguments stated, some relatively recent studies (e.g., Grime, Diamantopoulos, and Smith, 2002; Völckner and Sattler, 2007) assert that this direct relationship is insignificant and rather than its direct effect, brand breadth improves consumers' evaluation of brand extensions only through its effect on perceived fit.

In the context of brand portfolio characteristics, the role that previous extensions in a brand's portfolio play on brand extension success is also examined by many researchers (e.g., Keller and Aaker, 1992; Swaminathan, 2003). While evaluating a proposed extension of a parent brand that has already been extended to other products, consumers generally use their knowledge about any of its previous extensions and the success of the previous extensions actually acts as a sign of the success of the subsequent extension. In their study, Keller and Aaker (1992) focus on the effects of sequential introduction of brand extensions and their findings reveal that the effects of intervening extensions on evaluations of a proposed extension depend on the success or failure of the intervening extensions in relation to the perceived quality of the parent brand. In other words, the researchers argue that successful intervening extensions improve evaluations of a proposed extension for a parent brand of average quality, while unsuccessful intervening extensions decrease evaluations of a proposed extension for a high quality parent brand. Similarly, Swaminathan (2003) examines the role of the intervening extensions in influencing trial and repeat purchase of a subsequent brand extension in the context of

sequential brand extensions. The results suggest that a favorable experience with the parent brand and the intervening extension has an impact on purchase behavior of a subsequent brand extension, particularly among those with a lower level of loyalty toward the parent brand and among those who try the intervening extension more than once.

In other study, Dawar and Anderson (1994) point to the importance of the order and the direction of previous brand extensions in the brand portfolio. The two experiments conducted provide evidence for the significant effects of the order and the direction of previous extensions on the perceived coherence of the parent brand and purchase likelihood of the subsequent extension. The first experiment tests the effects of ordered versus non-ordered brand extensions on consumer reactions, while the second experiment tests the effects of directional consistency of multiple extensions on consumer reactions. The results indicate that undertaking extensions in a particular order allows distant extensions to be perceived as coherent and that following a consistent direction in extensions allows for greater coherence and purchase likelihood for the proposed extension.

Even if all these factors concerning the history of previous extensions such as their success/failure, order and direction are shown to be significant in the context of brand extension evaluations, they are extremely complex to measure within the scope of a consumer survey. Therefore, the effects of these factors are not investigated in this study.

Extension's Marketing Context

Advertising

A review of the related literature reveals that advertising strategies play a very significant role in the context of brand extensions (e.g., Boush, 1993; Bridges, Keller, and Sood, 2000; Pryor and Brodie, 1998; Samu and Ducey, 2002). One of the hardest tasks in case of a brand extension is to make consumers aware that the brand is on the market in a new form and thus, many firms create specific advertising budgets for their extensions rather than funding them out of the brand's regular advertising budget (Nijssen, 1999). It is generally believed that extensions that are well supported in terms of advertising, especially during the introduction phase, are more likely to be successful than extensions that have less support (Reddy, Holak, and Bhat, 1994). Recently, it is also demonstrated that favoring the introduction of brand extensions through adequate advertising constitutes an efficient way of protecting parent brand image (Martinez, Montaner, and Pina, 2009).

As one of the earliest studies conducted in this context, Boush (1993) investigates the role of advertising in brand extension introductions and how it affects fit judgments between a parent brand and its extension. He concludes that a brand extension is evaluated more favorably and judged similar to the parent brand if the advertising slogan primes attributes that the extension shares with the parent brand. Later, Pryor and Brodie (1998) replicate Boush's study (1993) and find similar results. In a parallel context, Bridges, Keller, and Sood (2000) demonstrate that by priming specific brand attributes and making them salient, advertising can establish explanatory links between the parent brand and the extension and hence, enhance perceived fit.

Questioning the widely accepted view that incongruent extensions are doomed to failure, Lane (2000) hypothesizes that with proper advertising content and repeated exposure to advertising, even incongruent extensions can be successful in the marketplace. Her analysis reveals that advertising message repetition induces generalization and results in increased favorability of brand extension judgments, particularly if the brand associations evoked by the advertising content offers a satisfactory basis for consumers on how the parent brand links positively with the brand extension. Like Lane (2000), Klink and Smith (2001) also think that receptivity to a proposed extension can increase over time with repeated advertising exposures. The results of their study show that repeated advertising exposures allow consumers a greater opportunity to find shared attributes between the brand extension and its parent brand and hence, consumers more readily assimilate the brand extension with their perceptions of the parent brands.

All these findings challenge the previous view that consumers' initial perceptions of fit are immovable and point to the important role that advertising strategy can play in guiding consumers' evaluations of brand extensions.

Pricing

When evaluating a new product, consumers mostly rely on its price as an additional cue for its quality. Even if pricing is a research issue that is widely studied in the marketing literature, its significance as it relates to brand extension strategies is an area that is mostly overlooked. However, two key studies need to be mentioned as exceptions that specifically acknowledge the potential role pricing has on brand extension evaluations.

One of these studies is conducted by Taylor and Bearden (2002) and the other one is conducted by Jun, MacInnis, and Park (2005).

In their study, Taylor and Bearden (2002) examine whether the actual price of the brand extension affects judgments of the brand extension's quality, perceived value and purchase intentions when the parent and extension categories are similar versus dissimilar. The findings reveal that high price enhances perceived quality of dissimilar extensions but not of similar extensions and the negative effects of price on perceived value and purchase intentions are larger for similar extensions than for dissimilar extensions. Thus, the researchers argue that a high price introductory strategy used to suggest a high quality product would likely to be more effective for dissimilar extensions than similar extensions.

Building on the study by Taylor and Bearden (2002), Jun, MacInnis, and Park (2005) further investigate the effect of several price related variables on consumers' judgments of brand extensions. They find that consumers' price expectations of a brand extension are affected by the price of the parent brand (i.e., a brand-specific price factor), the relative price of the parent category in relation to the extension category (i.e., a category-specific price factor) and the heterogeneity of prices in the extension category.

Distribution

In the extension's marketing context, distribution support that the extension receives may also play a significant role. However, there has been limited research in this area. In one of the few studies, Nijssen (1999) discusses the power of retailers and claim that the more

power retailers have compared to the firm introducing the extension, the greater the negative influence will be on its success. Similarly, pointing to the decisive role retailers have, Völckner and Sattler (2006) argue that a brand extension will be more successful if the retailer acceptance/support is high. In his study, Smith (1992) also argues that the distribution intensity of an extension increases its likelihood of success.

Firm Characteristics

Corporate Image

Corporate image (also known as organizational or institutional image) embraces the different perceptions that stakeholders or interest groups have of an organization (Barich and Kotler, 1991). Research in this area is vital since corporate image is a valuable asset that firms need to manage. A favorable corporate image helps firms not only boost their sales through increased consumer satisfaction and loyalty but also attract investors and future employees (Andreassen and Lindestad, 1998; Dowling, 1986; Lemmink, Schuijf, and Streukens, 2003). A favorable corporate image also weakens the negative influence of competitors, enabling firms achieve higher levels of profit (Fombrun and Shanley, 1990).

Despite its significance, how corporate image affects brand extension evaluations has not received much attention until recently. In the few exceptional studies conducted, the effect of corporate image is only implicitly investigated through the potential dimensions of this construct such as credibility, expertise, trustworthiness or reputation. As one of these attempts, Keller and Aaker (1992) operationalize company credibility as the average of the perceived expertise and the perceived trustworthiness of the

firm/brand providing the extension and test its effect on brand extension evaluations. Their analysis not only reveals a significant association between company credibility and brand extension acceptance but also shows how perceived company credibility mediates effects of intervening extensions on evaluations of a proposed extension. In support of Keller and Aaker (1992), McWilliam (1993) also demonstrates that consumers are willing to try brand extensions, as long as the brands are highly trusted and regarded. Similarly, Reast (2005) conducts a research on real and fictitious brands within low involvement products and services categories and finds that brands with higher trust ratings tended to have significantly higher brand extension ratings relative to same category lower trust rated rivals.

Recently, however, some researchers (e.g., De Ruyter and Wetzels, 2000; Martinez and Pina, 2005; Pina, Martinez, De Chernatony, and Drury, 2006) have started to focus on the critical role corporate image plays on brand extension success. For example, advancing innovativeness as an essential image characteristic in terms of marketing effectiveness, De Ruyter and Wetzels (2000) examine the role of corporate image (whether pioneer or innovative late mover) in service brand extensions. The results of their experimental study show that consumers evaluate service extensions by providers with an innovative late mover image more favorably than service extensions by companies with a pioneer image in terms of perceived corporate credibility and expected service quality.

Martinez and Pina (2005) also investigate the influence of corporate image on brand extensions and develop a model applied to services sector. Contrary to corporate image construct defined in terms of innovativeness by De Ruyter and Wetzels (2000), Martinez and Pina (2005) claim that its main dimensions are reputation and credibility, elements that are previously considered by Milewicz and Herbig (1994) as determinant for the acceptance

of brand extensions. The findings of the structural equation modeling Martinez and Pina (2005) conduct show that the corporate image affects both the perceived service quality and the perceived fit between the new service and the parent brand, which in turn affects attitudes toward the extension. In another study, Pina, Martinez and their colleagues (2006) again argue that the attitude toward an extension is indirectly affected by the corporate image of the firm introducing the brand extension and find results similar to those of their prior study.

Firm Size

Firm size has long been an important variable of study in the marketing literature. Given their superior resources and management capabilities, large firms are usually at a more advantageous position for better performance compared to their smaller competitors. In the context of extensions, a few attempts investigate the effect of firm size on extension success. Probably the most significant of these attempts is the study conducted by Reddy, Holak, and Bhat (1994) in the context of line extensions. Investigating the determinants of line extension success using data on seventy-five line extensions over a twenty year period, Reddy and his colleagues (1994) conclude that extension firm's size has a positive impact on the line extension's success.

A review of the related literature reveals that the effect of firm size on extension evaluations may vary in terms of consumers' cultural background. For example, Han and Schmitt (1997) find that while U.S. consumers view perceived fit as a more important factor than firm size, Hong Kong consumers view firm size as relevant for low fit

extensions but irrelevant for high fit extensions. Hou (2003) argues that this finding explains why firm size is of little interest among researchers in Western countries.

Even if cultural factors may be a reason why firm size has not received much interest in the academia, a more pronounced reason is actually the fact that firm size is a proxy variable for several other success factors, including corporate image. Thus, this study excludes firm size as a determinant of extension success, as suggested by Völckner and Sattler (2006).

Consumer Characteristics

Consumer Knowledge

One of the most frequently studied consumer characteristics that affect the process of brand extension evaluations is consumer knowledge. Consumer knowledge is made up of two major components, namely familiarity and expertise (Alba and Hutchinson, 1987); familiarity is the number of product-related experiences accumulated by the consumer and expertise is the ability to perform product-related tasks successfully. In the literature, there is some confusion on whether consumer knowledge relates to the product, the brand or both. For example, while Muthukrishnan and Weitz (1991) investigate the role of product knowledge, Broniarczyk and Alba (1994) consider brand knowledge. However, as Grime and his colleagues (2002) claim, there appears to be little distinction made between these two approaches since both use Alba and Hutchinson's (1987) definition of consumer knowledge. Alba and Hutchinson (1987) suggest that consumers high in knowledge (experts) are superior to consumers low in knowledge (novices) in terms of their cognitive

structure, analytic capabilities, ability to make elaborate inferences and memory capabilities and hence, the these two groups differ in terms of decision processes and strategies they employ.

In the brand extension literature, one of the earliest studies that investigate the role of product knowledge in brand extensions evaluations is the one conducted by Muthukrishnan and Weitz (1991). In this study, the researchers suggest that the basis of similarity or fit judgments in a brand extension may not be uniform across all segments of consumers and may vary between experts and novices. They believe that because of their deep, richly intertwined category structure, experts are more likely to identify similarities between the parent brand and the proposed extension than novices are.

There are also other studies testing the effects of consumer knowledge on brand extension evaluations; however, their findings are rather conflicting. For example, Gronhaug, Hem, and Lines (2002) claim that possessing knowledge of a product category implies that the consumer knows more about product alternatives and hence, they can more easily, and with more confidence, evaluate and make choices in that product category compared to others. In other words, the researchers argue that consumers knowledgeable of a product category perceive less uncertainty and thus, they are more likely have a favorable evaluation of an extension. However, their analysis reveals no support for their argument.

In a similar vein, Hansen and Hem (2004) point to the assumed differences between experts and novices in the amount of constantly accessible information and argue that since experts are more likely than novices to identify similarities between parent brands and brand extensions, knowledge of the extension category positively influences the intention to buy the brand extension. Yet, the results reveal no support for

this hypothesis. Despite these unsupportive findings, there are still some studies that either detect a positive effect (e.g., Dacin and Smith, 1994; Herr, Farquhar, and Fazio, 1996) or provide at least partial support (e.g., Dawar, 1996; Hem and Iversen, 2009). Hem and Iversen (2009) believe that the reason for these conflicting findings can partly be explained by the limited number of items used to measure consumer knowledge.

Besides its potential direct effect on extension evaluations, consumer knowledge is also studied as a moderator in the brand extension literature. For example, in their study, Grime, Diamantopolous, and Smith (2002) show that the higher the level of consumer knowledge, the greater the impact of perceived fit on consumer evaluations of an extension. Focusing on consumer familiarity with the extension product as a dimension of consumer knowledge, Völckner and Sattler (2006), contrary to their expectations, also find that high familiarity help consumers identify or create more shared attributes between the extension and the brand schema and as a result, higher levels of familiarity increases the impact of perceived fit on consumers' extension evaluations.

Consumer Innovativeness

Another consumer characteristic that is proposed to affect the process of brand extension evaluations is consumer innovativeness. Inspired by the theory of diffusion, the literature on consumer innovativeness has seen a stream of definitions and research interests (Im, Bayus, and Mason, 2003; Manning, Bearden, and Madden, 1995; Midgley and Dowling, 1978). In his book titled "Diffusion of Innovation", Rogers (2003) defines consumer innovativeness in terms of the degree to which a person is relatively early in adopting an innovation compared to other members of his or her social system, while Steenkamp,

Hofstede, and Wedel (1999) define consumer innovativeness as the predisposition to buy new and different products/services rather than remain with previous choices and consumption patterns. Independent of how it is defined, there is unanimous agreement that innovative consumers are generally early adopters and opinion leaders for new products (Midgley and Dowling, 1978).

Even though the importance of innovativeness has been examined extensively in the other fields of marketing, there was limited research into the effects of consumer innovativeness on brand extension evaluations in the 1980s and 1990s. However, with the study of Klink and Smith (2001), innovativeness has become an issue of importance in the context of brand extensions and its direct and moderating effects have been studied by other researchers (e.g., Hem, De Chernatony, and Iversen, 2003; Völckner and Sattler, 2006; Xie, 2008).

According to Rogers (2003), one of the most salient traits of consumer innovators is the comfort they gain from taking risk. Individuals high in innovativeness are more venturesome and more willing to try new brands (Steenkamp and Baumgartner, 1992). The response differences between highly innovative consumers and less innovative consumers (early and later adopters) reflect, to some extent, their differences in risk-taking propensity. Innovators tend to be less risk averse than other consumers and more willing to try to new products/services. As a result, in the brand extension literature, it is generally argued that innovative consumers show a more positive response to brand extensions because of their willingness to try new products (Hem, De Chernatony, and Iversen, 2003; Völckner and Sattler, 2006).

In addition to the direct effect innovativeness has on brand extension evaluations, the moderating effect it has on the perceived fit and brand extension evaluation relationship

is an issue of concern in the brand extension literature. As the level of perceived fit decreases, perceived risk associated with the extension increases, which in turn has a negative effect on extension evaluations (Smith and Andrews, 1995). However, since innovators are more risk prone and, consequently, more receptive to new ideas and categories associated to the brand, the influence of perceived fit on extension evaluations is lower among innovative consumers, who are more likely to buy extensions unrelated to the current markets (Czellar, 2003; Klink and Smith, 2001). Although Klink and Smith (2001) show that this moderation effect is applicable only for category fit, Martinez and Pina (2009) demonstrate that it is likely to appear in image fit as well.

Other Consumer Characteristics

Besides consumer knowledge and innovativeness, other consumer characteristics also have the potential to influence consumers' evaluations of brand extensions and hence, need to be mentioned. One of these characteristics is age, which is in fact an important moderator of brand extension evaluations. In the brand extension literature, three research articles are found that address the impact of age. First, Zhang and Sood (2002) explore how differently children and adults evaluate brand extensions with respect to the use of deep clues (i.e., category similarity) and surface cues (i.e., brand names). The three experiments conducted show that adults use deep features such as category similarity while children tend to use surface features such as brand names and name characteristics as a basis for their extension evaluations. Since extension name characteristics rather than perceived fit dominate children's extension evaluations, the researchers argue that children

are more accepting of far brand extensions, with brands having greater potential extendibility with younger consumers.

In a similar context, Achenreiner and John (2003) explore the way children use brand names for making consumer judgments to determine the age at which brand loyalty develops. The results suggest that younger children (eight years olds) evaluate both near and far brand extensions almost equally, generally liking all products as long as they carry a familiar and well-liked brand name while older children (twelve to sixteen years olds) are more discriminatory, evaluating near brand extensions more favorably than far brand extensions of well-liked brand names in a manner consistent with the way adults evaluate brand extensions. In his study, Czellar (2003) also argues that age is a moderating factor in brand extension evaluations. He comments on elderly consumers having difficulty with learning and processing new information and thus not rating new extensions as highly as younger consumers.

A review of the literature also reveals that cross-cultural differences exist in consumer perceptions of brand extension fit and extension evaluations. For example, Han and Schmitt (1997) find that in Hong Kong, firm size affects extension evaluations only when perceived fit is low, while in the United States, perceived fit rather than firm size affects extension evaluations. Similarly, in their study, Monga and Roedder-John (2004; 2007) find that due to the cultural differences in their styles of thinking, consumers from Eastern cultures (analytic thinkers) judge brand extension fit differently than consumers from Western cultures (holistic thinkers). As a result, consumers from Eastern cultures perceive higher levels of brand extension fit and evaluate brand extensions more favorably than do consumers from Western cultures and these differences are robust for extensions that range from very low levels of fit to moderate levels of fit with the parent brand.

At this point, it is important to underline that even if cultural differences do not change the fact that the main effects of quality and fit contribute significantly to evaluations of brand extensions, they do influence the relative importance of these factors. Hence, managers of global brands must be aware that the weight given to these underlying drivers is likely to vary among cultures (Bottomley and Holden, 2001). Cross-cultural differences are so significant that they not only influence consumer extension evaluations but also consumer reactions to failures by a brand extension (Buil, Martinez, and De Chernatony, 2009; Ng, 2010)

In the literature, there are also findings that positive mood can enhance consumers' evaluations of brand extensions. For example, Barone, Miniard, and Romeo (2000) examine the role of positive mood on brand extension evaluations and conclude that consumers in a positive mood have more of a tendency to rate extension fit higher and to evaluate extensions more favorably in the case of moderate fit extensions. The researchers believe that this is because a positive mood improves the perception of relatedness between the brand and the extension and as a result, the possibility of categorizing the extension as part of the parent brand category is enhanced. As a follow up to this study, Barone and Miniard (2002) also examine whether positive mood has the same effect on unfavorably evaluated brands and they observe that the effects of positive mood do not extend to brand extensions of unfavorably evaluated brands and are only restricted to positively evaluated brands.

Independent of the categorization processes assumed by Barone, Miniard, and Romeo (2000), it is also possible for mood to influence extension appraisals more directly. According to Yeung and Wyer (2004), people often use the affect they are experiencing as a source of information for their feelings toward that object they are evaluating. In a brand

extension context, consumers' evaluations of a product may not be based on a detailed analysis of the product's features but on the mood they are experiencing at the time at which they encounter the product. Therefore, it is not surprising that consumers in a positive mood (relative to those in a neutral mood) usually provide more favorable evaluations regardless of the extension's similarity to the parent brand (Barone, 2005).

Despite tremendous interest in brand extensions, very limited research addresses whether product involvement plays a role in consumer acceptance of brand extensions and many of the widely referenced studies on brand extensions mostly use product categories that are exclusively low in involvement or exclusively high in involvement. Realizing this gap, Nkwocha, Bao, Johnson, and Brotspies (2005) conduct an experimental study to test the moderating role of product involvement in the context of brand extensions. Utilizing the widely cited Elaboration Likelihood Model proposed by Petty, Cacioppo, and Schumann (1983), the researchers claim that since product involvement provides a situational motivation for consumers to discount the importance of product fit in brand extension evaluations, perceived fit dimensions are used by consumers more in a low product involvement situation than in a high product involvement situation.

Consumer-Brand Relationships

Over the past decade, marketing scholars have developed an extensive body of literature in the field of relationship marketing (e.g., Bendapudi and Berry, 1997; Grönroos, 1997; Morgan and Hunt, 1994; Sheth and Parvatiyar, 1995; 2002). For the most part, this literature has developed in two areas of study that are business-to-business exchanges and consumer services. Recently, given the increasing desire of firms to build relationships with

their consumers, understanding the nature of consumer-brand relationships has become crucial and researchers have started to investigate the relational variables that lie at the heart of consumer-brand relationships (Chaudhuri and Holbrook, 2002; Fournier, 1998).

Brand researchers have developed several conceptualizations of how brands affect consumer behavior. Earlier models - such as Aaker's brand equity model and Keller's consumer-based brand equity model - focus heavily on how consumers perceive and evaluate brands by investigating certain knowledge structures such as brand awareness, image and personality (Aaker, 1991; 1997; Keller, 1993). Research on brand relationships, however, offers a different perspective. It is argued that brands affect consumers not only because of the knowledge systems that consumers carry about brands in their heads but also because they are part of a psycho-social-cultural context (Fournier, 1998). Consumers engage in certain types of relationships with brands, similar to personal and intimate relations they form with other people. This relationship process can generate cognitive benefits as well as positive affect and emotions that result in a bond between the brand and the consumer (Fournier, 1998). Through such relationships developed with brands, consumers not only obtain functional aids to their living, but also seek meaning in various aspects of their lives (Fournier, 1998).

Today, many consumers participate in brand communities, so-called "subcultures of consumption" (Schouten and McAlexander, 1995). Brand community is a concept recently introduced into the marketing literature. Muniz and O'Guinn (2001, p. 423) define brand community as a "specialized, non-geographically bound community, based on a structured set of social relationships among users of a brand." They claim that the social bonds built through brand consumption may have implications for both brand equity and brand loyalty. Similarly, McAlexander, Schouten, and Koenig (2002) observe that brand

communities can situate the consumer in a complex web of relationships that develop synergistically, strengthening interpersonal ties and enhancing appreciation for the brand.

Another concept currently introduced is lovemarks that is put forward by Kevin Roberts (2005), CEO of Saatchi & Saatchi. According to Roberts, the great brand journey is ending and it is time to find a new concept with greater emotional potency. Just as products evolved to carry trademarks, and trademarks evolved into brands, now it is time for brands to evolve into lovemarks, which are the next evolution in branding. Lovemarks are about building and strengthening emotional bonds between brands and consumers, they are super-evolved brands that maximize their connection with consumers by creating strong emotional bonds. Creating or maintaining such strong emotional bonds of course have significant benefits. As Pawle and Cooper (2006, p. 39) state, "these bonds not only reinvigorate loyalty and create advocacy but also transform the competitive context and place lovemark brands in a category-of-one."

As brand relationships have grown to be an issue of major concern in the academia, conceptualizing consumer-brand relationships has become equally important. A major advance in this area is represented by the work of Fournier (1994; 1998) who uses the metaphor of interpersonal relationships to study consumer-brand relationships. In her research, a consumer and a brand are conceptualized as being in a dyadic relationship similar to a relationship between two people. Prior to Fournier's work, most of the research on brand building is focused on brand loyalty and brand attitude and while these constructs are useful, they are not as rich as the relationship metaphor in understanding long-term brand associations (Monga, 2002).

The work of Fournier (1994; 1998) shows that it is appropriate to think of consumers as being engaged in relationships with the brands they use. Capitalizing on this

idea, Fournier (1994, p. 124) develops a scale of BRQ, defined as a "consumer based indicator of the strength and depth of the person brand relationship". BRQ is an integrated multi-faceted construct encompassing cognitive, affective, and conative aspects. It measures the brand relationship on seven interrelated dimensions: personal commitment, love, passionate attachment (which is composed of interdependence and passion), intimacy, partner quality, nostalgic connection, and self-concept connection.

Even if brand-consumer relationships generally receive significant emphasis in the marketing literature, the role of these relationships within the context of brand extensions is still under-researched. Even if there are some attempts to study the importance of brand-consumer interaction in this context in the form of "parent brand experience" (Kirmani, Sood, and Bridges, 1999; Völckner and Sattler, 2006), "ownership effect" (Swaminathan, Fox, and Reddy, 2001), "brand loyalty" (Hem and Iversen, 2003), "parent brand conviction" (Völckner and Sattler, 2006), "brand-elicited affect" (Yeung and Wyer, 2005) or "emotional attachment" (Fedorikhin, Park, and Thomson, 2008), these are still limited in number.

As one of these attempts, Kirmani and her colleagues (1999) examine how ownership status moderates the effect of stretch direction, brand image and branding strategy and observe that owners have more favorable responses to brand extensions compared to non-owners. In a similar vein, Swaminathan and her colleagues (2001) investigate the effects of experience with the parent brand on consumers' trial and repeat purchase of a brand extension using household scanner data and find that experience with parent brand has a significant impact on extension trial but not on extension repeat purchase. More recently, Völckner and Sattler (2006), building on these prior studies,

show that parent-brand experience and conviction play an important role in driving brand extension success.

As another attempt, Hem and Iversen (2003) explore the effects of different dimensions of brand loyalty toward the parent brand on the brand extensions evaluations and contrary to their expectations, the results of their study show that a high affective relationship toward the parent brand actually reduces brand extension evaluations. Thus, the researchers conclude that it is dangerous to extend a brand too much if the consumers have strong affective relationship toward the parent brand. Czellar (2003) also acknowledges this possibility and argue that the question of whether some strong relationships may lead to a possessive brand attitude whereby the consumer becomes less favorable to changes in the brand offer should be inquired further.

Yeung and Wyer (2005) examine the influence of brand-elicited affect on consumers' evaluations of brand extensions and illustrate how it influences extension evaluations even when the extension and the parent brand are very dissimilar. In their study, the researchers clearly distinguish the affective reactions that a brand elicits from the construct of brand-affect. Arguing that brand-affect is often treated as a global evaluative concept (Aaker and Keller, 1990), Yeung and Wyer (2005) conceptualize brand-elicited affect as subjective feelings that consumers experience when they encounter a brand.

The study of Yeung and Wyer (2005) is an actual challenge for prior research that assumes consumers' extension evaluations are largely affected by perceptions of the extension's fit with the parent brand. In this study, the researchers argue that when consumers encounter a product in the marketplace, they are more likely to base their evaluations of a brand extension on their subjective affective reactions to the parent brand

without considering any specific features that the extension might have. That is, consumers interpret these reactions as an indication of how much they like the extension and form an initial impression of it based on these feelings alone. To this extent, consumers who feel good about a parent brand may evaluate its extension favorably, even if the extension is highly dissimilar to the core.

Yeung and Wyer (2005) also argue that when the fit of an extension to the core brand category is ambiguous, brand elicited affect increases consumers' perceptions that the extension belongs to this category and this perception, in turn, leads them to evaluate the extension more favorably. However, when extensions are unambiguously either very similar or dissimilar to the core, participants' affect has no impact on either their perceptions of similarity or their evaluations of the extension.

In a similar context, Fedorikhin, Park, and Thomson (2008) claim that consumers with elevated levels of attachment to a parent brand are more willing to purchase and pay more for its extensions, forgive the extensions in case of mishaps and recommend the extensions to others even when the fit of those extensions is only moderate. The researchers also argue that consumers with stronger attachment have greater accessibility to rich memories about the parent brand and a pervasive desire to maintain the scope of interactions with the parent brand, allowing their elevated attachment to increase the likelihood of categorizing the brand extension as a member of the parent brand category compared to the less attached consumers. The analyses conducted not only support the direct effect emotional attachment has on consumer responses but also demonstrate that emotional attachment has an impact on the extent to which the extension is categorized as a member of the parent brand family, which partially mediates attachment's effects.

Even if all these studies mentioned above point in some way to the importance of consumer-brand relationships in the context of brand extensions, BRQ as a construct is not directly investigated in this field of research, with the exception of two studies conducted by Park and his colleagues (2001; 2002). In their earlier study, Park and Kim (2001) propose that consumers having a strong relationship with a brand might react to its extensions more positively than those lacking such a relationship and this effect is above and beyond the effect that the perceived quality might have on judgments about the extension. The causal path analyses they conduct indicate that brand relationships directly influence purchase intentions of the extensions regardless of the extension's similarity to the parent brand. In a later study, Park and his colleagues (2002) consider this issue more in depth and employ the BRQ construct developed by Fournier (1994) to examine the strategic importance of the relationship quality of a brand within the context of introducing potential extensions of that brand. Their findings reveal that the strong BRQ subjects accept the proposed extensions more positively than the weak BRQ subjects do and this tendency is true in both evaluation and purchase intention data.

CHAPTER THREE

PROPOSED MODEL AND HYPOTHESES

Based on the theoretical insights discussed in the previous chapter, this chapter proposes a model on brand extension success and generates various hypotheses. In the first section, the proposed model is presented and discussed briefly. In the next section, the hypotheses concerning the direct effects of potential success factors on brand extension success are stated, explicating the important points from the literature as they apply to each hypothesis. Then, the hypothesized relationships between perceived fit and other success factors are discussed in detail. In the final section, the hypothesized attitude- behavior link is considered with specific reference to the Theory of Reasoned Action.

Proposed Model on Brand Extension Success

Based on insights from the brand extension literature, this study proposes a model on brand extension success that is defined in terms of consumers' favorable attitudinal and behavioral responses to brand extensions. The proposed model is presented in Figure 1. As illustrated in the model, brand extension success is a direct function of the perceived fit between the parent brand and the extension, quality of parent brand, brand portfolio breadth and quality variance, quality of the relationship that consumers have with the parent brand (BRQ) and corporate image of the firm that introduces the extension.

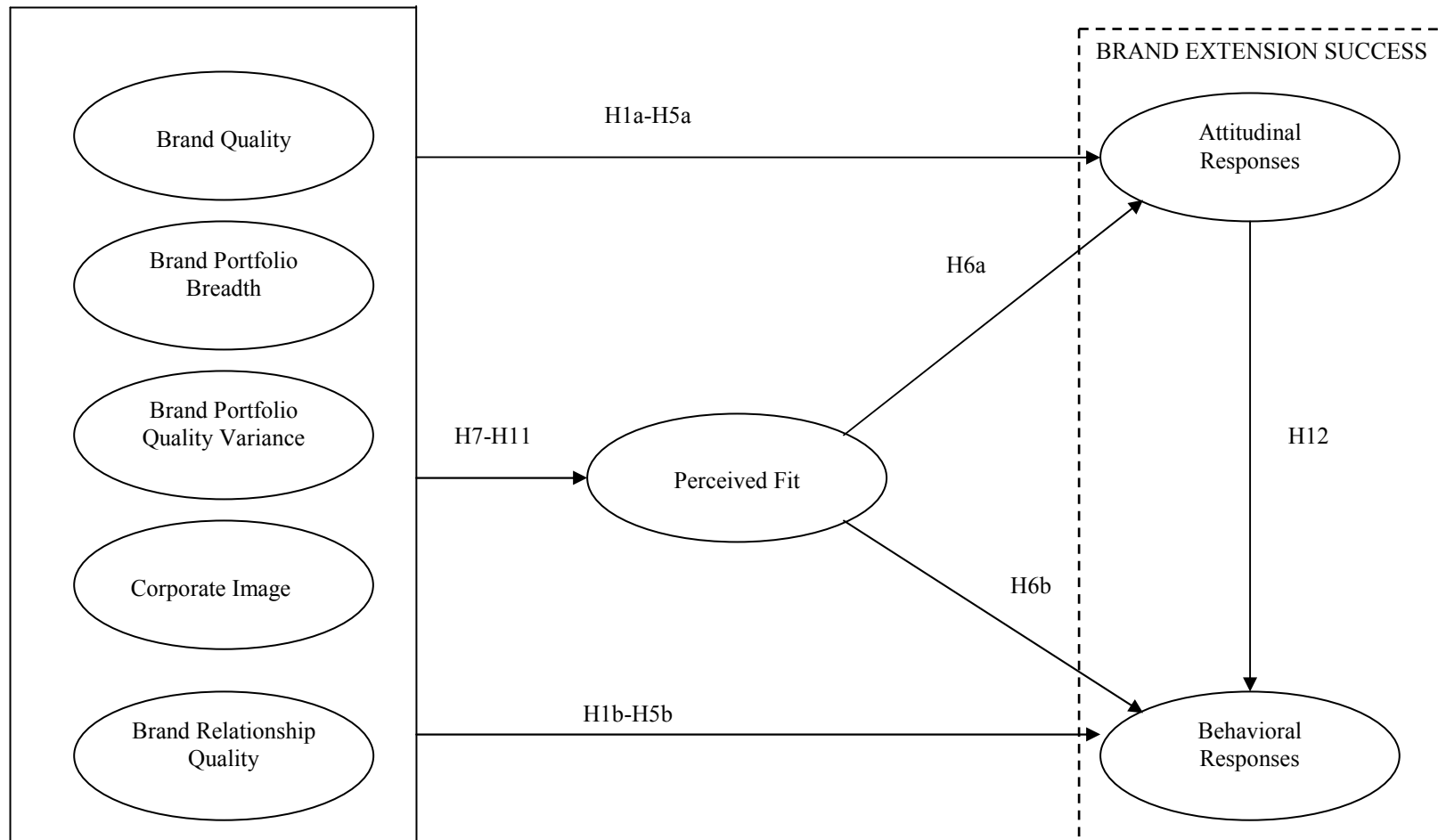


Figure 1. Proposed model on brand extension success

As previously stated, in order to avoid any faulty interpretation of the significance and the relative importance of the success factors under investigation, it is important to consider how perceived fit mediates the relationship between other success factors and brand extension success. Thus, the proposed model also considers the structural relationships between perceived fit and other success factors. Due to practical limitations, hypothetical rather than real extensions are used in the study and thus, all potential factors related to an extension's marketing context are omitted.

Direct Effects of Potential Success Factors on Brand Extension Success

Quality of Brand

While evaluating an extension, consumers usually use the parent brand as a basis on which to infer the characteristics and attributes about the new product, which are unknown to them. This implies that because consumers have not actually tried the extension product to be able to judge its quality, they mostly rely on the known brand name to make inferences about quality. Hence, a higher quality perceived in the parent brand implies a more positive evaluation of the extension, since the market considers that the perceived quality of the parent brand is a guarantee for the quality of the new product.

A review of the brand extension literature reveals that the expected relationship between the quality of the parent brand and consumer evaluations of the brand extension is an issue of major disagreement. While Aaker and Keller (1990) conclude that there is no direct link from perceived quality of the brand to the attitude toward the extension, a series of replications of their study verify the direct influence of perceived brand quality on the

assessment of extensions (e.g., Bottomley and Doyle, 1996; Bottomley and Holden, 2001; Sunde and Brodie, 1993). Other studies also demonstrate a positive and significant relationship between a brand's superior quality and the success of the extension (e.g., Gronhaug, Hem, and Lines, 2002; Park and Kim, 2001; Van Riel, Lemmink, and Ouwersloot, 2001). Based on the supportive evidence provided, it is expected that extension products introduced by a higher quality parent brand will be evaluated more favorably and hence be more successful than extensions introduced by a lower quality parent brand. Thus, it is hypothesized that:

H1a: The quality of the parent brand is positively associated with consumers' favorable attitudinal responses toward brand extensions.

H1b: The quality of the parent brand is positively associated with consumers' favorable behavioral responses toward brand extensions.

Brand Portfolio Characteristics

In the literature, there exist many studies that investigate the effect that portfolio characteristics such as portfolio breadth or portfolio quality variance have on brand extension evaluations (e.g., Boush and Loken, 1991; Dacin and Smith, 1994; DelVecchio, 2000; Sheinin and Schmitt, 1994). Investigating the effect portfolio breadth has brand extension success, Boush and Loken (1991) show that narrow brands and broad brands are evaluated differently for new product stimuli and suggest that there is a direct positive relationship between the portfolio breadth of the parent brand and consumers' evaluations

of the brand extension. In a similar context, Dacin and Smith (1994) conduct two laboratory experiments and the results of their experiments also confirm a positive relationship between the number of products affiliated with a brand and consumers' confidence in and favorability of their evaluations of extension quality. This finding is further supported by other researchers (e.g., DelVecchio, 2000; Sheinin and Schmitt, 1994).

Besides portfolio breadth, the effect that portfolio quality variance has on brand extension evaluations has also been studied. Pointing to the fact that quality variance affects the extent to which a brand provides a reliable signal or summary of information about the products affiliated with it, Dacin and Smith (1994) show that if individuals perceive that products under the same brand have very different levels of quality, then the evaluation toward a new extension of the brand will be negatively affected. Influenced by the study of Dacin and Smith (1994), DelVecchio (2000) also studies the role of brand portfolio characteristics on perceived brand reliability and finds that perceived variance in brand quality is negatively correlated with brand reliability. Based on these studies on the effect of portfolio breadth and portfolio quality variance, it is hypothesized that:

H2a: The breadth of the brand portfolio is positively associated with consumers' favorable attitudinal responses toward brand extensions.

H2b: The breadth of the brand portfolio is positively associated with consumers' favorable behavioral responses toward brand extensions.

H3a: The quality variance within the brand portfolio is negatively associated with consumers' favorable attitudinal responses toward brand extensions.

H3b: The quality variance within the brand portfolio is negatively associated with consumers' favorable behavioral responses toward brand extensions.

Corporate Image

The effect of corporate image on brand extension evaluations is implicitly investigated in prior research through the possible dimensions of this construct such as credibility, expertise, trustworthiness or reputation. Operationalizing "company credibility" as the average of the "perceived expertise" and the "perceived trustworthiness" of the company/brand providing the extension, Keller and Aaker (1992) report a significant association between company credibility and brand extension acceptance. In support of Keller and Aaker (1992), McWilliam (1993) finds that consumers are willing to try brand extensions, as long as the brands are highly trusted and regarded. Similarly, Reast (2005) conducts a research on real and fictitious brands within low involvement products and services categories and finds that brands with higher trust ratings tended to have significantly higher brand extension ratings relative to the same category lower trust rated rivals. Based on these studies, it is hypothesized that:

H4a: The corporate image of the firm introducing the brand extension is positively associated with consumers' favorable attitudinal responses toward brand extensions.

H4b: The corporate image of the firm introducing the brand extension is positively associated with consumers' favorable behavioral responses toward brand extensions.

Brand Relationship Quality (BRQ)

As the literature review suggests, the role of BRQ within the context of brand extensions is a research issue that has been mostly overlooked until recently. However, a limited number of studies acknowledge the significant relationship between consumer-brand relationships and brand extension evaluations. For example, Park and Kim (2001) argue that consumers having a strong relationship with a brand react to its extensions more positively than those lacking such a relationship and this effect is above and beyond the effect that the perceived quality might have on judgments about the extension. In a later study, Park and his colleagues (2002) consider this issue more in depth and show that the strong BRQ subjects accept the proposed extensions more positively than the weak BRQ subjects do. Similarly, Yeung and Wyer (2005) examine the influence of brand-elicited affect on consumers' evaluations of brand extensions and illustrate how it positively influences extension evaluations even when the extension and the parent brand are very dissimilar. Most recently, Fedorikhin, Park, and Thomson (2008) investigate the effect of emotional attachment on consumers' behavioral responses to brand extensions and find that consumers with elevated levels of attachment to a parent brand are more willing to purchase and pay more for its extensions, forgive the extensions in case of mishaps and recommend the extensions to others even when the fit of those extensions is only moderate. Based on these findings, this study hypothesizes that:

H5a: The quality of the relationship that consumers have with the parent brand (BRQ) is positively associated with consumers' favorable attitudinal responses toward brand extensions.

H5b: The quality of the relationship that consumers have with the parent brand (BRQ) is positively associated with consumers' favorable behavioral responses toward brand extensions.

Perceived Fit

Drawing primarily on categorization theory, prior studies propose that the degree to which brand associations are transferred to an extension depends on the level of perceived fit between the parent brand and the extension (e.g., Aaker and Keller, 1990; Boush and Loken, 1991; Morrin, 1999; Smith and Park, 1992). Categorization theory holds that people organize objects or information into categories that enable them to process and understand their environment efficiently (Mervis and Rosch, 1981). To the extent that a person perceives an object to be a member of a category, the components of the category (i.e., affect and beliefs) are transferred to the object. Hence, greater the similarity between the parent brand and the extension, greater is the transfer of positive associations to the extension.

The importance of perceived fit between the parent brand and the extension for the success of the latter has been explored by a number of theoretical and empirical research studies (e.g., Aaker and Keller, 1990; Boush and Loken, 1991; Chakravarti, MacInnis, and Nakamoto, 1990; Park, Milberg, and Lawson, 1991; Smith and Park, 1992). In those

studies, it is argued that favorable consumer evaluations of an extension require the parent brand to have a good fit with the new product. Based on the related literature, one can expect that extension products that have higher perceived fit with the parent brand will be evaluated more favorably and hence be more successful than extensions with low perceived fit with the parent brand. Thus, it is hypothesized that:

H6a: The perceived fit between the parent brand and the extension is positively associated with consumers' favorable attitudinal responses toward brand extensions.

H6b: The perceived fit between the parent brand and the extension is positively associated with consumers' favorable behavioral responses toward brand extensions.

Structural Relationships between Perceived Fit and Other Success Factors

Quality of Brand - Perceived Fit

Though not directly investigated in studies on brand extensions, there exist few examples in other research fields that show how the perceived quality of a brand affects consumers' fit perceptions. For example, in the context of sponsorships, Roy and Cornwell (2003) claim that consumers perceive a higher degree of congruence in the marketing actions of strong brands and their findings confirm that within a product category, sponsors with high brand equity are perceived as more congruent than sponsors with low equity brands. Building on this study, Martinez and Pina (2005) hypothesize that perceived quality of the parent brand may have an influence on perceived fit, but the results of the structural

equation modeling used reveal that perceived parent brand quality is not significantly related to the perceptions of fit, at least in service extensions. However, examining brand extension of online products, Song, Zhang, Xu, and Huang (2010) find a significant positive association between the perceived quality of the parent brand and perceived fit. Thus, this study hypothesizes that:

H7: The quality of the parent brand is positively associated with the perceived fit between the parent brand and the extension.

Breadth of Brand Portfolio - Perceived Fit

Boush and Loken (1991) argue that brand breadth, which is the variability among the product types represented by a brand, can influence the perceptions of fit for a brand extension. Their findings reveal that greater breadth increases the perceived fit of moderately discrepant extensions. Similarly, Sheinin and Schmitt (1994) claim that narrow brands have well defined schemata due to their relatively small product line and thus, a moderately incongruous new product is perceived as more incongruous of a narrow brand than of a broad brand. In his study, Dawar (1996) also discusses how perceptions of portfolio breadth influence fit evaluations of brand extensions and argues that to the extent that greater breadth enhances perceived similarity, then this could lead to an extension being seen as more similar than it might otherwise be.

Some recent studies (e.g., Grime, Diamantopoulos, and Smith, 2002; Völckner and Sattler, 2007) take a more definite stance and argue that rather than its main effect, brand

breadth improves consumers' evaluation of brand extensions only through its effect on perceived fit. Based on these arguments, this study hypothesizes that:

H8: The breadth of the brand portfolio is positively associated with the perceived fit between the parent brand and the extension.

Quality Variance within Brand Portfolio - Perceived Fit

During the extensive literature review conducted, no studies showing how portfolio quality variance affects perception of fit have been found. However, there are studies supporting the role that other portfolio characteristics such as brand breadth (e.g., Boush and Loken, 1991; Sheinin and Schmitt, 1994) or the success of previous extensions (e.g., Keller and Aaker, 1992) have on perceived fit. Thus, it is hypothesized that:

H9: The quality variance within the brand portfolio is negatively associated with the perceived fit between the parent brand and the extension.

Corporate Image - Perceived Fit

In addition to its direct effect, the corporate image of the firm introducing the extension may have an important influence on the perceptions of fit. In their study, Park, Milberg, and Lawson (1991) point out that the perceived fit is higher for prestigious brands than for brands with a lower reputation, because the concepts of prestige are better known and more generalizable than functional associations. Similarly, Rangaswamy, Burke,

and Oliva (1993) claim that strong corporate brands enable consumers to form more associations with challenging extensions and hence improve the perceived fit between the parent brand and the extension.

Recently, the role of corporate image in the context of brand extensions has become an issue of primary concern for some researchers (e.g., Martinez and Pina, 2005; Pina, Martinez, De Chernatony, and Drury, 2006). In the studies conducted, corporate image is found to affect the fit perceptions positively. The researchers claim that this finding is very noteworthy for the business world, since it shows that by communicating a strong corporate image, companies can reduce their fear of launching non-similar extensions. Based on these observations, this study hypothesizes that:

H10: The corporate image of the firm introducing the extension is positively associated with the perceived fit between the parent brand and the extension.

Brand Relationship Quality (BRQ)-Perceived Fit

In their study, Yeung and Wyer (2005) argue that when the fit of an extension to the parent brand category is ambiguous, brand elicited affect increases consumers' perceptions that the extension belongs to this category and this perception, in turn, leads them to evaluate the extension more favorably. However, when extensions are unambiguously either very similar or dissimilar to the core, participants' affect has no impact on either their perceptions of similarity or their evaluations of the extension.

In a similar context, Fedorikhin, Park, and Thomson (2008), investigating the effect of emotional attachment on consumer responses to brand extensions, argue that

emotional attachment has an impact on the extent to which the extension is categorized as a member of the parent brand family, which partially mediates attachment's effects. They state that consumers with stronger attachment will have greater accessibility to rich memories about the parent brand and a pervasive desire to maintain the scope of interactions with the parent brand, allowing the elevated attachment to increase the likelihood of categorizing the brand extension as a member of the parent brand category compared to the less attached consumers. Based on these studies, one can expect that consumers with high BRQ will be comparatively more motivated to categorize the extension as similar. Thus, it is hypothesized that:

H11: The quality of the relationship that the consumer has with the parent brand (BRQ) is positively associated with the perceived fit between the parent brand and the extension.

Attitude- Behavior Link

When assessing the relationship between attitudes and behavior, researchers usually incorporate the theoretical support from the Theory of Reasoned Action (TRA), which is proposed by Fishbein and Ajzen (1975). According to the TRA, behavior is a function of attitude, which reflects a combination of evaluative judgments and feelings toward performing a particular behavior. In other words, if people evaluate the suggested behavior as positive (attitude) and if they think their significant others want them to perform the behavior (subjective norm), this results in a higher intention (motivation) to perform that behavior and they are more likely to do so. The Theory of Planned Behavior (TPB) extends the TRA by adding perceived behavioral control to cover

volitional behaviors for predicting behavioral intention and actual behavior (Ajzen, 1985; 1991). Using either of these two theories, many researchers (e.g., Armitage and Conner, 2001; Kraus, 1995; Sheppard, Hartwick, and Warshaw, 1988) have confirmed that there is a high correlation of attitudes and subjective norms to behavioral intention, and subsequently to behavior.

Since behavior is believed to be a function of attitude, most of the studies in the brand extension literature have investigated consumers' attitudinal and behavioral responses to brand extensions in a joint manner. However, there are still some studies (e.g., Bhat and Reddy, 2001; Lane, 2000) in the literature explicitly showing that the attitudes toward the brand extensions influence the usage/purchase behavior. Most recently, Song, Zhang, Xu, and Huang (2010) test this relationship using structural equation modeling and find that the perceived quality of the extension is positively associated with the usage behavior toward the extension. Based on these arguments, this study hypothesizes that:

H12: Favorable attitudinal responses toward brand extensions are positively associated with favorable behavioral responses toward brand extensions.

In this chapter of the study, a model on brand extension success is proposed and the generated hypotheses are discussed briefly, referring to the important studies from the literature as they apply to each hypothesis. In the next chapter, the major aspects of the research design and methodology utilized in the study are delineated.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

This chapter presents the major aspects of the research design and methodology utilized in the study. First, the research objectives and research design are overviewed and then, the focus group interview and pretests conducted for the selection of stimuli are discussed. Next, the operational definitions of the variables included in the study are presented. Following that, the issues related to questionnaire development, design and administration are detailed. In the final part, the sampling and data analysis methods used are delineated.

Research Objectives

The main objective of this study is to investigate empirically the potential drivers of brand extension success that, in this study, is defined in terms of favorable attitudinal and behavioral responses of consumers toward any brand extension. In the proposed model, both attitudinal responses and behavioral responses are separately hypothesized to be a direct function of the brand quality, brand portfolio breadth, brand portfolio quality variance, BRQ, corporate image of the firm introducing the extension and perceived fit. As previously discussed, the role of consumer-brand relationships within the context of brand extensions is generally overlooked. Thus, an important objective of this study is to

fill this gap by highlighting how the quality of the relationships that consumers have with the parent brand, in other words BRQ, operates in this context.

Moreover, in order to avoid any faulty interpretation of the significance and relative importance of the success factors under research, this study aims to examine the relationships between perceived fit and other success factors and investigate whether perceived fit mediates the relationship between other success factors and brand extension success or not. By manipulating the level of perceived fit, the study also aims to explore whether the significance and the relative importance of each success factor change in the context of products with varying degrees of fit.

The research questions are listed as follows:

1. What are the potential drivers of brand extension success? Do they have a direct effect on brand extension success?
2. What kind of mediating effect, if any, does perceived fit have on the relationship between other success factors and brand extension success?
3. How do parent brand characteristics such as brand quality, brand portfolio breadth and brand portfolio quality variance and corporate image affect perceived fit?
4. What is the role of BRQ in the context of brand extensions? Does BRQ directly affect brand extension success or indirectly through its effect on perceived fit?
5. What is the significance and relative importance of each success factor for brand extension success?
6. Do the significance and the relative importance of a success factor change in the context of products with varying degrees of fit?

Research Design

This study is descriptive as it is concerned with determining the relationships between success factors and brand extension success (Churchill and Iacobucci, 2010). A cross-sectional design, which provides a snapshot of the relationship at a single point in time, is used. A survey research is considered appropriate because of the advantages it provides in the collection of perceptual data from large populations, the ability to quantify and apply survey data to structural equation modeling and the opportunity to use measures modified from previous survey research (Kerlinger and Lee, 2000).

Most studies in the brand extension literature generally use experiments with hypothetical brands in order to control extraneous factors. Even if such highly controlled lab experiments can provide valuable insights from theoretical perspectives, surveys are still preferred in some studies as in this one since they can actually enhance the external validity of study results from managerial perspectives (Swaminathan, Fox, and Reddy, 2001; Winer, 1999).

Selection of Stimuli

Focus Group Interview

Focus group interviews are highly used in the brand extension literature as an exploratory research technique that provides supplementary and confirmatory evidence in the analyses that follow. The advantages of focus group interviews are that they cover a maximum range of relevant topics, provide data that are as specific as possible, foster

interaction that explores the participants' feelings in some depth that would be less accessible otherwise, and take into account the personal context that participants use in generating their response to the topic (Morgan, 1997).

The purpose of the focus group interview conducted in this study is to identify the relevant product category, parent brands, and possible brand extension products to be used in the survey. At this point, it is very important to identify a product category that is well known and emotionally significant to respondents. It is also equally important that the parent brands to be selected are strongly associated with this product category.

Eight PhD students from the Department of Management of Boğaziçi University participated in the focus group interview. The focus group interview was semi-structured. In other words, the moderator had general guidelines with regard to what questions to ask, but was free to respond to and build upon respondents' answers. The questions discussed in the focus group interview are as follows:

- What are three to six important and relevant products in your life?
- Which of these products are more special for you?
- With which products do you feel as if you have a relationship? /Which products are emotionally significant to you?
- What are the brands that are closely related to these product categories and that you like very much?
- Think of the brands identified. Assuming that these brands are to be extended into new products, what are possible highly similar/moderately similar/highly dissimilar brand extensions?

The moderator was instructed to explain the terms “highly similar/moderately similar/highly dissimilar brand extensions” as well as to answer all questions that the respondents might have concerning the focus group interview. The interview took approximately one and a half hours.

The focus group interview reveals that the following product categories are particularly well- known and emotionally significant to respondents: computer/laptop, television, cell phone, automobile, white goods (e.g., refrigerator, dishwasher and washing machine) and clothing. For these product categories, respondents name various brands as being closely associated with the respective product category and as being well liked. Finally, respondents discuss possible highly similar/moderately similar/highly dissimilar brand extensions for each brand.

While choosing among various parent brand category alternatives, several constraints need to be considered. First, one has to ensure that the respondents of the main study will be reasonably familiar with and frequently use the product category chosen. In other words, this product category has to be of considerably universal interest among the sample. Second, the product category has to have a sufficient number of key players so that enough reasonably familiar brands can be identified. Third, the category has to be one for which three reasonably interesting and also realistic high, moderate and low fit product extensions with perceived average prices at least at a rough parity level can be proposed. Due to these restrictions, several parent brand categories (e.g., automobiles, cell phones) are eliminated and white goods is chosen as a familiar, frequently used and emotionally significant product category that will serve well as the parent brand product category.

This study includes multiple brands with the intention that the results will not be dependent on a particular brand selected. At that point, an important decision is whether to

use real or fictitious brands. Most of the past studies on brand extensions have been conducted in a lab setting using hypothetical brands and that has created concern about the problem of projecting the results to the real marketing situations (Klink and Smith, 2001). In this study, it is decided that for greatest realism, actual rather than hypothetical brands should be used. The reason for this decision is that in order for different levels of BRQ to be created, respondents need to have some prior experience or knowledge of the brands in question. It is believed that this cannot be effectively created with the use of hypothetical brands.

The parent brands used in this study are selected based upon the criteria that the brands are well-known to the sample among whom the research will be conducted and are generally determined by them to have at least average quality. Brands with below average ratings for overall quality are not included in this study since brand researchers (e.g., Tauber, 1988; Aaker and Keller, 1990) contend that low quality brands are less likely to support extensions. In addition, parent brands with previous extensions are chosen in order to measure the effect of brand portfolio characteristics.

At the end of the selection process, three brands-namely Arçelik, Vestel and Profilo- are chosen for analysis. This decision is further supported by the list called the “Lovemarks of Turkey” in white goods by Millward Brown Turkey (2007) since the brands chosen reflect the nature of the lovemarks continuum provided.

Pretests

Since the BRQ construct is of particular interest in this study, it is important that there will be people among the sample that will have relationships at all levels of quality (low, moderate and high) with the parent brands. For that purpose, a pretest is conducted involving the three brands chosen. A group of thirty graduate students and past graduates of Boğaziçi University is asked to indicate the level of their relationship with these brands utilizing the BRQ scale used in the main study. Although the resulting distributions are not normal, each brand has respondents at all levels.

The respective brand extensions mentioned for the white goods brands in the focus group interview constitute the basis for the second pretest. The objective of this pretest is to identify three hypothetical extensions with different levels of fit that are equally applicable to all the three parent brands. Fit has been defined in many different ways in previous research, including feature-based, usage-based, brand concept-based, and goal-based (Martin and Stewart, 2001). In line with its predominant use in the literature, for this pretest, it is operationalized as product category similarity.

The extension products that are already produced by any of three brands selected are eliminated and the remaining extensions are subject to the pretest. For the pretest, a group of seventy-five graduate students and past graduates of Boğaziçi University is given a scenario stating that a well-known white goods brand like those in Turkey (but no mention of any specific brand name) is planning to produce new products. Thinking of the well-know white goods brands in Turkey, the respondents are asked to provide similarity ratings on seven-point scales (ranging from 1= “very dissimilar” to 7= “very similar”) for these brand neutral potential extension products.

In addition to providing sufficient heterogeneity on similarity, the three extensions have to be relevant and logically connected to the parent brand. The extensions also have to be relevant to the sample of the study. In other words, the extensions need to be products that the particular sample will potentially have the interest and ability to purchase. The price levels also need to be relatively equal between the high, moderate and low fit extension products.

Thus, the proposed extension products are screened by eight consumer respondents and two marketing academics from Boğaziçi University. Three extension products are selected as equally applicable to all three brands. These products are automobile cooler fridge (high fit with mean =4.70), digital sphygmomanometer (moderate fit with mean=3.17) and wristwatch (low fit with mean= 1.45). In the literature, extensions with average similarity ratings of 5.0 or higher are considered as similar, and extensions with average similarity ratings of 2.5 or lower are considered as dissimilar to the parent brand (e.g., Keller and Aaker, 1992; Smith and Park, 1992). The mean similarity ratings for the selected extension products roughly correspond to the means suggested by the literature.

After the selection of extension products to be used, the group of respondents used in this pretest is once again contacted and asked to indicate what they think is the standard average price that people might be expected to pay for each of these extension products. This information is used to control the perceived price differentials between the high, moderate and low fit extension products. The results show that perceived price levels are not perfectly but relatively equal.

Operationalization of the Variables

In the literature, unidimensional single-item scales are criticized for their low reliability and inability to capture the latent constructs (Churchill, 1979). In addition, for statistical approaches such as structural equation modeling, the use of a minimum of three items per construct is generally recommended (Kline, 2005). Thus, this study uses multi-item scales to measure the variables whenever applicable.

The variables in the proposed model are measured using self-report measures of the respondents' perceptions. The respondents are asked to indicate either the extent to which they agree or disagree with each statement or their position on semantic differential scales for each statement. All the variables are measured through six-point Likert scales or semantic differential scales, except the demographics. The use of an even point scale is preferred to eliminate bias toward neutral opinions.

All variables used closely coincide with those used in previous studies in order to build upon prior research and to avoid unnecessary redundancy (Netemeyer, Bearden, and Sharma, 2003). Several criteria are employed in the selection of these measures. First, scales that have been shown to have problems with unidimensionality are not used, as this is a necessary requirement for proper measurement (Hattie, 1985). Second, a preference is shown for scales that have achieved high internal consistency as shown by a coefficient alpha of at least .70, the recommended benchmark (Nunnally and Bernstein, 1994). Thirdly, scales that have previously performed well with regard to tests of validity, such as face, construct, convergent, discriminant, predictive, and nomological validity, are favored. Lastly, scales that are short and simple are preferred to ease their understanding and reliability (Churchill, 1979; Churchill and Peter, 1984).

This section covers the multi-item measures for success factors and extension success. Tables 2-9 show the statements utilized for each scale and the previous works on which they are based.

Brand Quality

Quality of the parent brand is measured by asking respondents to rate the level of quality they associate with the parent brand name. A five-item scale based on the studies of Dodds, Monroe, and Grewal (1991) and Keller and Aaker (1992) is used and respondents are asked to assess perceived quality on a six-point Likert scale with the end points 1= “strongly disagree” and 6= “strongly agree”.

Table 2. Operationalization of Brand Quality

Statement:	Source:
[Brand name] offers superior products relative to competing brands.	Keller and Aaker (1992)
[Brand name] offers high-quality products.	Keller and Aaker (1992)
The workmanship of the [brand name] products is very high.	Dodds, Monroe, and Grewal (1991)
The [brand name] products are very reliable and durable.	Dodds, Monroe, and Grewal (1991)
The likelihood that this [brand name] product is dependable is very high.	Dodds, Monroe, and Grewal (1991)

Brand Portfolio Breadth and Brand Portfolio Quality Variance

In the literature, four factors related to brand portfolio have been claimed to affect brand extension success. These are the number of products affiliated with the brand, breadth of parent brand portfolio, quality variance among the products in the brand portfolio and

perceived success of previous extensions. Since measuring the success of previous brand extensions is extremely complex within the scope of a consumer survey, this variable is not investigated in this study.

In order to measure these items, six-point scales are used. Even if objective measures of the number products affiliated with any brand are readily available, the measures used in this study capture consumers' perceptions of the number of products associated with each brand they are considering since in evaluating a product, consumers typically draw on their own knowledge and perceptions (DeVecchio, 2000).

In addition, even if Boush and Loken (1991) do not explicitly state, their discussion of brand portfolio breadth can be viewed from two dimensions: the degree of similarity between the product categories in the brand portfolio and the number of these products. If two parent brands have the same number of product categories and if one brand represents more similar product categories than the other, then the former will be conceived as a narrower than the latter. Similarly, if one brand represents more product categories than are represented by another brand, the former will be considered as a broader brand. Based on the study of Boush and Loken (1991), this study defines both the degree of similarity (cohesiveness) between product categories in the brand portfolio and the number of these products as brand portfolio breadth.

In the literature, brand portfolio characteristics are usually manipulated through the choice of parent brands and checked by single-item measures. Thus, multi-item scales designed to measure these brand portfolio characteristics are quite rare. This study uses the brand portfolio breadth scale proposed by Lee (1994). This ten-item scale is generated based on the discussion related to brand portfolio breadth in prior research (e.g., Boush and Loken, 1991; Dacin and Smith, 1994).

Table 3. Operationalization of Brand Portfolio Breadth

Statement:
[Brand name] makes lots of different kinds of products.
[Brand name] means very limited product categories. (R)
[Brand name] represents diverse product categories.
There is only a small number of product categories [brand name] represents. (R)
[Brand name] seems to represent a wide range of product categories.
Product categories represented by [brand name] are highly interrelated to each other. (R)
Product categories represented by [brand name] are conceptually similar to each other. (R)
Technically similar product categories are represented by [brand name]. (R)
Product categories represented by [brand name] complement one another. (R)
Product categories represented by [brand name] are very similar (share many features). (R)
Source: Lee (1994), (R): Reverse-coded item

In order to measure subjects' perceptions of the degree of quality variance among the existing products affiliated with the brand, a four-item scale by DelVecchio (2000) is used. All items are measured using a six-point Likert scale with the end points 1= “strongly disagree” and 6= “strongly agree”. In this section, participants are specially instructed to answer questions about products previously introduced and not the new extension product.

Table 4. Operationalization of Brand Portfolio Quality Variance

Statement:
If I were to buy a [brand name] product, I would feel very certain of the level of quality that I am getting. (R)
The products offered by [brand name] are consistent in terms of their quality. (R)
The products offered by [brand name] provide very predictable levels of quality. (R)
The products offered by [brand name] are very similar to each other in terms of their quality. (R)
Source: DelVecchio (2000), (R): Reverse-coded item

Brand Relationship Quality (BRQ)

To measure BRQ, the seven dimensions (partner quality, love, nostalgic connection, passionate attachment, personal commitment, self-concept connection and intimacy) previously identified in the literature are considered and the measurement items developed by Fournier (1994) are used for generating an initial pool of Likert-type scale items. The respondents are asked to indicate the degree to which they agree or disagree with each of the items along a six-point Likert scale (1= “strongly disagree” and 6= “strongly agree”).

Table 5. Operationalization of Brand Relationship Quality (BRQ)

Item No	Statement	Dimension
1	This brand plays an important role in my life.	Passionate attachment
2	Something would be missing from my life if this brand were not around any longer.	Passionate attachment
3	I feel that this brand and I are really “meant for each other”.	Passionate attachment
4	Every time I use this brand, I am reminded of how much I like and need it.	Passionate attachment
5	I am addicted to this brand in some ways.	Passionate attachment
6	I would be very upset if I could not find the brand when I wanted it.	Passionate attachment
7	There are times when I really long to use this brand again.	Passionate attachment
8	No other brand in the category can quite take the place of this brand.	Passionate attachment
9	I feel like something is missing when I have not used the brand for a while.	Passionate attachment
10	I feel very loyal to this brand.	Personal commitment
11	This brand can count on me to always be there.	Personal commitment
12	I have made a pledge of sorts to stick with this brand.	Personal commitment
13	I will stay with this brand through good times and bad.	Personal commitment
14	I have always been faithful to this brand in spirit.	Personal commitment
15	I am willing to make small sacrifices in order to keep using this brand.	Personal commitment

Table 5. continued

Item No	Statement	Dimension
16	I have a lot of faith in my future with this brand.	Personal commitment
17	The brand is a part of me.	Self-concept connection
18	This brand takes good care of me.	Partner quality
19	This brand treats me like an important and valuable customer.	Partner quality
20	This brand shows a continuing interest in me.	Partner quality
21	This brand has always been good to me.	Partner quality
22	This brand is reliable/ dependable.	Partner quality
23	I really love this brand.	Love
24	I have feelings for this brand that I do not have for many other brands.	Love
25	This brand is my favorite brand for all.	Love
26	The brand says a lot about the kind of person I am or want to be.	Self-concept connection
27	The brand reminds me of who I am.	Self-concept connection
28	The brand's image and my self-image are similar in a lot of ways.	Self-concept connection
29	This brand and I have a lot in common.	Self-concept connection
30	This brand helps me make a statement about what is important to me in life.	Self-concept connection
31	This brand will always remind me of a particular phase of my life.	Nostalgic connection
32	The brand reminds me of things I have done or places I have been.	Nostalgic connection
33	This brand reminds me of what I was like at previous stage of my life.	Nostalgic connection
34	I have at least one fond memory that involves using this brand.	Nostalgic connection
35	Using this brand somehow makes me feel "at home".	Nostalgic connection
36	I know a lot about this brand.	Intimacy
37	I feel as though I really understand this brand.	Intimacy
38	I feel as though I have known this brand forever.	Intimacy
39	I know a lot about the company that makes this brand.	Intimacy

Source: Fournier (1994)

Corporate Image

Corporate image is a multidimensional concept and some authors (e.g., Grönroos, 1988; Lapierre, 1998) claim that its main dimensions are reputation and credibility. These dimensions may be applied to different contexts and are considered by Milewicz and Herbig (1994) as determinants for the acceptance of brand extensions. Thus, in this study, corporate image is measured according to the dimensions of reputation and credibility, using six-point semantic differential scales. There is no agreement on how to measure reputation, so the scale that Weiss, Anderson, and MacInnis (1999) use is chosen as appropriate. As Martinez and Pina (2005) argue, this scale has the advantage of being halfway between very extensive measurements and too concise measurements. There is no generalized scale for assessing credibility either and thus, the items suggested by Keller and Aaker (1992) are used.

Table 6. Operationalization of Corporate Image

Statement: The perceived image of the company is...	Dimension:	Source:
Disregarded vs. regarded	Reputation	Weiss, Anderson, and MacInnis (1999)
Unprofessional vs. professional	Reputation	Weiss, Anderson, and MacInnis (1999)
Unsuccessful vs. successful	Reputation	Weiss, Anderson, and MacInnis (1999)
Unstable vs. stable	Reputation	Weiss, Anderson, and MacInnis (1999)
Not well-established vs. well-established	Reputation	Weiss, Anderson, and MacInnis (1999)
Not at all trustworthy vs. very trustworthy	Credibility	Keller and Aaker (1992)
Not at all dependable vs. very dependable	Credibility	Keller and Aaker (1992)
Not at all concerned about customers vs. very concerned about customers	Credibility	Keller and Aaker (1992)

Perceived Fit

Although it is generally agreed that perceived fit is vitally important, there is little agreement among researchers on its measurement. A review of the literature reveals that perceived fit has been manipulated and measured in a variety of ways. In the earlier studies on brand extensions, there is a strong tendency to use single-item and overall measures of perceived fit (e.g., Boush and Loken, 1991; Boush, 1993; Keller and Aaker, 1992). In this context, the study of Aaker and Keller (1990) is seen as a “state of the art” because of the three sources of similarity features- complementarity, substitutability and transferability- they propose. According to many researchers in this stream of research, this is a significant challenge to the widespread use of single-item measures (Hem and Iversen, 2002).

This study defines perceived fit as respondents’ level of categorization of the proposed extension as part of the parent brand and uses the four item measure by Fedorikhin, Park, and Thomson (2008) together with three items that are highly used in the brand extension literature to measure perceived fit. The respondents are asked to indicate the degree to which they agree or disagree with each of the items along a six-point Likert scale (1= “strongly disagree” and 6= “strongly agree”).

Table 7. Operationalization of Perceived Fit

Statement:	Source:
Given the existing [brand name] products, it would be appropriate for [brand name] to introduce the [extension product].	Keller and Aaker (1992)
Given the existing [brand name] products, it would be logical for [brand name] to introduce the [extension product].	Keller and Aaker (1992)
The [extension product] fits in well (has good fit) with the existing line of the [brand name] products.	Keller and Aaker (1992)
The [extension product] is similar to other products that [brand name] makes.	Fedorikhin , Park, and Thomson (2008)
[Brand name] and the [extension product] go together really well.	Fedorikhin , Park, and Thomson (2008)
The [extension product] is an integral part of the [brand name] brand family.	Fedorikhin , Park, and Thomson (2008)
The [extension product] is a natural extension for [brand name].	Fedorikhin , Park, and Thomson (2008)

Brand Extension Success

Given the increased reliance on brand extensions as a marketing strategy, many studies are conducted to better understand what constitutes a successful brand extension. While a few of these studies use real market data such as market share or stock market value as a measure brand extension success (e.g., Lane and Jacobson, 1995; Reddy, Holak, and Bhat, 1994; Smith and Park, 1992), the more common tendency among researchers is to measure consumers' responses to brand extensions using attitudinal statements (Hem, De Chernatony, and Iversen, 2003). In some of these studies (e.g., Keller and Aaker, 1992; Broniarczyk and Alba, 1994; Muthukrishnan and Weitz, 1991), brand extension success is conceptualized as an overall attitude toward the extensions (such as "overall, I am very positive to the extension product"); in others, it is conceptualized as perceived extension

quality (e.g., Aaker and Keller, 1990; Bottomley and Doyle, 1996; Klink and Smith, 2001).

In most of these studies, customers' purchase intention for the extension – a behavioral response- is also treated as a measure of brand extension success but the possibility of other consumer responses with behavioral components has been mostly overlooked. Recently, few studies (e.g., Fedorikhin, Park, and Thomson, 2008; Völckner and Sattler, 2006) have investigated the influence of success factors on the consumers' behavioral responses to brand extensions such as willingness to search, pay, or spread word-of-mouth.

As previously stated, this study aims to enrich the limited measurement of brand extension success and investigate the effect of various success factors on attitudinal and behavioral components separately. This is so because personal evaluations are not necessarily equivalent to intentions to engage in any behavior. In other words, a person who has very favorable attitude toward an extension may still be unwilling to search the product or spread positive word of mouth.

Attitudinal Responses to Brand Extensions

For attitudinal responses, three items that measure overall attitudes toward brand extensions are used. These items are individually used in previous studies (e.g., Broniarczyk and Alba, 1994; Keller and Aaker, 1992) to measure consumer evaluations of brand extensions but are combined as an overall brand extension evaluation measure in a study by Hem, De Chernatony, and Iversen (2003). This scale is used in this study

and the three items are measured on a six-point semantic differential scale anchored by unfavorable/favorable, dislike/like and one of the worst/one of the best.

Table 8. Operationalization of Attitudinal Responses to Brand Extensions

Statement:

How positive are you to the [extension product]? (1= “very negative” 6= “very positive”)

What attitude do you have toward [extension product]? (1= “certainly dislike” 6= “certainly like”)

What is your overall evaluation of the [extension product] relative to existing brands in the extension category? (1= “one of the worst” 6= “one of the best”)

Source: Hem, De Chernatony, and Iversen (2003)

Behavioral Responses to Brand Extensions

For behavioral responses, purchase intention and word-of-mouth (WOM) intention are investigated based on the study by Fedorikhin, Park, and Thomson (2008). For purchase intention, respondents are asked to indicate, on a six-point scale (not likely to buy/very likely to buy) the extent to which they are willing to purchase each of the proposed product extensions. To measure WOM intention, respondents are asked to indicate the likelihood of recommending the extension, telling good things about the extension and sharing information about the extension and the three items are anchored with 1= “very unlikely” and 6= “very likely”. Respondents are also asked to indicate how willing they are to search for the extension product, as suggested by Völckner and Sattler (2007).

Table 9. Operationalization of Behavioral Responses to Brand Extensions

Statement:	Source:	
How likely are you be to buy the [extension product] the next time you buy ... ? (1= "very unlikely" 6= "very likely")	Völckner and Sattler (2007)	Purchase intention
How willing are you to search the [extension product]? (1= "very unwilling" 6= "very willing")	Völckner and Sattler (2007)	Willingness to search
How likely are you to recommend the [extension product] to someone you know? (1= "very unlikely" 6= "very likely")	Fedorikhin, Park, and Thomson (2008)	Word-of-mouth intention
How likely are you to tell people good things about the [extension product]? (1= "very unlikely" 6= "very likely")	Fedorikhin, Park, and Thomson (2008)	Word- of-mouth intention
How likely are you to share information about the [extension product] with someone you know? (1= "very unlikely" 6= "very likely")	Fedorikhin, Park, and Thomson (2008)	Word- of-mouth intention

Demographic Variables

Demographic variables, including gender, age, marital status, years of marriage if married, number of children if any, number of people at the household, education, current working status and household income are measured using either a categorical format or as open-ended questions. As these variables are not directly related with the theoretical model of interest in this study, the measures and results associated with these variables are not discussed in detail.

Questionnaire Development and Design

A structured and undisguised questionnaire is used in this study. It is undisguised in that the intention of the study is revealed to the respondents and the questions specifically serve to fulfill this clear purpose. Additionally, it is structured meaning that a standard questionnaire is applied to all respondents and it consists of close-ended, fixed- alternative questions, with the exception of some open-ended demographics questions. Fixed- alternative questionnaires are advantageous in the sense that they are simple to administer and analyze. Moreover, respondents have little difficulty while replying, but fixed- alternative questions, especially multiple-choice questions, can be associated with a loss of validity. Respondent may be forced either to respond to a question on which he/she does not have an opinion or to choose an alternative even if it is not her/his real answer (Churchill and Iacobucci, 2010). Since the use of scales can relatively minimize this problem, almost all responses in the questionnaire are in scale format.

The questionnaire is divided into three parts to facilitate completion and to minimize the effects of respondent fatigue and boredom. The items are mostly funnel sequenced from the general to specific, so that the respondents' answers to the more specific items will not influence their responses to the more general questions. In the first part, the respondents answer questions that assess the quality of parent brand, the breadth of products in the brand portfolio and the quality variance among those products, the BRQ that they have with the parent brand and the corporate image of the firm that introduces the extension.

In the second part, the respondents are told that the parent brand (Arçelik, Vestel or Profilo) has decided to launch a new product with the same brand name and they are

successively asked about their beliefs and responses about these three different extension products (automobile cooler fridge, digital sphygmomanometer and wristwatch). For each extension product, data are collected on the respondents' level of perceived fit along with their attitudinal and behavioral responses toward the extension product. To avoid the possibility of the fit assessment's influencing extension evaluations, the fit assessments are taken after the attitudinal and behavioral response questions, as suggested by Yeung and Wyer (2005). In the last section, the respondents are asked to provide some demographics.

Designing the questionnaire is very important since its descriptive power determines the research's validity. Thus, a multi-stage process is employed for this stage. First, a comprehensive review of literature is performed as an aid to obtain conceptual and measurement information about relevant variables in the study and then the selected measurement items is compiled into a draft questionnaire. As the original measures are developed in English, a procedure involving several rounds of translation and back translation is followed to ensure that the measures translated into Turkish are equivalent to the English version.

Before pre-testing, a panel of expert judges is asked to judge the face validity of items in each item pool, as recommended in the scale development literature (DeVellis, 2003; Netemeyer, Bearden, and Sharma, 2003). These judges consist of two professors of marketing who have expertise in consumer behavior and experience in scale development and two doctoral students in marketing. Each judge is asked to comment on the representativeness of each item. During these discussions, it is frequently mentioned that several measures contain items that are quite redundant in that they use similar words or phrasing. While this is favorable in the early stages of scale development, excessive redundancy among the items in a purified measure should be

avoided since such items do not contribute to a measure's construct validity but only lengthens the questionnaire (Boyle, 1991). Overly lengthy questionnaires tend to be burdensome for respondents, an aspect that can lead to increased non-response bias (Dillman, Smyth, and Christian, 2009) as well as acquiescence bias (DeVellis 2003; Netemeyer, Bearden, and Sharma, 2003).

Given these conditions, an effort is made to reduce the number of items in each measure. The wording of items in each measure is reviewed with the expert judges and when multiple items in a single measure use identical or very similar words or phrases, only one of the items is retained. In addition, the items which are deemed by any judge to be unclear (especially when translated into Turkish), wordy or inappropriate are removed from the item pool. The listing of the initial item pools in Appendix A indicates which items are retained and which are eliminated at this step.

The next stage of questionnaire development involves two pre-tests, whose purpose is to test the suitability of the instrument, hence reducing measurement error and increasing the internal validity of the study. For the first pre-test, the questionnaire is administered in a one-to-one interview setting to a convenience sample of twelve graduate students at the Department of Management of Boğaziçi University. As suggested by Dillman, Smyth, and Christian (2009), in this pre-test, the respondents are asked to indicate words or phrases in the questionnaire which they find confusing, to reword statements in their own words and to evaluate the questionnaire regarding its general clarity, appropriateness of the questions, any questions that might need to be excluded and order of the questions. Based on comments and suggestions from the respondents, the questionnaire is improved in terms of clarification of wordings and overall format before the main study.

In the final stage of questionnaire development, another pretest is conducted using the revised questionnaire. Since the primary purpose of this pretest test is to uncover problems unique to the mode of administration and to purify the proposed measures rather than to provide widely generalizable results, a convenience sample of fifty six graduate students and past graduates of Boğaziçi University is selected.

As no major problems concerning the mode of administration are faced, the pretest data are first subjected to exploratory factor analysis to determine the unidimensionality of the constructs. A scale is considered unidimensional when the items of the scale estimate one factor. Once the unidimensionality of a scale is established, reliability tests are conducted to determine the degree to which the scales are free from error and internally consistent. Items are considered for elimination when their corrected item-total correlations (the correlation of each item with the sum of the other items in its category) are less than .50 and/or when the items do not substantially contribute to either coefficient alpha or mean inter-item correlation (Netemeyer, Bearden, and Sharma, 2003). However, before elimination, each item is subjected to qualitative analysis to prevent inadvisable or premature deletion. Qualitative assessment of the items draws upon results of the content validity assessment using the literature reviews and academic expert reviews (Bienstock, Mentzer, and Bird, 1997). If the content validity is judged adequate despite the quantitative results, the item is kept.

The results of the exploratory factor analyses support the unidimensionality and reliability of the constructs. Most of the items used in the pretest are retained for the main study with the exception of a number of items in the BRQ construct. Due to the difficulty of assimilating the items of this construct to the Turkish culture and language,

some of the items are eliminated and some are refined, resulting in twenty-four items to measure the BRQ construct in the main study.

The listing of the initial item pools in Appendix A indicates which items are retained and which are eliminated at this step. The finalized version of the questionnaire employed for this study is provided in Appendix B (English version) and Appendix C (Turkish version).

Questionnaire Administration and Data Collection

The questionnaire administration and data collection stage of this study is funded by Boğaziçi University Research Fund (Project Code: 09C202D). The questionnaires are administered by a professional research company to people living in Istanbul by means of door-to-door interviews. The respondents are contacted in person at their homes or workplaces. The interviewers are highly experienced and they have received an orientation about the purpose of the survey and the contents of the questionnaire in detailed training sessions before going into the field. They obtain respondents' names and telephone numbers for validation purposes. Approximately 5% of the respondents are randomly contacted to confirm that the interviews are completed as planned.

The questionnaires are accompanied by a short cover letter stating that the questionnaire is in conjunction with a study being conducted at the Department of Management of Boğaziçi University and all information provided will be used for academic purposes only and be treated confidentially. Before starting the questionnaire, the interviewers are asked to inform the respondents that the study is designed to examine their responses to a number of new products which may be introduced in the

near future by the brand in the questionnaire and that it is an independent study that has no affiliation with the brand.

The general instructions are given at the beginning of the questionnaire and are repeated verbally when required throughout the questionnaire. To minimize the demand on the respondents and prevent any confounding effects, separate versions of the questionnaire for all three brands are prepared with similar questions and each respondent is asked to complete the questionnaire for one of the three parent brands and its three hypothetical extensions with varying levels of fit.

Repeated measures designs are often associated with order effects. In order to minimize such effects, the order of treatments is randomized independently for each respondent (Churchill and Iacobucci, 2010). The questionnaires are organized in six different orders and are randomly administered to respondents, resulting in a similar number of fully completed questionnaires for each of the brands. The completion of each questionnaire lasted between 30-40 minutes and once the responses to all questions were completed, the respondents were thanked for their participation. The data were collected approximately in five weeks.

Sampling

Student samples have been extensively used in the past to examine brand extension evaluations (e.g., Aaker and Keller, 1990; Boush et al., 1987; Boush and Loken, 1991; Broniarczyk and Alba, 1994; Gürhan-Canlı and Maheswaran, 1998; Sheinin, 2000). The use of student samples is not without criticism and its limitations are widely recognized by most researchers (e.g., Barr and Hit, 1986; Cunningham, Anderson, and Murphy, 1974;

James and Sonner, 2001; Peterson, 2001). Thus, this study covers responses from real customers instead of students acting as respondents.

To be eligible, the respondents have to be at the age of minimum eighteen and the extension products must be relevant to them. As such, it is necessary that they be consumers who are knowledgeable of the brand names that appear on the questionnaire and either they or any of their close family members be in the potential target audience of the brand extension product. Thus, before the questionnaire, the respondents are verbally asked about their familiarity and usage of the stimuli brands and the extension products. Those who are unfamiliar with either the brands or the extension products are thanked and are not included in the study.

There is no consensus within the structural equation modeling literature on the best sample size or sample size calculation approach; however, there are various recommendations for determining an appropriate sample size. For example, Anderson and Gerbing (1988) suggest that sample sizes of 150 or more are adequate for achieving parameter estimates with small standard errors and they offer a converged and proper solution for models. Many scholars, however, recommend using larger sample sizes especially when data are non-normal (Kline, 2005). Generally, larger sample sizes and degrees of freedom yield higher power for structural equation modeling analysis (McQuitty, 2004). Kline (2005) recommends using ten to twenty cases per parameter to estimate and describes two hundred cases as a medium sample size. Jackson (2003) suggests that sample size should be considered in light of the normality of the data, the number of observations to estimate and the estimation method. He also recommends a twenty to one ratio of sample size to parameters to be estimated. Based on these

recommendations, a sample size of five hundred consumers is considered appropriate for this study.

With the assistance of the research company, 750 households in the urban areas of Istanbul are randomly selected. Specifically, a sampling frame listing all the districts in these areas is first compiled. Then, based on this information, a two-stage area sampling is employed to select fifty districts and subsequently, fifteen random households from each district. Within each selected household, an adult member (at the age of minimum eighteen) is asked to participate voluntarily, without receiving any compensation. Nevertheless, of the 748 individuals contacted, 502 have agreed to participate in the study, yielding a response rate of 67.1%. Among the 502 completed responses, 173 are completed for Vestel, 165 for Arçelik and 164 for Profilo. There are no questionnaires with major missing values, so all are retained for data analysis.

At this point, it is important to note that although the response rates are calculated based on the number of responding individuals, the total number of analyzed cases include 1506 brand extension cases since three hypothetical brand extensions for a parent brand are given to each of the respondents ($3 \text{ cases} * 502 \text{ individuals} = 1506 \text{ cases}$).

Data Analysis Method: Structural Equation Modeling

As a statistical methodology with a confirmatory approach to analyze multivariate data, structural equation modeling (SEM) is used frequently in psychology and social sciences research (Byrne, 2010; Hair, Black, Babin, and Anderson, 2010; Schumacker and Lomax, 2004). Since SEM examines the structure of interrelationships expressed in

series of equations, this technique can be thought of as a unique combination of exploratory factor analysis and multiple regression analysis (Hair et al., 2010; Kline, 2005).

In contrast to exploratory factor analysis, SEM demands that the structure of inter-variable relations, grounded in theory and/or empirical findings, be specified a priori. One advantage of SEM is it is capable of controlling measurement error. Moreover, in addition to dealing with observed variables as most statistical tools can, SEM procedures allow the incorporation of latent constructs, which are constructs that cannot be directly measured (Byrne, 2010). Ullman (2001) claims that when the phenomena of interest are complex and multidimensional, SEM is the only analysis that allows complete and simultaneous tests of all the relationships. All these imply that SEM is the proper statistical tool to be used for this study.

SEM is conducted using two sub-models: a measurement model and a structural model, as suggested by Anderson and Gerbing (1988). First, confirmatory factor analysis identifies the measurement model, which shows the relationship between the observed and latent variables and enables a comprehensive assessment of construct validity including convergent and discriminant validity. Second, the structural model estimates casual relationships among the latent variables and tests the hypotheses given the complex relationships among constructs (Byrne, 2010).

To evaluate the overall fit in measurement and structural models, several goodness-of-fit indices are used in combination. Even if Chi-Square (χ^2) is the most common goodness-of-fit index, it may be quite misleading when the model is relatively complex, sample size is large and the assumption of multivariate normality is violated (Byrne, 2010; Kline, 2005). Therefore, many researchers use other fit indices as well

such as Normed χ^2 , Root Mean Square Residual (RMR), Root Mean Square Error of Approximation (RMSEA), Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), Normed Fit Index (NFI) and Tucker-Lewis Index (TLI).

In this chapter of the study, the major aspects of the research design and methodology utilized are delineated. In the next chapter, the analyses of the data collected from the survey are discussed and the results are presented.

CHAPTER FIVE

DATA ANALYSES AND RESULTS

This chapter addresses the analyses of the data collected from the survey and presents their results. It begins with an overview of the respondents' demographic profile, followed by an assessment of non-response bias and preliminary data analyses. Following such, the results of the exploratory factor analyses conducted for each construct are presented. This study proposes two different models for SEM: the basic model and the alternative model. Using the two-stage approach recommended by Anderson and Gerbing (1988), the two measurement models are first confirmed by confirmatory factor analyses and then the structural models are assessed to test the hypotheses of the study. The chapter concludes with an analysis of the control variables used in the study. All descriptive statistics are calculated using SPSS 18.0 and SEM analyses are conducted using AMOS 18.0.

Demographic Profile of the Respondents

The demographic characteristics of gender, age, marital status, years of marriage, number of children, number of people at household, level of education, current working status and monthly household income are included in this study in an effort to provide a demographic profile of the respondents.

Of the survey respondents, 50.6 % of respondents are females and 49.4 % are males. The ages of the respondents vary from eighteen years to eighty years, with an average of thirty-six years. 49.3 % of the respondents are relatively young, with 15.8 % of the respondents reporting ages between eighteen and twenty-four and 33.5 % of the respondents reporting ages between twenty-five and thirty-four. 42.7 % of respondents are middle aged, with 28.5 % being between ages thirty-five and forty-four while 14.2 % being between ages forty-five and fifty-four. 8 % of the respondents are older individuals with an age of minimum fifty-five.

In terms of marital status, 73.3 % of the respondents are married, followed by 24.1 % who are single, 1.2 % who are living together, .8 % who are widowed and .6 % who are divorced. In the questionnaire, the respondents who are married are also asked to indicate the number of years they are married for. Of the 368 respondents who are married, 14.7 % are married for less than five years while 22.3 % are married for more than twenty-five years.

In terms of the number of children, 69.7 % of the respondents have at least one child while 30.3 % do not have any children. Of all the respondents, 42.8 % have one or two children, with 14.3 % having one child and 28.5% having two children. 16.7 % of the respondents have three children, while 4.6 % have four children and 4.2 % have five children. Only seven respondents (1.4 %) have more than six children.

Almost all respondents report that there are at least two people at their household. Only 1 % report that they live alone. 65.4 % of the respondents report that they are two to four people. 18.3 % of the respondents report that they are five people, while 9.8 % report reported that they are six and 3.8 % report that they are seven. Only eight respondents (1.6 %) report that they are more than eight people at the household.

In terms of educational levels, 37.1 % of the respondents have completed primary school, 15.7 % have completed secondary school and 31.5 % have completed high school as their latest degree. 11.8 % of the respondents have a bachelor's degree, while only .8 % of the respondents have a graduate degree. The remaining 3.2 % of the respondents have not attended to a school at all but are literate.

In terms of current working status composition, 29.7 % of the respondents are wage earners while 17.9 % are self-employed. 7.4 % of the respondents are retired, 4.8 % of the respondents are unemployed and 4.4 % are students. In this category, the group of housewives is the largest one with 35.7 % of the respondents.

In the questionnaire, the respondents are also asked about their monthly household income, but more of the respondents have left this question blank than any other question, with twenty-three of the respondents providing no income information. Of 479 respondents who have answered the question, 38.2 % report monthly household income less than 1000 TL, whereas only .8 % report monthly household income in excess of 5000 TL. More than half of the reported monthly household income fall between 1000 TL and 2999 TL, with 39.5 % of the respondents reporting monthly household incomes between 1000 TL and 1999 TL and 17.5 % between 2000 TL and 2999 TL.

In order to assess the representativeness of the sample, the demographic profile of the 502 respondents is compared with the demographic profile for Istanbul (2008-2009) reported by Turkish Statistical Institute (TurkStat). The comparison reveals not an exact but a close match between the two profiles. Therefore, the sample of this study is considered representative of Istanbul. Table 10 provides a summary of the demographic profile of the respondents.

Table 10. Demographic Profile of the Respondents

Characteristics	Frequency	Sample %
Gender		
Male	248	49.4
Female	254	50.6
Age(in years)		
18-24	79	15.8
25-34	167	33.5
35-44	142	28.5
45-54	71	14.2
55-64	30	6.0
65 and over	10	2.0
Marital Status		
Single	121	24.1
Living together	6	1.2
Married	368	73.3
Divorced	3	0.6
Widowed	4	0.8
Years of marriage		
Less than 5 years	54	14.7
5-10 years	86	20.6
11-15 years	67	18.2
16-20 years	55	15.0
21-25 years	34	9.2
More than 25 years	82	22.3
Number of children		
No child	152	30.3
1	72	14.3
2	143	28.5
3	84	16.7
4	23	4.6
5	21	4.2
6	5	1.0
7	2	0.4
Number of people at the household		
1	5	1.0
2	60	12.0
3	106	21.2
4	161	32.2
5	92	18.3
6	49	9.8
7	19	3.8
8 or more	8	1.6
Level of education		
Literate	16	3.2
Primary school	186	37.1
Secondary school	79	15.7
High school	158	31.5
University	59	11.8
Graduate school	4	0.8

Table 10. continued

Characteristics	Frequency	Sample %
Current working status		
Wage earner	149	29.7
Self-employed	90	17.9
Unemployed/job seeker	24	4.8
Housewife	179	35.7
Retired	37	7.4
Student	22	4.4
Cannot work because of old age or disability	1	0.2
Monthly household income		
Less than 1000 TL	183	38.2
1000-1999 TL	189	39.5
2000-2999 TL	84	17.5
3000-3999 TL	9	1.9
4000-4999 TL	10	2.1
More than 5000 TL	4	0.8

Non-Response Bias

It is important to assess non-response bias since it influences the generalizability of the statistical analysis that is performed on those who respond. To evaluate the non-response bias, a popular method is to conduct a wave analysis to examine the profile difference of early and late respondents in the entire sample (Armstrong and Overton, 1977). The assumption underlying this method is that those who respond late are more similar to non-respondents than those who respond early.

Salant and Dillman (1994) suggest that when the response rate of a study is less than 60 %, researchers should examine the possibility of non-response bias. The response rate obtained for this survey is relatively high. Thus, it is believed that non-response bias is minimal in this study.

Preliminary Data Analyses

The data distribution characteristics for the sample data, including means, standard deviations, skewness and kurtosis are reported in Table 11. All items in the study except some of the demographics are metric variables that are measured on six-point Likert or semantic differential type scales. The mean values range from 2.203 to 4.625 with standard deviations ranging from 1.180 to 1.877. Among the seven items with means over 4.5, all have a full range of answers (from one to six) and standard deviations ranging from 1.263 to 1.54. These are considered acceptable levels of range and deviation and therefore, no items are deleted based on these results.

The preliminary data analyses also include an analysis of the presence of outliers, the assumption of normality, linearity, homoscedasticity, multicollinearity and the correlations among the key constructs of the study. Missing values are also discussed in this context. There are two main reasons why these analyses are important. First, most estimation methods for SEM requires certain assumptions about the distributional characteristics of the data. Second, data-related problems makes SEM computer programs fail to yield a logical solution (Kline, 2005). Therefore, before either a raw data file or a matrix summary of the data is created for SEM, the original data is carefully screened. Each of these topics is discussed briefly below.

Table 11. Descriptive Statistics

Construct/ Item		Mean	Standard Deviation	Skewness	Kurtosis
CORPORATE IMAGE					
CI1	Disrespected (disregarded) vs. respected (regarded)	4.418	1.322	-.751	.114
CI2	Unprofessional vs. professional	4.542	1.327	-.905	.266
CI3	Unsuccessful vs. successful	4.554	1.404	-.827	-.103
CI4	Unstable vs. stable	4.474	1.378	-.909	.184
CI5	Not at all trustworthy vs. very trustworthy	4.530	1.365	-.915	.183
CI6	Not at all concerned about customers vs. very concerned about customers	4.458	1.351	-.854	.180
BRAND QUALITY					
PBQ1	[Brand name] offers high-quality products.	4.468	1.348	-.891	.298
PBQ2	[Brand name] offers superior products relative to competing brands.	4.255	1.325	-.658	-.098
PBQ3	The workmanship of the [brand name] products is very high.	4.315	1.333	-.667	-.120
PBQ4	The [brand name] products are very reliable and durable.	4.420	1.345	-.813	.099
BRAND PORTFOLIO BREADTH					
BREADTH1	[Brand name] makes lots of different kinds of products.	4.590	1.280	-.848	.189
BREADTH2	[Brand name] means very limited product categories. (R)	4.048	1.629	-.222	-1.299
BREADTH3	[Brand name] seems to represent a wide range of product categories.	4.625	1.263	-.753	-.181
BREADTH4	Product categories represented by [brand name] complement one another. (R)	2.436	1.180	.764	.110
BREADTH5	Product categories represented by [brand name] are very similar (share many features). (R)	4.530	1.193	-.836	.259
BRAND PORTFOLIO QUALITY VARIANCE					
QUALVAR1	If I were to buy a [brand name] product, I would feel very certain of the level of quality that I am getting. (R)	2.574	1.356	.773	.002
QUALVAR2	The products offered by [brand name] are consistent in terms of their quality. (R)	2.542	1.259	.817	.298
QUALVAR3	The products offered by [brand name] provide very predictable levels of quality. (R)	2.502	1.270	.933	.435

Table 11. continued

Construct	Item	Mean	Standard Deviation	Skewness	Kurtosis
BRAND RELATIONSHIP QUALITY					
BRQ1_1	This brand plays an important role in my life.	3.243	1.737	.065	-1.361
BRQ1_2	Something would be missing from my life if this brand were not around any longer.	2.781	1.629	.329	-1.303
BRQ1_3	Every time I use this brand. I am reminded of how much I like and need it.	2.950	1.686	.252	-1.307
BRQ1_4	I am addicted to this brand in some ways.	2.964	1.694	.324	-1.209
BRQ1_5	There are times when I really long to use this brand again.	2.827	1.658	.309	-1.288
BRQ1_6	I feel very loyal to this brand.	2.966	1.703	.265	-1.291
BRQ1_7	I will stay with this brand through good times and bad.	3.028	1.751	.246	-1.345
BRQ1_8	I have always been faithful to this brand in spirit.	2.904	1.723	.337	-1.272
BRQ1_9	The brand is a part of me.	2.912	1.732	.346	-1.328
BRQ1_10	The brand says a lot about the kind of person I am or want to be.	3.034	1.659	.183	-1.261
BRQ1_11	The brand reminds me of who I am.	2.765	1.718	.408	-1.313
BRQ1_12	The brand's image and my self image are similar in a lot of ways.	2.841	1.701	.378	-1.255
BRQ1_13	This brand will always remind me of a particular phase of my life.	2.948	1.743	.273	-1.343
BRQ1_14	This brand reminds me of what I was like at previous stage of my life.	2.779	1.649	.405	-1.212
BRQ1_15	I have at least one fond memory that involves using this brand.	2.920	1.709	.298	-1.286
BRQ2_1	This brand treats me like an important and valuable customer.	3.335	1.674	-.044	-1.261
BRQ2_2	This brand shows a continuing interest in me.	3.275	1.676	.038	-1.275
BRQ2_3	This brand has always been good to me.	3.384	1.682	-.028	-1.257
BRQ2_4	This brand is reliable/ dependable.	4.036	1.593	-.505	-.852
BRQ2_5	I really love this brand.	3.902	1.627	-.392	-.969
BRQ3_1	I know a lot about this brand.	3.494	1.546	.018	-1.126
BRQ3_2	I feel as though I really understand this brand.	3.548	1.595	-.133	-1.126
BRQ3_3	I feel as though I have known this brand forever.	4.269	1.517	-.693	-.571
BRQ3_4	I know a lot about the company that makes this brand.	3.333	1.633	.121	-1.239

Table 11. continued

Construct	Item	Mean	Standard Deviation	Skewness	Kurtosis
ATTITUDINAL RESPONSES TO BRAND EXTENSIONS					
ATTHIGH1	Overall attitude toward the [extension product]	4.542	1.540	-.944	-.162
ATTMOD1	(very negative versus very positive)	4.450	1.649	-.924	-.374
ATTLOW1		2.821	1.877	.503	-1.332
ATTHIGH2	Overall attitude toward the [extension product]	4.217	1.497	-.733	-.396
ATTMOD2	(certainly dislike versus certainly like)	4.247	1.587	-.763	-.459
ATTLOW2		2.721	1.726	.541	-1.152
ATTHIGH3	Overall evaluation of the [extension product] relative to existing brands in the	4.297	1.376	-.757	-.016
ATTMOD3	extension category	4.271	1.455	-.760	-.198
ATTLOW3		3.002	1.618	.224	-1.181
BEHAVIORAL RESPONSES TO BRAND EXTENSIONS					
BEHHIGH1	Likelihood to buy the [extension product]	3.902	1.623	-.527	-.856
BEHMOD1		3.944	1.659	-.535	-.888
BEHLOW1		2.530	1.670	.715	-.847
BEHHIGH2	Willingness to search the [extension product]	3.797	1.647	-.418	-1.040
BEHMOD2		3.865	1.706	-.429	-1.074
BEHLOW2		2.550	1.660	.704	-.885
BEHHIGH3	Likelihood to recommend the [extension product]	3.930	1.633	-.508	-.901
BEHMOD3		3.876	1.673	-.489	-.974
BEHLOW3		2.548	1.678	.733	-.836
BEHHIGH4	Likelihood to share information about the [extension product]	3.976	1.639	-.530	-.873
BEHMOD4		3.904	1.676	-.469	-1.030
BEHLOW4		2.552	1.651	.673	-.921

Table 11. continued

Construct	Item	Mean	Standard Deviation	Skewness	Kurtosis
PERCEIVED FIT					
FITHIGH1	The [extension product] is similar to other products that [brand name] makes.	4.259	1.348	-.749	-.052
FITMOD1		3.635	1.596	-.331	-1.058
FITLOW1		2.203	1.488	1.002	-.236
FITHIGH2	[Brand name] and the [extension product] go together really well.	4.343	1.391	-.839	.052
FITMOD2		4.036	1.614	-.593	-.748
FITLOW2		2.390	1.584	.811	-.629
FITHIGH3	The [extension product] is an integral part of the [brand name] brand family.	4.241	1.427	-.786	-.203
FITMOD3		3.821	1.638	-.422	-1.062
FITLOW3		2.247	1.529	.971	-.279
FITHIGH4	The [extension product] is a natural extension for [brand name].	4.267	1.373	-.694	-.278
FITMOD4		4.030	1.545	-.604	-.696
FITLOW4		2.649	1.576	.542	-.945
FITHIGH5	The [extension product] fits in well with the existing line of the [brand name]	4.396	1.348	-.817	-.052
FITMOD5	products.	3.783	1.633	-.388	-1.043
FITLOW5		2.265	1.504	.962	-.277
FITHIGH6	Given the existing [brand name] products, it would be appropriate for [brand	4.432	1.450	-.833	-.136
FITMOD6	name] to introduce the [extension product].	4.034	1.634	-.553	-.846
FITLOW6		2.460	1.611	.788	-.672

Notes: (R) means reverse coded.

HIGH means high fit extension product (automobile cooler fridge)

MOD means moderate fit extension product (digital sphygmomanometer)

LOW means low fit extension product (wristwatch)

Outliers

Outliers are extreme or very unusual cases that can bias estimates and significance tests (Yuan, Marshall, and Bentler, 2002). They may affect the results of SEM, even when the remainder of the data is well distributed. The outliers can be remedied by correcting errors by transforming the variables or dropping the cases. Outliers of the sample of the 502 usable responses collected from the survey are tried to be detected by examining standard scores (i.e., Z score) of each metric scale item. According to Hair et al. (2010), for larger sample sizes (eighty or more observations), outliers are defined as cases with standard scores of four or greater. Using this criterion, all metric variables were examined and no outliers are detected.

Mahalanobis distance is also used to detect the existence of potential outliers. Mahalanobis D^2 measures the distance of each observation from the mean center of observations in multidimensional space (Hair et al., 2010). Although there are several cases having relatively large Mahalanobis D^2 values, no isolated cases with unreasonably large values relative to other cases are detected. Overall, no outliers are detected and all 502 observations are retained.

Normality

Normality concerns the distribution of the individual variables. To assess the normality of each metric scale item, both empirical measures of a distribution's shape characteristics and the normal probability plots are obtained. The normal probability

plots provide a visual portrayal of the shape of the distribution. The empirical measures, however, include skewness and kurtosis measures reflecting the shape of a distribution and an overall statistical test for normality – Kolmogorov-Smirnov test. They together provide a guide as to the items with significant deviations from normality.

A non-normal distribution can be easily detected by significant skewness and kurtosis. Skewness is a measure of the lack of symmetry in a distribution. The skewness of a normal distribution is the value of zero (Hair et al., 2010). Negative values for the skewness indicate data that are skewed left and positive values for the skewness indicate data that are skewed right. Kurtosis, on the other hand, is a measure of whether the data are peaked or flat compared to a normal distribution. Values above or below zero denote departures from normality. A positive value of kurtosis indicates a sharp peak near the mean and long tails, and a negative value of kurtosis means a flat top near the mean with short tails (Hair et al., 2010).

A way of testing normality is dividing the unstandardized skewness and kurtosis scores of a variable by its corresponding standard error. This ratio is interpreted as a z test of skewness and kurtosis and ratios greater than 1.96 (for p value less than .05) or ratios greater than 2.58 (for p value less than .01) indicate significant skewness and/or kurtosis in the data. However, in large samples, these tests may be overly sensitive to non-normality. A suggested alternative to the ratio test is to interpret the absolute value of the skewness and kurtosis scores, with absolute values of skewness greater than three indicating the distribution is extremely skewed and absolute values of kurtosis greater than ten suggesting a problem while absolute values greater than twenty indicate a potentially serious problem (Kline, 2005).

As illustrated in Table 11, the skewness scores in this study range from -.944 to 1.002, and the kurtosis scores range from -1.361 to .435. Thus, the skewness and kurtosis scores satisfy the requirement of normality. Also, since large sample sizes tend to diminish the detrimental effect of non-normality (Hair et al., 2010), normality is deemed adequate for this study, given the relatively large sample size of 502.

Linearity and Homoscedasticity

Linearity refers to a constant slope indicating a unit change in the dependent variable for each unit change in the independent variable. Linearity can be checked by inspecting the bivariate scatterplots of the dependent-independent variable relationships or the plots of residuals against each independent variable (Hair et al., 2010). In order to test the assumption of linearity for the data used in this study, a visual inspection of the scatter plots of each pair of variables (i.e., scores from each independent variable's scale item vs. those from each dependent variable's scale item) is conducted. The examination of these scatterplots does not exhibit any serious nonlinear relationships. The partial residual plots between the independent and dependent variables also support linearity of the relationships.

Homoscedasticity refers to dependent variable values being relatively equal for each value of the independent variables and can be checked either graphically by the scatter plot of standardized predicted values and studentized residuals or statistically by the Levene test or the Box's M test (Hair et al., 2010). In this study, Levene's tests of equality of variance are performed to check homoscedasticity. Gender and current working status are used as the categorical variables for the tests. The results of the tests

for each of the categorical variables show no significant threat of heteroscedasticity ($p > .05$).

Correlation Analysis

A correlation analysis is performed on the key constructs of the study in order to assess the strength of the association between them. A separate correlation matrix is provided for each extension product with two different versions: in one version, BRQ is used as a summated score of its three dimensions (basic model) and in the other version, each dimension is postulated as a discrete construct (alternative model).

The correlation matrices of the summated variables in Tables 12-17 provide an initial test of the hypothesized relationships. Most of the relationships of concern are at the hypothesized direction and many of them are supported at the .01 significance level. According to Kline (2005), correlations between constructs should not exceed .85 in order for the constructs to have discriminant validity. However, correlations higher than .85 can sometimes be accepted if the constructs have been theoretically supported to be distinct from each other (Hair et al., 2010). As can be seen, some of the constructs are highly correlated but none of them exceeds the recommend threshold.

Still, the highest correlation of .778 between brand quality and corporate image needs further consideration since these two constructs may be used to capture very similar things in the case of firms with a single brand. Even if in this study all brands used are associated with firms that have a diverse portfolio of brands, it is important to assess discriminant validity between the two constructs before they are put into the overall measurement model.

Table 12. Construct Correlation Matrix for High Fit Extension Product

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ	FIT	ATT	BEH
IMAGE	4.496	1.194	1	0.605	.394	.496	.304	.287	.335	.366
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.326	.282	.388	.394
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.213	.373	.294	.221
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.259	.368	.386	.325
BRQ	3.185	1.326	.551(**)	.571(**)	.461(**)	-.509(**)	1	.187	.171	.279
FIT	4.323	1.245	.536(**)	.531(**)	.611(**)	-.607(**)	.433(**)	1	.598	.394
ATT	4.352	1.346	.579(**)	.623(**)	.542(**)	-.621(**)	.414(**)	.773(**)	1	.581
BEH	3.901	1.525	.605(**)	.628(**)	.470(**)	-.570(**)	.528(**)	.628(**)	.762(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. * * $p < .01$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ= Brand Relationship Quality, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

Table 13. Construct Correlation Matrix for Moderate Fit Extension Product

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ	FIT	ATT	BEH
IMAGE	4.496	1.194	1	.605	.394	.496	.304	.303	.358	.381
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.326	.286	.341	.389
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.213	.220	.274	.227
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.259	.240	.278	.270
BRQ	3.185	1.326	.551(**)	.571(**)	.461(**)	-.509(**)	1	.460	.304	.413
FIT	3.890	1.454	.550(**)	.535(**)	.469(**)	-.490(**)	.678(**)	1	.581	.602
ATT	4.323	1.462	.598(**)	.584(**)	.523(**)	-.527(**)	.551(**)	.762(**)	1	.645
BEH	3.897	1.608	.617(**)	.624(**)	.476(**)	-.520(**)	.643(**)	.776(**)	.803(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. * * $p < .01$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ= Brand Relationship Quality, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

Table 14. Construct Correlation Matrix for Low Fit Extension Product

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ	FIT	ATT	BEH
IMAGE	4.496	1.194	1	.605	.394	.496	.304	.021	.068	.060
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.326	.021	.064	.063
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.213	.013	.059	.031
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.259	.025	.065	.044
BRQ	3.185	1.326	.551(**)	.571(**)	.461(**)	-.509(**)	1	.015	.033	.048
FIT	2.369	1.380	.144(**)	.145(**)	.114(*)	-.157(**)	.121(**)	1	.506	.551
ATT	2.848	1.643	.261(**)	.252(**)	.243(**)	-.254(**)	.181(**)	.711(**)	1	.753
BEH	2.545	1.614	.245(**)	.251(**)	.175(**)	-.210(**)	.218(**)	.742(**)	.868(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. ** $p < .01$. * $p < .05$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ= Brand Relationship Quality, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

Table 15. Construct Correlation Matrix for High Fit Extension Product with Brand Relationship Quality Dimensions

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ1	BRQ2	BRQ3	FIT	ATT	BEH
IMAGE	4.496	1.194	1	.605	.394	.496	.239	.353	.213	.287	.335	.366
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.258	.396	.209	.282	.388	.394
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.143	.271	.232	.373	.294	.221
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.189	.334	.206	.368	.386	.325
BRQ1	2.924	1.456	.489(**)	.508(**)	.378(**)	-.435(**)	1	0.646	0.379	.126	.127	.243
BRQ2	3.586	1.469	.594(**)	.629(**)	.521(**)	-.578(**)	.804(**)	1	0.396	.241	.236	.282
BRQ3	3.661	1.342	.462(**)	.457(**)	.482(**)	-.454(**)	.616(**)	.629(**)	1	.204	.141	.159
FIT	4.323	1.245	.536(**)	.531(**)	.611(**)	-.607(**)	.355(**)	.491(**)	.452(**)	1	.598	.394
ATT	4.352	1.346	.579(**)	.623(**)	.542(**)	-.621(**)	.357(**)	.486(**)	.376(**)	.773(**)	1	.581
BEH	3.901	1.525	.605(**)	.628(**)	.470(**)	-.570(**)	.493(**)	.531(**)	.399(**)	.628(**)	.762(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. ** $p < .01$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ1= Emotional Connection, BRQ2= Partner Quality& Love, BRQ3= Intimacy, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

Table 16. Construct Correlation Matrix for Moderate Fit Extension Product with Brand Relationship Quality Dimensions

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ1	BRQ2	BRQ3	FIT	ATT	BEH
IMAGE	4.496	1.194	1	.605	.394	.496	.239	.353	.213	.303	.358	.381
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.258	.396	.209	.286	.341	.389
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.143	.271	.232	.220	.274	.227
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.189	.334	.206	.240	.278	.270
BRQ1	2.924	1.456	.489(**)	.508(**)	.378(**)	-.435(**)	1	.646	.379	.411	.239	.360
BRQ2	3.586	1.469	.594(**)	.629(**)	.521(**)	-.578(**)	.804(**)	1	0.396	.441	.361	.417
BRQ3	3.661	1.342	.462(**)	.457(**)	.482(**)	-.454(**)	.616(**)	.629(**)	1	.249	.205	.233
FIT	3.890	1.454	.550(**)	.535(**)	.469(**)	-.490(**)	.641(**)	.664(**)	.499(**)	1	.581	.602
ATT	4.323	1.462	.598(**)	.584(**)	.523(**)	-.527(**)	.489(**)	.601(**)	.453(**)	.762(**)	1	.645
BEH	3.897	1.608	.617(**)	.624(**)	.476(**)	-.520(**)	.600(**)	.646(**)	.483(**)	.776(**)	.803(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. ** $p < .01$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ1= Emotional Connection, BRQ2= Partner Quality& Love, BRQ3= Intimacy, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

Table 17. Construct Correlation Matrix for Low Fit Extension Product with Brand Relationship Quality Dimensions

	Mean	Standard Deviation	IMAGE	QUALITY	BREADTH	QUALVAR	BRQ1	BRQ2	BRQ3	FIT	ATT	BEH
IMAGE	4.496	1.194	1	.605	.394	.496	.239	.353	.213	.021	.068	.060
QUALITY	4.365	1.236	.778(**)	1	.434	.618	.258	.396	.209	.021	.064	.063
BREADTH	4.582	1.111	.628(**)	.659(**)	1	.487	.143	.271	.232	.013	.059	.031
QUALVAR	2.539	1.222	-.704(**)	-.786(**)	-.698(**)	1	.189	.334	.206	.025	.065	.044
BRQ1	2.924	1.456	.489(**)	.508(**)	.378(**)	-.435(**)	1	.646	.379	.020	.029	.050
BRQ2	3.586	1.469	.594(**)	.629(**)	.521(**)	-.578(**)	.804(**)	1	.396	.018	.048	.048
BRQ3	3.661	1.342	.462(**)	.457(**)	.482(**)	-.454(**)	.616(**)	.629(**)	1	.002	.008	.006
FIT	2.369	1.380	.144(**)	.145(**)	.114(*)	-.157(**)	.142(**)	.135(**)	-.046	1	.506	.551
ATT	2.848	1.643	.261(**)	.252(**)	.243(**)	-.254(**)	.169(**)	.218(**)	.088(*)	.711(**)	1	.753
BEH	2.545	1.614	.245(**)	.251(**)	.175(**)	-.210(**)	.224(**)	.220(**)	.079	.742(**)	.868(**)	1

Notes: a. Mean is calculated by summing and averaging the corresponding items for each construct.

b. Values below the diagonal are correlation coefficients. Values above the diagonal are squared correlations.

c. ** $p < .01$. * $p < .05$

d. IMAGE= Corporate Image, QUALITY= Brand Quality, BREADTH= Brand Portfolio Breadth, QUALVAR= Brand Portfolio Quality Variance, BRQ1= Emotional Connection, BRQ2= Partner Quality& Love, BRQ3= Intimacy, FIT= Perceived Fit, ATT= Attitudinal Responses to Brand Extensions, BEH= Behavioral Responses to Brand Extensions

According to Hair et al. (2010), discriminant validity means not only that constructs are distinct, but also that each item represents only one latent construct. The existence of cross-loadings implies a discriminant validity problem and jeopardizes the measurement model fit. Therefore, an exploratory factor analysis using principal component analysis with varimax rotation is conducted for the ten items used to measure brand quality and corporate image. The purpose is to examine whether the items load as expected. The results are provided in Table 18.

Table 18. Exploratory Factor Analysis on Brand Quality and Corporate Image

Construct/Item	Factor Loading	Reliability	Variance Explained
Brand Quality and Corporate Image			81 %
Factor One (Corporate Image)		.941	44 %
CI1	.795		
CI2	.853		
CI3	.837		
CI4	.813		
CI5	.762		
CI6	.680		
Factor Two (Brand Quality)		.943	37%
PBQ1	.821		
PBQ2	.844		
PBQ3	.848		
PBQ4	.826		

Note: See Table 11 for the abbreviations.

As shown in Table 18, the exploratory factor analysis provides a two-factor solution and all items are loaded as expected. The cumulative variance explained by the two factors is 81 %, exceeding the recommended criterion of 60 % (Hair et al., 2010). The first factor, composed of six items, accounts for 44 % of variance explained. The six items loading on this factor reflect corporate image. Factor loadings of these six items range from .680 to .853 with five of them exceeding the preferable criterion of .70, and one just below

the .70. Internal reliability for Factor One, based on Cronbach's coefficient alpha, is .941, exceeding the threshold value of .70. Accounting for 37 % of the variance explained, Factor Two includes four items related to brand quality. Factor loadings of these four items range from .821 to .848 with all of them exceeding the preferable criterion of .70. Cronbach's coefficient alpha indicates an internal reliability of .943, exceeding the threshold of .70. The findings of the exploratory factor analysis provide support that brand quality and corporate image possess adequate discriminant validity.

Further reliability and validity checks are conducted for each construct and these will be discussed in the detail in the following sections.

Multicollinearity

SEM assumes that multicollinearity may lead to a nonpositive definite covariance matrix due to high correlations among variables. Since some observed variables have high correlations at the significance level of .01, which indicates that the data may violate the collinearity assumption of SEM, a collinearity diagnostic test using tolerance and variance inflation factor (VIF) is conducted to assess multicollinearity.

Tolerance is defined as $1 - R^2$, where R^2 is the multiple R of a given independent regressed on all other independent variables. If the tolerance value is less than some cutoff value, usually .10, the independent should be dropped from the analysis due to multicollinearity (Hair et al., 2010). VIF is also used in lieu of tolerance, as VIF is simply the reciprocal of tolerance. As a rule of thumb, when the VIF of a variable exceeds ten, then a serious multicollinearity problem is expected (Mason and Perreault, 1991).

Using behavioral responses of consumers to brand extensions as the dependent variable and all the other variables as the independent variables, a multiple regression analysis for each extension product is run and both VIF and tolerance values are examined. In the case of high fit extension product, the VIF values range between 1.991 and 3.995 and the tolerance values range between .250 and .522. The regression models for the moderate and the low fit extension products also give similar results.

Another test of multicollinearity is also conducted using perceived fit as the dependent variable and all the other success factors (brand quality, brand portfolio breadth, brand portfolio quality variance, corporate image and BRQ) as the independent variables. The VIF values for this regression model range between 1.566 and 3.747 and the tolerance values range between .267 and .638 for the high fit extension product. The regression models for the moderate and the low fit extension products again give similar results. Because no VIF value exceeds ten and the tolerance values are greater than .10 in all the cases examined, it is concluded that collinearity among all the explanatory variables are within considerable level.

Missing Data

Missing data is inevitable in survey research. Even if most data sets have some missing data, researchers often fail to indicate the amount of missing data and how missing data are handled in their analyses. There are several common ways of handling missing data and each has its own implications; in other words, using different methods for addressing missing data can result in different findings. Therefore, it is very important to report how missing data are handled.

Of the 502 surveys returned, only forty-four (9 %) have missing responses. One respondent has four missing items, which is the largest number of missing responses in the survey. The number of missing responses for each of the cases containing missing values is indicated in Table 19.

Table 19. Missing Values by Case

Number of Cases	Number of Missing Values
37	1
6	2
1	4

Among the eighty-nine items analyzed, seventy-three (82 %) have no missing values. Of the sixteen items with missing values, ten have one missing value, three have two missing values and one has three missing values. One item of corporate image (CI6) has eleven missing values. The highest number of missing values is observed in the question related to household income, with twenty-three missing cases, as shown in Table 20.

Table 20. Missing Values by Item

Number of Items	Number of Missing Values
10	1
3	2
1	3
1	11
1	23

There are several imputation techniques to deal with missing data such as complete case approach (listwise deletion), all-available approach (pairwise deletion), mean substitution, regression imputation or model-based imputation techniques and each has

its own strengths and weaknesses. However, when the missing data are less than 10 %, any of the imputation techniques can be applied (Hair et al., 2010). AMOS 18.0 uses maximum likelihood (ML) imputation, which several studies show to have the least bias. For example, Byrne (2010) compares the output from an incomplete data model with output from a complete data sample and demonstrates that ML imputation yields very similar chi-square and fit measures despite 25 % data loss in the incomplete data model. Thus, this study uses ML to estimate and replace missing values.

Exploratory Factor Analyses

In order to ensure unidimensionality of the measures used in the study, exploratory factor analyses with principal component extraction and varimax rotation method are conducted on each of the multiple-item scales. Unidimensionality refers to the existence of a single construct explaining a set of items and it is critically important when more than two constructs are involved in the proposed model (Hair et al., 2010). The reliability test assumes unidimensionality of each construct in the model, but does not ensure unidimensionality. Thus, the unidimensionality of measures are usually assessed prior to the reliability tests (Gerbing and Anderson, 1984).

Before conducting an exploratory factor analysis, it is necessary that the correlations among the items in a measure be sufficiently high. Two recommended tests of this interrelatedness are the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which should be greater than .60 and the Bartlett's test of sphericity, which should be significant at the .05 alpha level (Hair et al., 2010). Both of these tests are

performed in all factor analyses conducted and the requisite conditions for both are met in all cases, as shown in Tables 21- 29.

Eigenvalues greater than one and scree plots are mostly used to determine the number of factors for each scale, while strength of factor loadings and face validity are used as criteria in determining the items to be included in each factor. As suggested by Hattie (1985), items with factor loadings of at least .50 or without the problem of high cross-loadings on more than one factor are retained to ensure unidimensionality.

After establishing unidimensionality, reliability of each scale is examined. One form of reliability is test-retest but a more common method that is used in the literature is internal consistency that refers to the consistency among the items in a summated scale (Hair et al., 2010). The underlying principle of internal consistency is that the individual items or indicators of a scale should all measure the same construct and thus be highly intercorrelated (Churchill, 1979). The most widely used measure for internal consistency in cross-sectional studies is Cronbach's coefficient alpha (Netemeyer, Bearden, and Sharma, 2003). Although there is no gold standard about how high reliability coefficients must be to be considered as good, it is suggested that coefficient alpha be at least .70 (Nunnally and Bernstein, 1994).

While coefficient alpha is certainly useful and informative, the use of additional measures of internal consistency is also recommended (Cortina, 1993). One of the most prominent of these is corrected item-total correlation scores that refer to the correlation of each item with the sum of the other items in its category. A general rule of thumb suggests that the corrected item-total correlation be higher than .50 and items be eliminated to enhance reliability if their corrected item-total correlation is less than .50 (Hair et al., 2010). The variance explained percentages are also used to measure internal

consistency. They indicate the amount each item contributes to explaining the specified construct and the values greater than 60 % are considered a sign of good construct reliability (Fornell and Larcker, 1981).

The results of the exploratory factor analyses and reliability analyses are displayed in Tables 21- 29, which include factor loadings, corrected item-total correlations, Cronbach's coefficient alphas and variance explained percentages. For each construct except the BRQ, the analyses reveal one-factor solutions while for the BRQ, the analyses produce a three-factor solution. The eigenvalues for each factor shown in these tables are greater than one, indicating unidimensionality of the constructs. The scree plots produced also support the findings regarding the number of factors extracted for each scale. The Cronbach's coefficient alphas, the corrected item-total correlations and variance explained percentages are all above the suggested cut off points, providing support for the reliability of each scale.

Based on the results of the exploratory factor analyses, the original items in most of the scales are retained for confirmatory factor analysis with the exception of two items (BREADTH 2 and BREADTH4) related to brand portfolio breadth. The results of the exploratory factor analyses are reported below in detail. For each construct, given their unidimensionality and reliability, the item responses are averaged to drive a single evaluative measure when needed.

Brand Quality

The exploratory factor analysis reveals a one-factor solution for parent brand quality with four items. Factor loadings of these four items range from .915 to .936. The variance explained for this variable is 85 %. The internal reliability based on Cronbach's alpha coefficient is .943.

Table 21. Results of the Exploratory Factor Analysis for Brand Quality

Construct/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
Brand Quality			.943	85 %
PBQ1	.915	.849		
PBQ2	.936	.883		
PBQ3	.923	.861		
PBQ4	.922	.859		
The KMO measure of sampling adequacy= .868				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Brand Portfolio Breadth

Taking into consideration the low factor loadings and the significant improvements in the alpha if item deleted scores, two items (BREADTH2 AND BREADTH4) are deleted. The remaining three items load on one factor and their factor loadings range from .866 to .904. The variance explained for this variable is 80 % and its internal reliability based on Cronbach's alpha coefficient is .871.

Table 22. Results of the Exploratory Factor Analysis for Brand Portfolio Breadth

Construct/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
Portfolio Breadth			.871	80 %
BREADTH1	.904	.777		
BREADTH3	.904	.776		
BREADTH5	.866	.709		
The KMO measure of sampling adequacy= .731				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Brand Portfolio Quality Variance

The exploratory factor analysis reveals that brand portfolio quality variance is explained by one factor consisting of three items. Factor loadings of these three items range from .926 to .956. Cronbach's alpha coefficient shows that the internal reliability for the factor is .938 with 89 % of variance explained.

Table 23. Results of the Exploratory Factor Analysis for Brand Portfolio Quality Variance

Construct/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
Portfolio Quality Variance			.938	89 %
QUALVAR1	.926	.838		
QUALVAR2	.954	.893		
QUALVAR3	.951	.886		
The KMO measure of sampling adequacy= .758				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Brand Relationship Quality (BRQ)

Although the BRQ construct developed by Fournier (1994) measures consumer brand relationships on seven interrelated dimensions (personal commitment, love, passionate attachment, intimacy, partner quality, nostalgic connection and self-concept connection), the exploratory factor analysis conducted produces a three-factor solution for the twenty-four items that are retained after the pretest. As illustrated in Table 24, the cumulative variance explained by the three factors is 77 %, exceeding the recommended criterion of 60 % (Hair et al., 2010). The first factor, composed of fifteen items, accounts for 41 % of the variance explained. The items loading on this factor reflect “emotional connection”. The factor loadings of these items range from .653 to .845, all exceeding the criterion of .50 that is considered necessary for practical significance (Hair et al., 2010). The internal reliability of Factor One, based on Cronbach’s coefficient alpha, is .974, exceeding the threshold value of .70. Accounting for 22 % of the variance explained, Factor Two includes five items related to “partner quality & love”. The factor loadings of these five items range from .685 to .784, all exceeding the preferable criterion of .50. Cronbach’s coefficient alpha indicates an internal reliability of .935, exceeding the threshold of .70. The four items loading on Factor Three are related to “intimacy”. The variance explained by the factor is 14 % with factor loadings ranging from .710 to .803. The internal reliability of the factor, based on Cronbach’s coefficient alpha, is .876, exceeding the threshold of .70.

Table 24. Results of the Exploratory Factor Analysis for Brand Relationship Quality

Construct/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
BRQ				77 %
Factor One: Emotional Connection			.974	41 %
BRQ1_1	.678	.759		
BRQ1_2	.845	.849		
BRQ1_3	.795	.850		
BRQ1_4	.739	.844		
BRQ1_5	.791	.881		
BRQ1_6	.683	.860		
BRQ1_7	.653	.842		
BRQ1_8	.701	.863		
BRQ1_9	.737	.881		
BRQ1_10	.748	.811		
BRQ1_11	.835	.835		
BRQ1_12	.800	.845		
BRQ1_13	.727	.795		
BRQ1_14	.804	.826		
BRQ1_15	.690	.777		
Factor Two: Partner Quality & Love			.935	22 %
BRQ2_1	.701	.840		
BRQ2_2	.685	.850		
BRQ2_3	.737	.885		
BRQ2_4	.784	.751		
BRQ2_5	.767	.801		
Factor Three: Intimacy			.876	14 %
BRQ3_1	.803	.815		
BRQ3_2	.710	.783		
BRQ3_3	.737	.637		
BRQ3_4	.802	.702		
The KMO measure of sampling adequacy= .965				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Based on the results of the above analysis, the mean of the items for measuring “emotional connection”, the mean of the items for measuring “partner quality & love”, and the mean of the items for measuring “intimacy” are computed to create three new items – BRQ1, BRQ2 and BRQ3 , respectively. The mean is calculated by averaging the

corresponding items for each factor. An exploratory factor analysis is then performed for the three newly computed items. This analysis produces a one-factor solution consisting of all the three items. As shown in Table 25, the factor loadings of these three items range from .832 to .918, all exceeding the preferable criterion of .50. The variance explained by the factor is 79 %, exceeding the recommended criterion of 60 %. The internal reliability for the factor, based on Cronbach's coefficient alpha, is .867. Thus, this factor is considered acceptable and is retained for further analysis given its adequate values of factor loadings, reliability and variance explained.

Table 25. Results of the Exploratory Factor Analysis for Brand Relationship Quality Dimensions

Variable/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
Brand Relationship Quality			.867	79 %
BRQ1	.913	.821		
BRQ2	.918	.843		
BRQ3	.832	.871		
The KMO measure of sampling adequacy= .703				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Corporate Image

All items load on one factor with 77 % of variance explained. The factor is composed of six items characterizing the respondents' general perception of corporate image. The factor loadings of these six items range from .786 to .917 and the internal reliability according to Cronbach's alpha coefficient is .941.

Table 26. Results of the Exploratory Factor Analysis for Corporate Image

Variable/Item	Factor Loading	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)	Variance Explained
Corporate Image			.941	77 %
CI1	.879	.821		
CI2	.896	.843		
CI3	.917	.871		
CI4	.914	.869		
CI5	.881	.827		
CI6	.786	.707		
The KMO measure of sampling adequacy= .910				
The Barlett's test of sphericity (significance level)= .000				
Note: See Table 11 for the abbreviations.				

Perceived Fit

An exploratory factor analysis is conducted for each extension product separately and in each case, all six items load on one factor. The internal reliability for this factor, based on Cronbach's alpha coefficient, is approximately .95 for all cases. For the high fit case, 80 % of variance is explained by these six items with factor loadings ranging from .812 to .920. For the moderate fit case, 82 % of variance is explained by these six items with factor loadings ranging from .838 to .930 while for the low fit case, 79 % of variance is explained by these six items with factor loadings ranging from .840 to .928.

Table 27. Results of the Exploratory Factor Analysis for Perceived Fit

Items	HIGH FIT		MODERATE FIT		LOW FIT	
	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation
FIT1	.812	.740	.838	.774	.853	.787
FIT2	.910	.867	.914	.872	.921	.882
FIT3	.919	.879	.924	.887	.928	.889
FIT4	.892	.842	.902	.856	.840	.775
FIT5	.920	.882	.930	.896	.916	.873
FIT6	.918	.876	.908	.865	.889	.838
Reliability coefficient (Cronbach's Alpha)= .951 (high fit)						
.955 (moderate fit)						
.948 (low fit)						
% of Variance Explained = 80 % (high fit)						
82 % (moderate fit)						
79 % (low fit)						
The KMO measure of sampling adequacy= .921 (high fit, moderate fit)						
.912 (low fit)						
The Barlett's test of sphericity (significance level)= .000						
Note: See Table 11 for the abbreviations.						

Attitudinal Responses to Brand Extensions

An exploratory factor analysis is conducted for each extension product separately and each analysis produces a one-factor solution for the three-item scale. The internal reliability for this factor, based on Cronbach's alpha coefficient, is .902 (high fit), .926 (moderate fit) and .937 (low fit). For the high fit case, 84 % of variance is explained by these three items with factor loadings ranging from .887 to .937. For the moderate fit case, 87 % of variance is explained by these three items with factor loadings ranging from .909 to .952 while for the low fit case, 89 % of variance is explained by these three items with factor loadings ranging from .908 to .969.

Table 28. Results of the Exploratory Factor Analysis for Attitudinal Responses

Items	HIGH FIT		MODERATE FIT		LOW FIT	
	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation
ATT1	.919	.815	.941	.866	.956	.899
ATT2	.937	.851	.952	.888	.969	.920
ATT3	.887	.755	.909	.803	.908	.803
Reliability coefficient (Cronbach's Alpha)= .902 (high fit)						
.926 (moderate fit)						
.937 (low fit)						
% of Variance Explained = 84 % (high fit)						
87 % (moderate fit)						
89 % (low fit)						
The KMO measure of sampling adequacy= .733 (high fit)						
.744 (moderate fit)						
.727 (low fit)						
The Barlett's test of sphericity (significance level)= .000						
Note: See Table 11 for the abbreviations.						

Behavioral Responses to Brand Extensions

An exploratory factor analysis is conducted for each extension product separately and in each case, all four items load on one factor. The internal reliability for this factor, based on Cronbach's alpha coefficient, is .950 (high fit), .970 (moderate fit) and .979 (low fit). For the high fit case, 87 % of variance is explained by these four items with factor loadings ranging from .916 to .949. For the moderate fit case, 92 % of variance is explained by these four items with factor loadings ranging from .951 to .969 while for the low fit case, 94 % of variance is explained by these four items with factor loadings approximately .97.

Table 29. Results of the Exploratory Factor Analysis for Behavioral Responses

HIGH FIT			MODERATE FIT		LOW FIT	
Items	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation	Factor Loading	Corrected Item-Total Correlation
BEH1	.918	.855	.951	.913	.968	.943
BEH2	.916	.852	.953	.916	.968	.943
BEH3	.946	.906	.969	.943	.974	.952
BEH4	.949	.900	.960	.928	.968	.943
Reliability coefficient (Cronbach's Alpha)=			.950 (high fit)			
			.970 (moderate fit)			
			.979 (low fit)			
% of Variance Explained =			87 % (high fit)			
			92 % (moderate fit)			
			94 % (low fit)			
The KMO measure of sampling adequacy=			.862 (high fit)			
			.859 (moderate fit)			
			.870 (low fit)			
The Barlett's test of sphericity (significance level)=			.000			
Note: See Table 11 for the abbreviations.						

Assessing the Basic Measurement Model Validity

Following Anderson and Gerbing's (1988) two-step approach to SEM, the confirmatory assessment of construct validity for the measurement model is conducted prior to the testing of the structural model. The measurement model delineates relationships between observed indicator variables and the unobserved constructs they are designed to measure, thus specifying the pattern by which each measure loads on a particular construct. Confirmatory factor analysis of the measurement model is considered appropriate when there is theoretical and empirical knowledge of the underlying latent variable structure (Anderson and Gerbing, 1988; Byrne, 2010). Each observed measure is assigned to only one latent variable and all latent variables are allowed to correlate freely. The use of confirmatory factor analysis is highly recommended by scale development experts. This method not only allows for direct testing of the hypothesized factor structure of items but also provides additional evidence of scale reliability and

permits the examination of convergent validity and discriminant validity (Fornell and Larcker, 1981; Hair et al., 2010; Netemeyer, Bearden, and Sharma, 2003).

The results of the exploratory factor analyses are used as the basis for constructing the basic measurement model. The model comprises of thirty-two observed indicators and eight latent constructs. To test the model, a confirmatory factor analysis for all construct measures is conducted using maximum likelihood estimation of the covariance matrix with AMOS 18.0. The statistical results of the confirmatory factor analysis for each extension product are displayed in Tables 30-32, which include the standardized factor loadings, their associated standard errors, t-values, construct reliabilities, percentages of the variance extracted for each construct and the key fit statistics.

As the initial step in examining results of the measurement model, the presence of offending estimates in the data is determined. Offending estimates are coefficients in the measurement model or structural model that exceed theoretical limits. According to Hair and his colleagues (2010), among the most common offending estimates are:

1. Negative or non-significant error variances for any construct (also referred to as Heywood cases)
2. Standardized coefficients exceeding or very close to 1.0
3. Very large standard errors associated with any estimated coefficient.

If any offending estimates are found, only after the elimination of those estimates, the model converges on a proper solution allowing assessment of scale confirmation.

Based on the criteria given above, the presence of offending estimates in this study is investigated and no offending estimates are found.

Table 30. Results of the Basic Measurement Model Fit for High Fit Extension Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.847	.060	19.074***		
CI2	.875	.061	19.625***		
CI3	.913	.064	20.472***		
CI4	.913	.063	20.481***		
CI5	.848	.062	19.207***		
CI6	.723(a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.885	.033	29.887***		
PBQ2	.913	.031	32.305***		
PBQ3	.894	.032	30.780***		
PBQ4	.898 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69 %
BREADTH1	.842	.045	22.519***		
BREADTH3	.835 (a)	----	----		
BREADTH5	.822	.046	20.273***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84 %
QUALVAR1	.873	.031	31.855***		
QUALVAR2	.932	.025	39.633***		
QUALVAR3	.942 (a)	----	----		
BRAND RELATIONSHIP QUALITY				.871	69 %
BRQ1	.854	.076	17.569***		
BRQ2	.937	.084	17.717***		
BRQ3	.691 (a)	----	----		
PERCEIVED FIT				.951	76 %
FITHIGH1	.754	.035	22.220***		
FITHIGH2	.902	.028	33.296***		
FITHIGH3	.914	.028	34.552***		
FITHIGH4	.857	.031	28.910***		
FITHIGH5	.895	.028	32.505***		
FITHIGH6	.914 (a)	----	----		
ATTITUDINAL RESPONSES				.905	76 %
ATTHIGH1	.867 (a)	----	----		
ATTHIGH2	.906	.035	28.756***		
ATTHIGH3	.841	.036	23.901***		
BEHAVIORAL RESPONSES				.950	83 %
BEHHIGH1	.883	.036	27.975***		
BEHHIGH2	.868 (a)	----	----		
BEHHIGH3	.944	.033	32.228***		
BEHHIGH4	.939	.034	31.807***		

χ^2 (436) = 997.294 p-value = 0.000 Normed χ^2 = 2.287

RMR = .070 RMSEA = .051 GFI = .892 CFI = .967 NFI = .943 TLI = .962

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2] / [(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))] / [(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) *** $p < .001$.

(e) See Table 11 for the abbreviations.

Table 31. Results of the Basic Measurement Model Fit for Moderate Fit Extension
Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.846	.060	19.017***		
CI2	.874	.061	19.584***		
CI3	.913	.064	20.453***		
CI4	.914	.063	20.475***		
CI5	.848	.062	19.199***		
CI6	.722 (a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.887	.033	30.082***		
PBQ2	.913	.031	32.310***		
PBQ3	.891	.032	30.597***		
PBQ4	.899 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69%
BREADTH1	.845	.045	22.599***		
BREADTH3	.839	----	----		
BREADTH5	.817 (a)	.046	20.097***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84%
QUALVAR1	.874	.031	31.846***		
QUALVAR2	.933	.025	39.454***		
QUALVAR3	.941 (a)	----	----		
BRAND RELATIONSHIP QUALITY				.871	70%
BRQ1	.862	.076	17.769***		
BRQ2	.930	.080	18.307***		
BRQ3	.692 (a)	----	----		
PERCEIVED FIT				.955	78%
FITMOD1	.788	.037	23.426***		
FITMOD2	.911	.031	32.315***		
FITMOD3	.911	.032	31.941***		
FITMOD4	.880	.031	29.641***		
FITMOD5	.907	.032	31.790***		
FITMOD6	.894 (a)	----	----		
ATTITUDINAL RESPONSES				.930	82%
ATTMOD1	.908 (a)	----	----		
ATTMOD2	.940	.028	36.103***		
ATTMOD3	.859	.030	27.936***		
BEHAVIORAL RESPONSES				.970	89%
BEHMOD1	.932	.025	39.303***		
BEHMOD2	.927 (a)	----	----		
BEHMOD3	.966	.023	44.711***		
BEHMOD4	.951	.024	42.093***		

χ^2 (436) = 1180.768 p-value = 0.000 Normed χ^2 = 2.708

RMR = .074 RMSEA = .058 GFI = .867 CFI = .959 NFI = .937 TLI = .954

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2] / [(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))] / [(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) * * * $p < .001$.

(e) See Table 11 for the abbreviations.

Table 32. Results of the Basic Measurement Model Fit for Low Fit Extension Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.847	.060	19.061***		
CI2	.875	.061	19.621***		
CI3	.913	.064	20.470***		
CI4	.913	.063	20.467***		
CI5	.847	.062	19.179***		
CI6	.723 (a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.886	.033	29.972***		
PBQ2	.914	.031	32.305***		
PBQ3	.892	.032	30.571***		
PBQ4	.898 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69%
BREADTH1	.842	.045	22.523***		
BREADTH3	.839 (a)	----	----		
BREADTH5	.819	.046	20.098***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84%
QUALVAR1	.874	.031	31.858***		
QUALVAR2	.932	.025	39.459***		
QUALVAR3	.941 (a)	----	----		
BRAND RELATIONSHIP QUALITY				.870	69%
BRQ1	.849	.078	17.343***		
BRQ2	.944	.087	17.404***		
BRQ3	.685 (a)	----	----		
PERCEIVED FIT				.949	76%
FITLOW1	.819	.036	23.874***		
FITLOW2	.907	.035	29.644***		
FITLOW3	.918	.034	29.844***		
FITLOW4	.800	.039	23.317***		
FITLOW5	.897	.034	28.498***		
FITLOW6	.870 (a)	----	----		
ATTITUDINAL RESPONSES				.941	84%
ATTLOW1	.946 (a)	----	----		
ATTLOW2	.975	.019	50.982***		
ATTLOW3	.827	.026	28.814***		
BEHAVIORAL RESPONSES				.979	92%
BEHLOW1	.957	.020	51.090***		
BEHLOW2	.955 (a)	----	----		
BEHLOW3	.967	.019	53.595***		
BEHLOW4	.957	.020	50.514***		

χ^2 (436) = 1179.819 p-value = 0.000 Normed χ^2 = 2.706

RMR = .084 RMSEA = .058 GFI = .869 CFI = .959 NFI = .937 TLI = .954

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2]/[(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))]/[(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) *** $p < .001$.

(e) See Table 11 for the abbreviations.

Goodness-of-Fit

As displayed in Table 30, the key fit statistics for high fit extension product are $\chi^2=997.294$ with 436 degrees of freedom ($p = .000$), Normed $\chi^2=2.287$, RMR= .070, RMSEA = .051, GFI = .892, CFI = .967, NFI = .943 and TLI = .962. The χ^2 result indicates that the observed covariance matrix does not match the estimated covariance matrix within the sampling variance. This is expected since the χ^2 appears to be overly sensitive to trivial discrepancies if the sample size is large (Kline, 2005). Therefore, given the problems associated with using the χ^2 as a goodness-of-fit test alone and the effective sample size of 502, other overall model fit statistics are examined closely as well.

Most scholars recommend using several indices or joint fit standards because model fit indices vary in calculation and approach. Using multiple indices can help reduce the risk of discarding a good fitting model or retaining a poor fitting model (Hu and Bentler, 1999; Kline, 2005). Hair et al. (2010) suggest relying on at least one absolute fit index and one incremental fit index, in addition to the χ^2 goodness-of-fit test statistic. This study relies on Normed χ^2 , RMR, RMSEA and GFI as its absolute fit indices and CFI, NFI and TLI as its incremental fit indices.

In terms of the absolute fit indices, the value of the Normed χ^2 is 2.287, which is below the cut-off criterion of three (Hair et al., 2010) and this shows that the model fits the data well. The values for RMR and RMSEA are .070 and .051, respectively and they both fall into the acceptable value range for RMR and RMSEA (i.e., preferable less than .05, but acceptable from .05 to .08). The value for GFI is .892 and this is just below the level of .90, which is generally considered as indicative of good model fit. Like the case

for χ^2 , this may be due to the large number of indicator variables in the model. Even if the sample size is not included in the formula of GFI, this statistic is still indirectly sensitive to sample size due to the effect of sample size on sampling distributions (Hair et al., 2010).

In terms of incremental fit indices, the CFI is .967 and this value clearly exceeds the CFI guideline of .90 for a model of this complexity and sample size (Hair et al., 2010). The other incremental fit indices are also supportive. For example, the NFI is .943 and the TLI is .962. Like the CFI, the NFI and the TLI exceed the fit guideline of .90 (Hair et al., 2010) Thus, the results generally support the basic measurement model for the high fit extension product.

The key fit statistics for the moderate fit and low fit extension products are also supportive of the model. The statistical results of for the moderate and low fit cases are displayed in Table 31 and Table 32, respectively.

Construct Validity

Establishing construct validity of the measurement model is essential in order to confirm the accuracy of measurement. Construct validity assesses the degree to which a scale or a set of measured items actually represents the theoretical latent construct that it is designed to measure (Hair et al., 2010). In assessing construct validity, researchers examine convergent, discriminant, nomological and face validity. Face validity is previously established based upon the content of the corresponding items for each construct. Thus, this study examines the model's construct validity in terms of convergent, discriminant and nomological validity.

Convergent Validity

Hair et al. (2010) define convergent validity as the extent to which indicators of a specific construct converge or share a high proportion of variance in common.

Convergent validity can be assessed by examining the factor loading estimates, construct reliability and average variance extracted for each construct. As required for convergent validity, all the standardized loadings estimates for a construct should be at least .50, and ideally at least .70, the construct reliabilities should be at least .70 and the average variance extracted should be at least 50 % (Hair et al., 2010).

As displayed in Tables 30- 32, only the loading estimate of intimacy item (BRQ3) in the BRQ construct falls below the .70 standard, but it is very close to .70 in each extension product. Thus, this item is kept. All construct reliabilities exceed .70 and all average variances extracted exceed 50 %. Taken together, satisfactory evidence of convergent validity is provided for the basic measurement model in all cases.

Discriminant Validity

Discriminant validity refers to the degree to which a construct differs from other constructs (Hair et al., 2010). A highly used approach for establishing discriminant validity is to compare the variance extracted for each construct with the squared inter-construct correlations associated with that construct. It is required that the average of variance extracted in each construct exceed the squared inter-construct correlations associated with constructs in the model (Hair et al., 2010). For each extension product, the variance extracted from Tables 30- 32 are compared to the corresponding inter-

construct squared correlation coefficients in Tables 12- 14 (above the diagonal) and it is observed that the variance extracted are greater than the inter-construct squared correlation coefficients in all cases, providing good evidence of discriminant validity of the basic measurement model.

Nomological Validity

Nomological validity, as another type of construct validity, refers to the extent to which a measure operates within a set of theoretical constructs and their respective measures (Netemeyer, Bearden, and Sharma, 2003). Nomological validity is tested by examining whether the correlations among the constructs in a measurement model makes sense. Tables 12- 14 display the correlations among the latent constructs in the model. The results support the prediction that most of these constructs are correlated, as theoretically suggested. Therefore, the analysis of the correlations among the latent constructs supports nomological validity of the basic measurement model.

Modification Indices

According to Hair et al. (2010), modification indices of about four or greater imply that the fit of a model can be enhanced considerably by freeing the corresponding path. When the modification indices in this study are examined, it is found that some indices are approximately four or greater. However, making model changes based solely on modification indices is not recommended because it may be contradictory with the theoretical foundation (Hair et al., 2010). Thus, the expected change for each

modification index is carefully reviewed and it is observed that most of these changes are not supported by theory and even in the cases supported, the model fit does not improve significantly. Accordingly, it is decided that no change is needed for the basic measurement model.

Assessing the Alternative Measurement Model Validity

The results of the exploratory factor analyses are used as the basis for constructing the alternative measurement model. Each of the three dimensions of the BRQ is postulated as a discrete construct, along with the other seven constructs of the basic measurement model discussed in the previous section. The model comprises of fifty-three observed indicators and ten latent constructs. To test the model, a confirmatory factor analysis for all construct measures is conducted using maximum likelihood estimation of the covariance matrix with AMOS 18.0. The statistical results of the confirmatory factor analysis for each extension product are displayed in Tables 33- 35, which include the standardized factor loadings, their associated standard errors, t-values, construct reliabilities, percentages of the variance extracted for each construct and the key fit statistics.

As the initial step in examining results of the measurement model, the presence of offending estimates in the data is investigated as suggested by Hair et al. (2010) and no offending estimates are found.

Table 33. Results of the Alternative Measurement Model Fit for High Fit Extension
Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.847	.060	19.066***		
CI2	.875	.061	19.618***		
CI3	.913	.064	20.460***		
CI4	.913	.063	20.473***		
CI5	.848	.062	19.199***		
CI6	.723(a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.885	.033	29.885***		
PBQ2	.913	.031	32.282***		
PBQ3	.894	.032	30.777***		
PBQ4	.898 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69 %
BREADTH1	.839	.046	22.414***		
BREADTH3	.833 (a)	----	----		
BREADTH5	.826	.046	20.326***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84 %
QUALVAR1	.873	.031	31.850***		
QUALVAR2	.932	.025	39.639***		
QUALVAR3	.942 (a)	----	----		
EMOTIONAL CONNECTION (BRQ1)				.974	72 %
BRQ1_1	.768	.052	19.145***		
BRQ1_2	.846	.048	21.720***		
BRQ1_3	.854	.049	22.000***		
BRQ1_4	.865	.049	22.351***		
BRQ1_5	.897	.047	23.549***		
BRQ1_6	.890	.049	23.260***		
BRQ1_7	.874	.051	22.686***		
BRQ1_8	.891	.049	23.272***		
BRQ1_9	.907	.049	23.854***		
BRQ1_10	.810	.049	20.547***		
BRQ1_11	.828	.050	21.114***		
BRQ1_12	.844	.050	21.683***		
BRQ1_13	.795	.052	20.105***		
BRQ1_14	.819	.048	20.869***		
BRQ1_15	.782 (a)	----	----		
PARTNER QUALITY& LOVE (BRQ2)				.934	74 %
BRQ2_1	.906 (a)	----	----		
BRQ2_2	.921	.029	34.678***		
BRQ2_3	.930	.030	34.826***		
BRQ2_4	.735	.037	20.707***		
BRQ2_5	.791	.036	23.609***		

Table 33. continued

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
INTIMACY (BRQ3)				.877	64 %
BRQ3_1	.876	.078	17.060***		
BRQ3_2	.900	.081	17.392***		
BRQ3_3	.674(a)	----	----		
BRQ3_4	.736	.080	14.761***		
PERCEIVED FIT				.951	76 %
FITHIGH1	.753	.035	22.184***		
FITHIGH2	.902	.028	33.342***		
FITHIGH3	.914	.028	34.555***		
FITHIGH4	.857	.031	28.930***		
FITHIGH5	.895	.028	32.539***		
FITHIGH6	.914 (a)	----	----		
ATTITUDINAL RESPONSES				.905	76 %
ATTHIGH1	.866	.034	28.672***		
ATTHIGH2	.906(a)	----	----		
ATTHIGH3	.843	.033	25.724***		
BEHAVIORAL RESPONSES				.950	83 %
BEHHIGH1	.882 (a)	----	----		
BEHHIGH2	.869	.036	27.968***		
BEHHIGH3	.944	.032	33.660***		
BEHHIGH4	.939	.032	33.180***		

χ^2 (1280)=4131.086 p-value = 0.000 Normed χ^2 =3.227

RMR=.114 RMSEA = .067 GFI = .732 CFI = .906 NFI = .870 TLI = .899

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2]/[(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))/[(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) *** $p < .001$.

(e) See Table 11 for the abbreviations.

Table 34. Results of the Alternative Measurement Model Fit for Moderate Fit Extension
Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.846	.060	19.008***		
CI2	.874	.061	19.574***		
CI3	.913	.064	20.440***		
CI4	.914	.063	20.465***		
CI5	.848	.062	19.191***		
CI6	.722(a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.887	.033	30.089***		
PBQ2	.913	.031	32.269***		
PBQ3	.891	.032	30.603***		
PBQ4	.899 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69 %
BREADTH1	.841	.045	22.485***		
BREADTH3	.837 (a)	----	----		
BREADTH5	.822	.046	20.169***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84 %
QUALVAR1	.874	.031	31.846***		
QUALVAR2	.932	.025	39.469***		
QUALVAR3	.941 (a)	----	----		
EMOTIONAL CONNECTION (BRQ1)				.974	72 %
BRQ1_1	.769	.052	19.180***		
BRQ1_2	.846	.047	21.757***		
BRQ1_3	.855	.049	22.039***		
BRQ1_4	.865	.049	22.360***		
BRQ1_5	.897	.047	23.578***		
BRQ1_6	.889	.049	23.274***		
BRQ1_7	.874	.050	22.722***		
BRQ1_8	.891	.049	23.313***		
BRQ1_9	.906	.049	23.879***		
BRQ1_10	.811	.049	20.602***		
BRQ1_11	.828	.050	21.167***		
BRQ1_12	.845	.049	21.730***		
BRQ1_13	.795	.051	20.150***		
BRQ1_14	.819	.048	20.923***		
BRQ1_15	.782 (a)	----	----		
PARTNER QUALITY& LOVE (BRQ2)				.934	74 %
BRQ2_1	.905 (a)	----	----		
BRQ2_2	.921	.029	34.633***		
BRQ2_3	.931	.030	34.851***		
BRQ2_4	.734	.037	20.668***		
BRQ2_5	.791	.036	23.595***		

Table 34. continued

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
INTIMACY (BRQ3)				.877	64 %
BRQ3_1	.877	.078	16.986***		
BRQ3_2	.901	.082	17.299***		
BRQ3_3	.672(a)	----	----		
BRQ3_4	.735	.080	14.693***		
PERCEIVED FIT				.955	78 %
FITMOD1	.789	.037	23.484***		
FITMOD2	.910	.031	32.231***		
FITMOD3	.911	.032	31.907***		
FITMOD4	.880	.031	29.584***		
FITMOD5	.908	.032	31.851***		
FITMOD6	.893 (a)	----	----		
ATTITUDINAL RESPONSES				.930	82 %
ATTMOD1	.908	.028	36.085***		
ATTMOD2	.939 (a)	----	----		
ATTMOD3	.860	.028	29.624***		
BEHAVIORAL RESPONSES				.970	89 %
BEHMOD1	.931 (a)	----	----		
BEHMOD2	.928	.026	39.316***		
BEHMOD3	.965	.023	45.438***		
BEHMOD4	.951	.024	42.603***		

χ^2 (1280)=4364.868 p-value = 0.000 Normed χ^2 =3.410

RMR=.117 RMSEA = .069 GFI = .716 CFI = .903 NFI = .868 TLI = .895

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2]/[(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))/[(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) *** $p < .001$.

(e) See Table 11 for the abbreviations.

Table 35. Results of the Alternative Measurement Model Fit for Low Fit Extension Product

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
CORPORATE IMAGE				.942	73 %
CI1	.847	.060	19.058***		
CI2	.875	.061	19.615***		
CI3	.913	.064	20.460***		
CI4	.913	.063	20.461***		
CI5	.847	.062	19.173***		
CI6	.723(a)	----	----		
BRAND QUALITY				.943	81 %
PBQ1	.886	.033	29.962***		
PBQ2	.914	.031	32.269***		
PBQ3	.892	.032	30.576***		
PBQ4	.898 (a)	----	----		
BRAND PORTFOLIO BREADTH				.872	69 %
BREADTH1	.839	.045	22.391***		
BREADTH3	.836 (a)	----	----		
BREADTH5	.824	.046	20.154***		
BRAND PORTFOLIO QUALITY VARIANCE				.940	84 %
QUALVAR1	.874	.031	31.854***		
QUALVAR2	.932	.025	39.477***		
QUALVAR3	.941 (a)	----	----		
EMOTIONAL CONNECTION (BRQ1)				.974	72 %
BRQ1_1	.769	.052	19.148***		
BRQ1_2	.846	.048	21.702***		
BRQ1_3	.855	.049	22.004***		
BRQ1_4	.865	.049	22.329***		
BRQ1_5	.897	.047	23.545***		
BRQ1_6	.890	.049	23.243***		
BRQ1_7	.874	.051	22.681***		
BRQ1_8	.891	.049	23.284***		
BRQ1_9	.907	.049	23.847***		
BRQ1_10	.811	.049	20.546***		
BRQ1_11	.828	.050	21.104***		
BRQ1_12	.844	.050	21.673***		
BRQ1_13	.795	.052	20.108***		
BRQ1_14	.818	.048	20.857***		
BRQ1_15	.782 (a)	----	----		
PARTNER QUALITY& LOVE (BRQ2)				.934	74 %
BRQ2_1	.905 (a)	----	----		
BRQ2_2	.922	.029	34.733***		
BRQ2_3	.931	.030	34.836***		
BRQ2_4	.734	.037	20.651***		
BRQ2_5	.791	.036	23.582***		

Table 35. continued

Construct/Item	Standardized Factor Loadings	Standard Error	t-values	Construct Reliability(b)	Average Variance Extracted(c)
INTIMACY (BRQ3)				.877	64 %
BRQ3_1	.876	.077	17.139***		
BRQ3_2	.899	.080	17.449***		
BRQ3_3	.677(a)	----	----		
BRQ3_4	.737	.079	14.830***		
PERCEIVED FIT				.949	76 %
FITLOW1	.820	.036	23.908***		
FITLOW2	.906	.035	29.567***		
FITLOW3	.918	.034	29.809***		
FITLOW4	.801	.039	23.323***		
FITLOW5	.898	.034	28.502***		
FITLOW6	.869 (a)	----	----		
ATTITUDINAL RESPONSES				.941	84 %
ATTLOW1	.945	.021	50.983***		
ATTLOW2	.975 (a)	----	----		
ATTLOW3	.827	.026	30.271***		
BEHAVIORAL RESPONSES				.979	92 %
BEHLOW1	.957 (a)	----	----		
BEHLOW2	.955	.019	51.020***		
BEHLOW3	.967	.019	54.200***		
BEHLOW4	.957	.019	51.019***		

χ^2 (1280)=4307.897 p-value = 0.000 Normed χ^2 =3.366

RMR=.118 RMSEA = .069 GFI = .723 CFI = .905 NFI = .870 TLI = .897

Notes: (a) One of the paths for each construct is set to 1. Therefore, no standards errors or t-values are provided.

(b) $[(\text{SUM}(\text{sl}_i))^2]/[(\text{SUM}(\text{sl}_i))^2 + \text{SUM}(\text{e}_i)]$

(c) $[(\text{SUM}(\text{sl}_i^2))/[(\text{SUM}(\text{sl}_i^2) + \text{SUM}(\text{e}_i))]$

(d) * * * $p < .001$.

(e) See Table 11 for the abbreviations.

Goodness-of-Fit

As displayed in Table 33, the key fit statistics for high fit extension product are $\chi^2 = 4131.086$ with 1280 degrees of freedom ($p = .000$), Normed $\chi^2 = 3.227$, RMR = .114, RMSEA = .067, GFI = .732, CFI = .906, NFI = .870 and TLI = .899. As in the case of the basic measurement model, the χ^2 result indicates that the observed covariance matrix does not match the estimated covariance matrix within the sampling variance. However, given the problems associated with using the χ^2 as a goodness-of-fit test alone and the effective sample size of 502, other fit statistics are examined closely.

In terms of the absolute fit indices, the value of the Normed χ^2 is 3.227, which is a bit above the cut-off criterion of three (Hair et al., 2010). The values for RMR and RMSEA are .114 and .067, respectively. Even if the value for RMR does not fall into the acceptable range, the value for RMSEA does. As suggested by Hair et al. (2010), RMR or RMSEA values less than .05 are preferable, but still acceptable from .05 to .08. The value for GFI is .732 and this is below the desired level of .90.

In terms of incremental fit indices, the value for CFI exceeds the fit guideline of .90 while the values for NFI and TLI fall below the fit guideline of .90 (Hair et al., 2010). The fit indices for the alternative measurement model are not that good compared to the basic measurement model proposed in the previous section. However, this is not surprising considering the fact that the alternative model is much more complex with more constructs and indicators used compared to the basic model. Even if these results for the alternative model mostly signal a fit problem, given the complexity of the model and the closeness of some fit indices to the cut-off levels, it is kept for further analysis.

The key fit statistics give similar results for the moderate fit and low fit extension products. The statistical results of for the moderate and low fit cases are displayed in Table 34 and Table 35, respectively.

Construct Validity

Establishing construct validity of the measurement model is essential in order to confirm the accuracy of measurement. Thus, the alternative model's construct validity is examined in terms of convergent, discriminant and nomological validity.

Convergent Validity

As required for convergent validity, all the standardized loadings estimates for a construct should be at least .50, and ideally at least .70, the construct reliabilities should be at least .70 and the average variance extracted should be at least 50 % (Hair et al., 2010).

As displayed in Tables 33- 35, only the loading estimate of one item in the intimacy construct (BRQ3_3) falls below the .70 standard, but it is very close to .70 in each extension product . Thus, this item is kept. All construct reliabilities exceed .70 and all average variances extracted exceed 50 %. Taken together, satisfactory evidence of convergent validity is provided for the alternative measurement model in all cases.

Discriminant Validity

For discriminant validity, it is required that the average of variance extracted in each construct exceed the squared inter-construct correlations associated with constructs in the model (Hair et al., 2010). For each extension product, the variance extracted from Tables 33- 35 are compared to the corresponding inter-construct squared correlation coefficients in Tables 15- 17 (above the diagonal) and it is observed that the variance extracted are greater than the inter-construct squared correlation coefficients in all cases, providing good evidence of discriminant validity of the alternative measurement model.

Nomological Validity

Nomological validity is tested by examining whether the correlations among the constructs in a measurement model makes sense. Tables 15- 17 display the correlations among the latent constructs in the model. The results support the prediction that most of these constructs are correlated, as theoretically suggested. Therefore, the analysis of the correlations among the latent constructs supports nomological validity of the alternative measurement model.

Modification Indices

When the modification indices provided for the alternative measurement model are examined, it is found that some indices are approximately four or greater. However, making model changes based solely on modification indices is not recommended

because it may be contradictory with the theoretical foundation (Hair et al., 2010). Thus, the expected change for each modification index is carefully reviewed and it is decided that no change is needed for the alternative measurement model.

Testing the Basic Structural Model

A structural model is different from a measurement model. While a measurement model accentuates the relationships between latent constructs and measured items, a structural model emphasizes the nature and degree of the relationships between constructs (Hair et al., 2010). The basic structural model of this study is presented in Figure 2, which includes the eight latent constructs of the overall measurement model. Of these eight latent constructs, five (brand quality, brand portfolio breath, brand portfolio quality variance, corporate image and BRQ) are the independent latent variables (exogenous constructs) while the other three (perceived fit, attitudinal responses to brand extensions and behavioral responses to brand extensions) are the dependent latent variables (endogenous constructs).

Since the measurement model is confirmed, the structural model is estimated using SEM via AMOS 18.0. The Maximum Likelihood (ML) estimation method is preferred, as in the confirmatory factor analysis, since it provides unbiased, more consistent and more efficient parameter estimates (Jaccard and Wan, 1996).

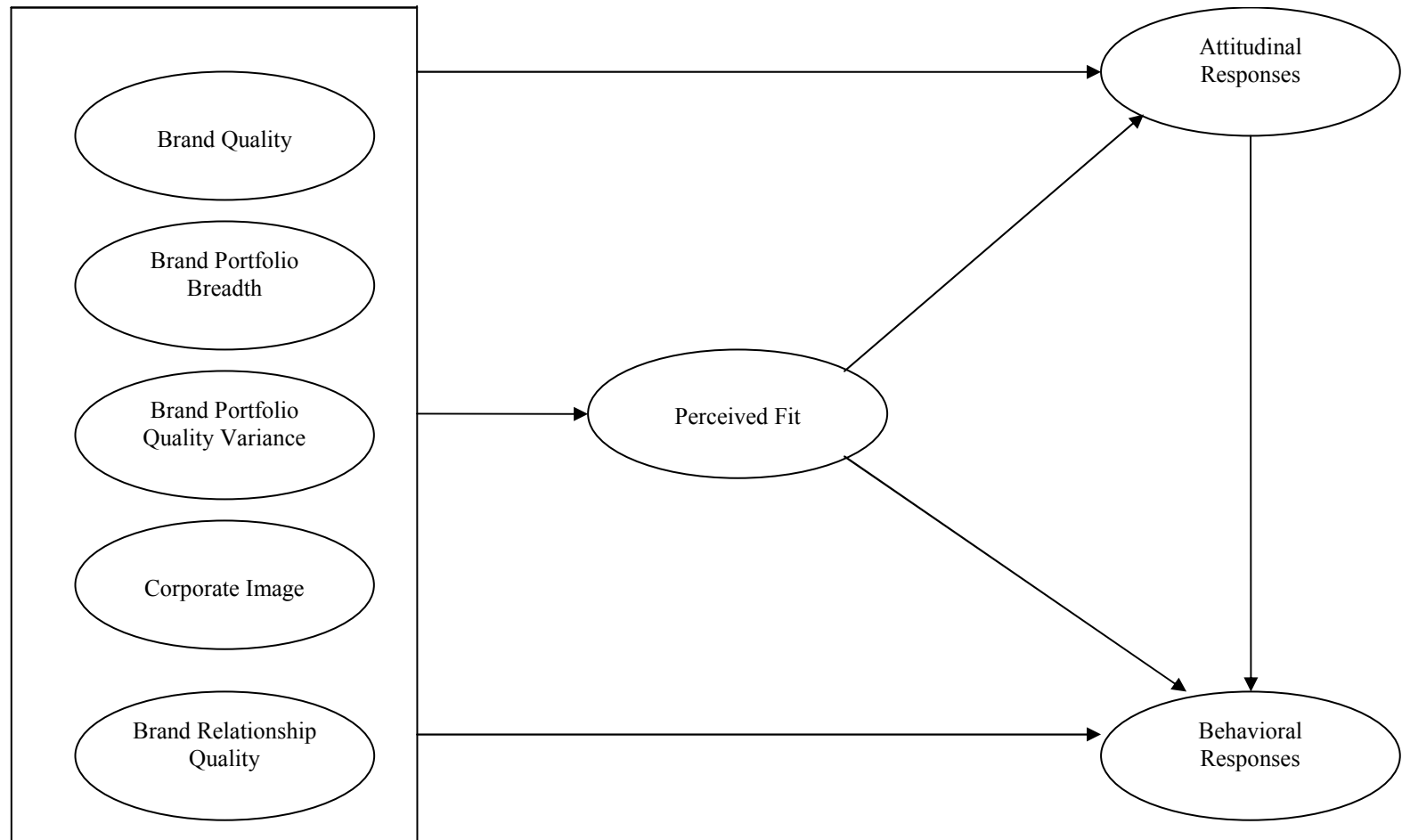


Figure 2. Basic structural model

Validity of the Basic Structural Model

To assess the validity of the basic structural model, SEM model fit and structural parameter estimates are examined for each extension product. For the high fit extension product, the key fit statistics are $\chi^2 = 997.294$ with 436 degrees of freedom ($p = .000$), Normed $\chi^2 = 2.287$, RMR = .070, RMSEA = .051, GFI = .892, CFI = .967, NFI = .943 and TLI = .962. As expected, the χ^2 result indicates that the observed covariance matrix does not match the estimated covariance matrix within the sampling variance. Given the problems associated with using the χ^2 goodness-of-fit test alone and the effective sample size of 502, other fit statistics are examined closely as well.

In terms of the absolute fit indices, the value of the Normed χ^2 is 2.287, which is below the cut-off criterion of three (Hair et al., 2010) and this shows that the model fits the data well. The values for RMR and RMSEA are .070 and .051, respectively and they both fall into the acceptable value range for RMR and RMSEA (i.e., preferable less than .05, but acceptable from .05 to .08). The value for GFI is .892 and this is just below the level of .90, which is generally considered as indicative of good model fit. In terms of incremental fit indices, the CFI is .967 and this value clearly exceeds the CFI guideline of .90 for a model of this complexity and sample size (Hair et al., 2010). The other incremental fit indices are also supportive. For example, the NFI is .943 and the TLI is .962. Like the CFI, the NFI and the TLI also exceed the fit guideline of .90 (Hair et al., 2010). A summary of the fit indices of the structural model for each extension product are displayed in Table 36.

Table 36. Fit Indices for the Basic Structural Model

	High Fit	Moderate Fit	Low Fit	Fit Guidelines
χ^2 (436)	997.294	1180.768	1179.819	
p-value	.000	.000	.000	$p \geq .05$
Normed χ^2	2.287	2.708	2.706	≤ 3
CFI	.967	.959	.959	$\geq .90$
NFI	.943	.937	.937	$\geq .90$
TLI	.962	.954	.954	$\geq .90$
GFI	.892	.867	.869	$\geq .90$
RMR	.070	.074	.084	$\leq .08$
RMSEA	.051	.058	.058	$\leq .08$

These diagnostics suggest that the basic structural model provides a good overall fit since all index values are within the range of or very close to the accepted threshold values. The key fit statistics for the moderate fit and low fit extension products are also generally supportive of the structural model.

The fit statistics for the structural model are the same as those obtained for the measurement model due to the saturated nature of the model. In other words, the number of direct structural relationships proposed in the structural model proposed equals to the number of possible construct correlations in the measurement model.

In order to improve the fit of the basic structural model, modification indices are checked. It is observed that most of the suggested changes are not supported by theory and even in the cases supported, the model fit does not improve significantly. Thus, it is decided that no change is needed for the basic structural model.

Next, the size, direction and significance of structural parameter estimates are examined to validate the basic structural model. Tables 37- 39 display the unstandardized estimates, standardized estimates, standard errors and t-values for each of the extension products. Most of the structural path estimates are significant in the expected direction at least for one of the extension products. Thus, it is concluded that these results are generally supportive of the basic structural model proposed.

Table 37. Results of the Basic Structural Model for High Fit Extension Product

Structural Paths			Unstandardized	Standardized	Standard	
			Estimates	Estimates	Error	t-values
Perceived Fit	< ---	Parent Brand Quality	-.217	-0.198	.096	-2.260*
Perceived Fit	< ---	Portfolio Breadth	.490	0.390	.088	5.603***
Perceived Fit	< ---	Portfolio Quality Variance	-.373	- 0.337	.086	-4.322***
Perceived Fit	< ---	Brand Relationship Quality	.216	0.152	.074	2.931**
Perceived Fit	< ---	Corporate Image	.152	0.112	.093	1.638
Attitudinal Responses	< ---	Parent Brand Quality	.398	0.354	.082	4.850***
Attitudinal Responses	< ---	Portfolio Breadth	-.211	-0.164	.076	-2.783**
Attitudinal Responses	< ---	Portfolio Quality Variance	-.071	-0.063	.074	-.967
Attitudinal Responses	< ---	Brand Relationship Quality	-.057	-0.039	.062	-.920
Attitudinal Responses	< ---	Corporate Image	.015	0.011	.078	.196
Attitudinal Responses	< ---	Perceived Fit	.731	0.714	.047	15.549***
Behavioral Responses	< ---	Parent Brand Quality	.120	0.101	.094	1.276
Behavioral Responses	< ---	Portfolio Breadth	-.157	-0.115	.083	-1.889
Behavioral Responses	< ---	Portfolio Quality Variance	.077	0.065	.078	.989
Behavioral Responses	< ---	Brand Relationship Quality	.287	0.186	.069	4.159***
Behavioral Responses	< ---	Corporate Image	.239	0.163	.083	2.869**
Behavioral Responses	< ---	Perceived Fit	-.041	-0.038	.077	-.532
Behavioral Responses	< ---	Attitudinal Responses	.731	0.692	.083	8.761***
$\chi^2(436) = 997.294$ p-value = 0.000 Normed $\chi^2=2.287$						
RMR = .070 RMSEA = .051 GFI = .892 CFI = .967 NFI = .943 TLI = .962						

Notes: *** p<0.001. ** p<0.01. * p<0.05

Table 38. Results of the Basic Structural Model for Moderate Fit Extension Product

Structural Paths			Unstandardized Estimates	Standardized Estimates	Standard Error	t-values
Perceived Fit	< ---	Parent Brand Quality	-.050	-0.042	.100	-.501
Perceived Fit	< ---	Portfolio Breadth	.102	0.074	.087	1.168
Perceived Fit	< ---	Portfolio Quality Variance	.011	0.009	.089	.121
Perceived Fit	< ---	Brand Relationship Quality	.976	0.621	.092	10.648***
Perceived Fit	< ---	Corporate Image	.264	0.176	.098	2.698**
Attitudinal Responses	< ---	Parent Brand Quality	.124	0.101	.089	1.391
Attitudinal Responses	< ---	Portfolio Breadth	.152	0.108	.078	1.950
Attitudinal Responses	< ---	Portfolio Quality Variance	.040	0.032	.080	.501
Attitudinal Responses	< ---	Brand Relationship Quality	-.094	-0.058	.088	-1.067
Attitudinal Responses	< ---	Corporate Image	.211	0.138	.088	2.401*
Attitudinal Responses	< ---	Perceived Fit	.691	0.677	.051	13.584***
Behavioral Responses	< ---	Parent Brand Quality	.266	0.208	.079	3.374***
Behavioral Responses	< ---	Portfolio Breadth	-.144	-0.098	.068	-2.098*
Behavioral Responses	< ---	Portfolio Quality Variance	.109	0.084	.070	1.561
Behavioral Responses	< ---	Brand Relationship Quality	.218	0.131	.077	2.832**
Behavioral Responses	< ---	Corporate Image	.132	0.083	.077	1.712
Behavioral Responses	< ---	Perceived Fit	.298	0.281	.057	5.178***
Behavioral Responses	< ---	Attitudinal Responses	.456	0.440	.054	8.494***
$\chi^2(436) = 1180.768$ p-value = 0.000 Normed $\chi^2=2.708$						
RMR = .074 RMSEA = .058 GFI = .867 CFI = .959 NFI = .937 TLI = .954						

Notes: *** p<0.001. ** p<0.01. * p<0.05

Table 39. Results of the Basic Structural Model for Low Fit Extension Product

Structural Paths			Unstandardized	Standardized	Standard	t-values
			Estimates	Estimates	Error	
Perceived Fit	< ---	Parent Brand Quality	-.022	-.019	.136	-.161
Perceived Fit	< ---	Portfolio Breadth	-.059	-.045	.118	-.502
Perceived Fit	< ---	Portfolio Quality Variance	-.157	-.134	.121	-1.295
Perceived Fit	< ---	Brand Relationship Quality	.052	.034	.104	.502
Perceived Fit	< ---	Corporate Image	.110	.077	.131	.843
Attitudinal Responses	< ---	Parent Brand Quality	.057	.041	.113	.505
Attitudinal Responses	< ---	Portfolio Breadth	.188	.118	.098	1.911
Attitudinal Responses	< ---	Portfolio Quality Variance	.061	.044	.101	.606
Attitudinal Responses	< ---	Brand Relationship Quality	.026	.014	.086	.296
Attitudinal Responses	< ---	Corporate Image	.088	.051	.109	.812
Attitudinal Responses	< ---	Perceived Fit	.859	.715	.044	19.425***
Behavioral Responses	< ---	Parent Brand Quality	.159	.120	.070	2.264*
Behavioral Responses	< ---	Portfolio Breadth	-.137	-.091	.062	-2.222*
Behavioral Responses	< ---	Portfolio Quality Variance	.098	.073	.063	1.549
Behavioral Responses	< ---	Brand Relationship Quality	.111	.064	.054	2.039*
Behavioral Responses	< ---	Corporate Image	.027	.017	.068	.404
Behavioral Responses	< ---	Perceived Fit	.256	.224	.038	6.671***
Behavioral Responses	< ---	Attitudinal Responses	.686	.723	.034	20.213***
$\chi^2(436) = 1179.819$ p-value = 0.000 Normed $\chi^2 = 2.706$						
RMR = .084 RMSEA = .058 GFI = .869 CFI = .959 NFI = .937 TLI = .954						

Notes: *** p<0.001. ** p<0.01. * p<0.05

Test of Research Hypotheses

In SEM, two types of matrices are examined: a Gamma matrix and a Beta matrix. The Gamma matrix (γ) specifies the regression coefficients that link dependent and independent constructs while the Beta matrix (β) specifies the regression coefficients that link dependent constructs. A close examination of the structural paths of the hypothesized model reveals that there are fifteen parameters to be estimated in Gamma matrix and three parameters to be estimated in Beta matrix. Each of these matrices represents one of the hypotheses proposed earlier. The Gamma matrix represents H1a-H5a, H1b-H5b and H7-H11, while the Beta matrix (β) represents H6a, H6b and H12.

The results indicate that of all the eighteen hypothesized paths, fifteen paths are significant for at least one of the extension products while three paths are not. However, the results do not support three of the significant paths since these relationships are not in the hypothesized direction. A summary of the hypothesized paths of the basic structural model for all cases of fit are summarized in Table 40. The next section provides a detailed discussion of each path and its corresponding hypothesis.

Direct Effects of Success Factors on Attitudinal and Behavioral Responses

H1, which predicts a positive relationship between brand quality and consumers' responses to brand extensions, is conditionally supported. The results, as shown in Table 40, demonstrate a positive and significant path from brand quality to favorable attitudinal responses only for the high fit extension product with a standardized path estimate of $\gamma = .354$ ($p < .001$), conditionally supporting H1a in the high fit condition.

Table 40. Summary of the Hypothesized Structural Paths for the Basic Structural Model

HYPOTHESES	STRUCTURAL PATHS	HIGH FIT	MODERATE FIT	LOW FIT	
H1a	Brand Quality→ Attitudinal Responses	.354***	n.s	n.s	Conditionally Supported
H1b	Brand Quality→ Behavioral Responses	n.s	.208***	.120*	Conditionally Supported
H2a	Brand Portfolio Breadth → Attitudinal Responses	-.164**	n.s	n.s	Not Supported
H2b	Brand Portfolio Breadth → Behavioral Responses	n.s	-.098*	-.091*	Not Supported
H3a	Brand Portfolio Quality Variance → Attitudinal Responses	n.s	n.s	n.s	Not Supported
H3b	Brand Portfolio Quality Variance → Behavioral Responses	n.s	n.s	n.s	Not Supported
H4a	Corporate Image → Attitudinal Responses	n.s	.138*	n.s	Conditionally Supported
H4b	Corporate Image → Behavioral Responses	.163**	n.s	n.s	Conditionally Supported
H5a	Brand Relationship Quality → Attitudinal Responses	n.s	n.s	n.s	Not Supported
H5b	Brand Relationship Quality → Behavioral Responses	.186***	.131**	.064*	Supported
H6a	Perceived Fit→ Attitudinal Responses	.714***	.677***	.715***	Supported
H6b	Perceived Fit→ Behavioral Responses	n.s	.281***	.224***	Conditionally Supported
H7	Brand Quality→ Perceived Fit	-.198*	n.s	n.s	Not Supported
H8	Brand Portfolio Breadth→ Perceived Fit	.390***	n.s	n.s	Conditionally Supported
H9	Brand Portfolio Quality Variance→ Perceived Fit	-.337***	n.s	n.s	Conditionally Supported
H10	Corporate Image→ Perceived Fit	n.s	.176**	n.s	Conditionally Supported
H11	Brand Relationship Quality→ Perceived Fit	.152**	.621***	n.s	Conditionally Supported
H12	Attitudinal Responses → Behavioral Responses	.692***	.440***	.723***	Supported

However, a positive and significant path from brand quality to favorable behavioral responses is observed only for the moderate and low fit extension products with standardized path estimates of $\gamma = .208$ ($p < .001$) and $\gamma = .120$ ($p < .05$), respectively, conditionally supporting H1b in the moderate fit and low fit conditions.

Even if this study hypothesizes a positive and significant relationship between brand portfolio breadth and consumers' responses to brand extensions, the results fail to support this hypothesis. In the high fit condition, there is a significant but negative path from brand portfolio breadth to favorable attitudinal responses, with a standardized path estimate of $\gamma = -.164$ ($p < .01$). In the moderate and low fit conditions, the path from brand portfolio breadth to favorable behavioral responses is significant but again negative, with standardized path estimates of $\gamma = -.098$ ($p < .05$) and $\gamma = -.091$ ($p < .05$), respectively. In all other cases, these two structural paths are insignificant. Thus, H2a and H2b are not supported.

A similar relationship is observed between brand portfolio quality variance and consumers' responses to brand extensions. Even if the study proposes a negative relationship between brand portfolio quality variance and consumers' responses to brand extensions, no such significant relationships for any of the extension products is found, falling to support H3a and H3b.

The results also demonstrate that the expected positive effect of corporate image on consumers' responses is limited to high fit and moderate fit extension products. The path from corporate image to favorable attitudinal responses is positive and significant only in the moderate fit condition, with a standardized path estimate of $\gamma = .138$ ($p < .05$), conditionally supporting H4a. In the high fit condition, while the path to favorable attitudinal responses is not significant, the path to behavioral responses is significant

with a standardized path estimate of $\gamma = .163$ ($p < .01$), conditionally supporting H4b.

However, in the low fit case, none of the hypothesized paths is found to be significant.

As one of the key construct of this study, BRQ is found to have a positive and significant effect only on consumers' behavioral responses but in all condition of fit. The standardized path estimates for this path are $\gamma = .186$ ($p < .001$) for high fit extension product, $\gamma = .131$ ($p < .01$) for moderate fit extension product and $\gamma = .064$ ($p < .05$) for low fit extension product, supporting H5b. The path from BRQ to favorable attitudinal responses is not significant for any of the three extension products, failing to support H5a.

In line with the findings of prior research, the results of this study also support the primary role that perceived fit has on consumers' responses. The path from perceived fit to favorable attitudinal responses is positive and significant for the all three extension products, with a standardized path estimate of $\beta = .714$ ($p < .001$) for the high fit condition, $\beta = .677$ ($p < .001$) for the moderate fit condition and $\beta = .715$ ($p < .001$) for the low fit condition. Thus, H6a is supported in all fit conditions. The path from perceived fit to favorable behavioral responses is also positive and significant with a standardized path estimate of $\beta = .281$ ($p < .001$) in the moderate fit condition and $\beta = .224$ ($p < .001$) in the low fit condition, supporting H6b in these two conditions. However, the results fail to support H6b in the high fit condition, as the corresponding path is not significant. Thus, H6b is conditionally supported.

Structural Relationships between Perceived Fit and Other Success Factors

In the basic structural model test, each success factor other than perceived fit is also hypothesized to affect consumers' attitudinal and behavioral responses indirectly through its effect on perceived fit. In other words, perceived fit is claimed to mediate the effects of these success factors on consumers' attitudinal and behavioral responses. The results for these paths and their related hypotheses (H7-H11) are shown in Table 40.

H7 predicts a positive and direct effect of brand quality on perceived fit, but the results indicate a significant yet negative relationship with a standardized path estimate of $\gamma = -.198$ ($p < .05$) for the high fit extension product, failing to support H7. The results for the moderate fit and low fit extension products, however, reveal no significant relationship, again failing to support H7.

The potential mediating role of perceived fit, though fails to be supported for parent brand quality, is conditionally supported for the other success factors. In line with H8, the results indicate a positive and significant relationship between brand portfolio breadth and perceived fit, with a standardized path estimate of $\gamma = .390$ ($p < .001$) for the high fit extension product. The results for the moderate fit and low fit extension products, however, reveal no significant relationship. Thus, H8 is conditionally supported.

H9, predicting a negative and direct effect of portfolio quality variance on perceived fit, is supported only for the high fit extension product as indicated by the significant path with a standardized path estimate of $\gamma = -.337$ ($p < .001$), but no such significant effect is observed for the moderate fit and low fit extension products. Thus, H9 is conditionally supported.

Similarly, H10, predicting a positive and direct effect of corporate image on perceived fit, is supported only for the moderate fit extension product as indicated by the significant path with a standardized path estimate of $\gamma = .176$ ($p < .01$), but no such significant effect is observed for the high fit and low fit extension products. Thus, H10 is conditionally supported.

Finally, the results demonstrate a positive and significant path from BRQ to perceived fit with a standardized path estimate of $\gamma = .152$ ($p < .01$) for the high fit extension product and a standardized path estimate of $\gamma = .621$ ($p < .001$) for the moderate fit extension product. Yet, no significant path from BRQ to perceived fit is observed for the low fit extension product. Thus, H11 is also conditionally supported.

Attitude-Behavior Link

In line with the prior research, the results of this study demonstrate that the path from favorable attitudinal responses to favorable behavioral responses is positive and significant for the all three extension products. The standardized path estimates are $\beta = .692$ ($p < 0.001$) for the high fit case, $\beta = .440$ ($p < 0.001$) for the moderate fit case and $\beta = .723$ ($p < 0.001$) for the low fit case. Thus, H12 is supported.

Proportion of Variances in the Endogenous Constructs

Table 41 lists the proportion of variances explained by each endogenous construct in the basic structural model. These results are generally supportive, indicating that the proposed factors explain a significant portion of variances. The only exception is the low

fit condition where perceived fit is the endogenous construct. Only 3% of the variance in perceived fit is explained by brand quality, brand portfolio breadth, brand portfolio quality variance, corporate image and BRQ. However, this result is not surprising given that in the low fit condition none of the success factors is influential enough to enhance perceived fit.

Table 41. Proportion of Variances in the Endogenous Constructs for the Basic Structural Model

Endogenous Constructs	High Fit	Moderate Fit	Low Fit
Perceived Fit	51 %	57 %	3 %
Favorable Attitudinal Responses	76 %	70 %	57 %
Favorable Behavioral Responses	72 %	78 %	84 %

Direct, Indirect and Total Effects

The standardized direct, indirect and total effects demonstrated by the basic structural model are presented in Tables 42- 44. As illustrated in Table 42, for the high fit extension product, the strongest direct effect observed is the influence of perceived fit on consumers' attitudinal responses to brand extensions. The size of this direct effect is .714, which is the standardized path estimate for the relationship. The strongest indirect effect in the model is the influence of perceived fit on consumers' behavioral responses to brand extensions. The size of this indirect effect is .494, which is calculated by multiplying the estimated relationship from perceived fit to attitudinal responses by the estimated relationship from attitudinal responses to behavioral responses. The strongest total effect in the model is the total effect of perceived fit on consumers' attitudinal responses to brand extensions. The size of this total effect is .714, which is calculated by summing the indirect and direct effects of perceived fit on attitudinal responses.

Table 42. Direct Effects, Indirect Effects and Total Effects for the High Fit Extension Product- The Basic Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Brand Relationship Quality	Perceived Fit	Attitudinal Responses
Standardized Direct Effects							
Perceived Fit	-.198	.390	-.337	.112	.152		
Attitudinal Responses	.354	-.164	-.063	.011	-.039	.714	
Behavioral Responses	.101	-.115	.065	.163	.186	-.038	.692
Standardized Indirect Effects							
Perceived Fit							
Attitudinal Responses	-.141	.279	-.241	.080	.108		
Behavioral Responses	.155	.065	-.197	.059	.042	.494	
Standardized Total Effects							
Perceived Fit	-.198	.390	-.337	.112	.152		
Attitudinal Responses	.212	.115	-.303	.091	.069	.714	
Behavioral Responses	.256	-.051	-.133	.222	.228	.456	.692

Table 43. Direct Effects, Indirect Effects and Total Effects for the Moderate Fit Extension Product- The Basic Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Brand Relationship Quality	Perceived Fit	Attitudinal Responses
Standardized Direct Effects							
Perceived Fit	-.042	.074	.009	.176	.621		
Attitudinal Responses	.101	.108	.032	.138	-.058	.677	
Behavioral Responses	.208	-.098	.084	.083	.131	.281	.440
Standardized Indirect Effects							
Perceived Fit							
Attitudinal Responses	-.028	.050	.006	.119	.420		
Behavioral Responses	.020	.090	.019	.163	.334	.298	
Standardized Total Effects							
Perceived Fit	-.042	.074	.009	.176	.621		
Attitudinal Responses	.073	.158	.038	.257	.362	.677	
Behavioral Responses	.228	-.008	.103	.246	.465	.579	.440

Table 44. Direct Effects, Indirect Effects and Total Effects for the Low Fit Extension Product- The Basic Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Brand Relationship Quality	Perceived Fit	Attitudinal Responses
Standardized Direct Effects							
Perceived Fit	-.019	-.045	-.134	.077	.034		
Attitudinal Responses	.041	.118	.044	.051	.014	.715	
Behavioral Responses	.120	-.091	.073	.017	.064	.224	.723
Standardized Indirect Effects							
Perceived Fit							
Attitudinal Responses	-.013	-.032	-.096	.055	.025		
Behavioral Responses	.016	.052	-.068	.094	.036	.517	
Standardized Total Effects							
Perceived Fit	-.019	-.045	-.134	.077	.034		
Attitudinal Responses	.027	.086	-.052	.106	.039	.715	
Behavioral Responses	.136	-.039	.005	.111	.099	.741	.723

The sizes of the direct and total effects of perceived fit on attitudinal responses are the same in this model since perceived fit can only directly influence attitudinal responses, there is no indirect effect hypothesized for this relationship.

The standardized direct, indirect and total effects for the moderate and low fit extension products are illustrated in Table 43 and Table 44, respectively. At this point, it is important to emphasize the significant role BRQ plays in the moderate fit condition. The strongest indirect effect in the model is the influence of BRQ on consumers' attitudinal responses to brand extensions. The size of this indirect effect is .420, which is calculated by multiplying the estimated relationship from BRQ to perceived fit by the estimated relationship from perceived fit to attitudinal responses. Even if the strongest direct and total effects observed is the influence of perceived fit on consumers' attitudinal responses to brand extensions, with a size of .677, the influence of BRQ on perceived fit is also very strong. The size of this effect is .621.

Testing the Alternative Structural Model

The alternative structural model of this study is presented in Figure 3, which includes the ten latent constructs of the alternative measurement model. Of these ten latent constructs, seven (brand quality, brand portfolio breadth, brand portfolio quality variance, corporate image, emotional connection, partner quality & love and intimacy) are the independent latent variables (exogenous constructs) while the other three (perceived fit, attitudinal responses to brand extensions and behavioral responses to brand extensions) are the dependent latent variables (endogenous constructs). The structural model is estimated using SEM via AMOS 18.0.

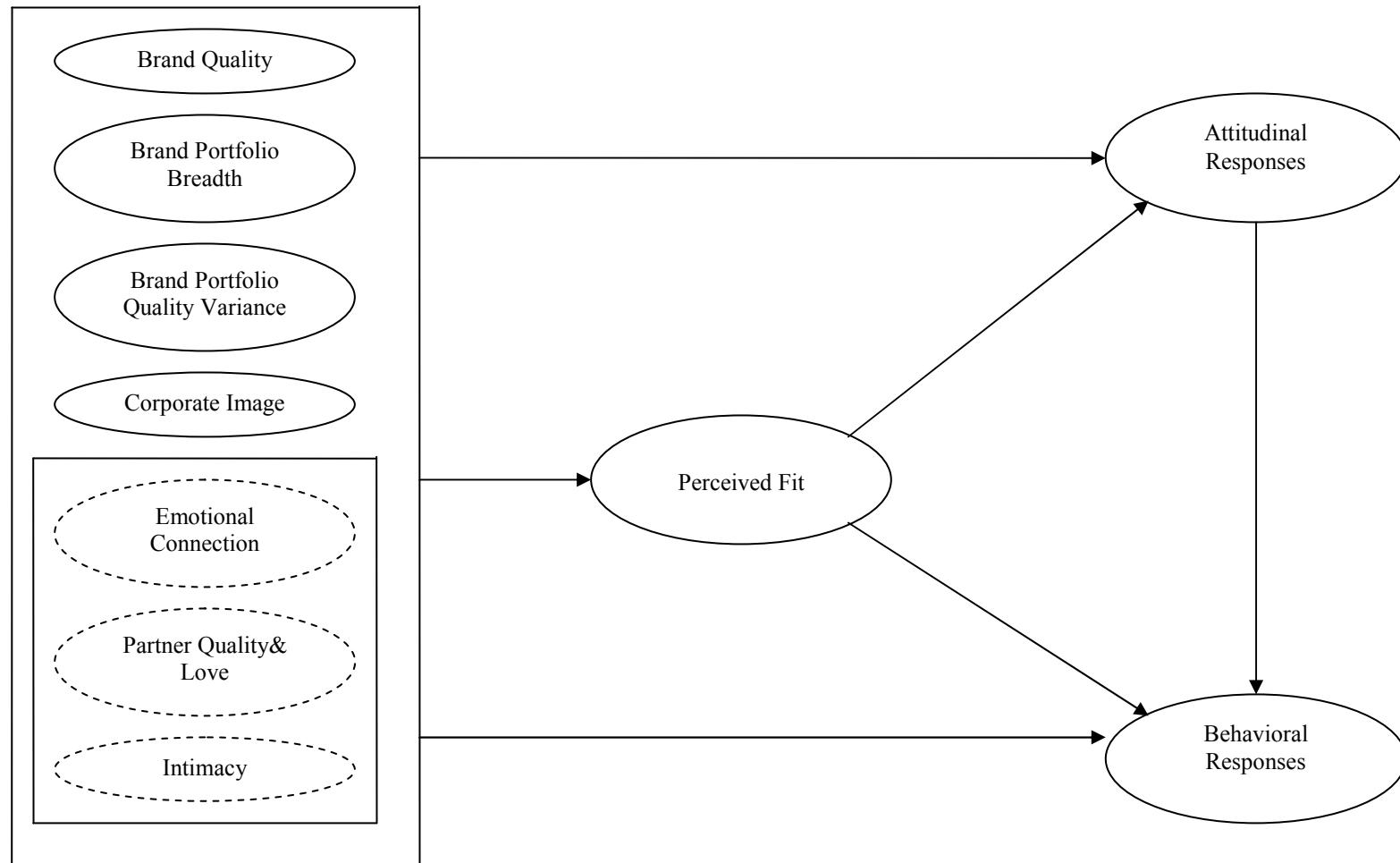


Figure 3. Alternative structural model

Validity of the Alternative Structural Model

To assess the validity of the alternative structural model, SEM model fit and structural parameter estimates are examined for each extension product. For the high fit extension product, the key fit statistics are $\chi^2 = 4131.086$ with 1280 degrees of freedom ($p = .000$), Normed $\chi^2 = 3.227$, RMR = .114, RMSEA = .067, GFI = .732, CFI = .906, NFI = .870 and TLI = .899. These fit statistics are the same as those obtained for the alternative measurement model due to the saturated nature of the model.

A summary of the fit indices of the alternative structural model for each extension product are displayed in Table 45. Even if these results for the alternative model generally signal a fit problem, given the complexity of the model and the closeness of some fit indices to the cut-off levels, it is kept for further analysis.

Table 45. Fit Indices for the Alternative Structural Model

	High Fit	Moderate Fit	Low Fit	Fit Guidelines
χ^2 (1280)	4131.086	4364.868	4307.897	
p-value	.000	.000	.000	$p \geq .05$
Normed χ^2	3.227	3.410	3.366	≤ 3
CFI	.906	.903	.905	$\geq .90$
NFI	.870	.868	.870	$\geq .90$
TLI	.899	.895	.897	$\geq .90$
GFI	.732	.716	.723	$\geq .90$
RMR	.114	.117	.118	$\leq .08$
RMSEA	.067	.069	.069	$\leq .08$

Next, the size, direction and significance of structural parameter estimates are examined to validate the alternative structural model. Tables 46- 48 display the unstandardized estimates, standardized estimates, standard errors and t-values for each of the extension products.

Table 46. Results of the Alternative Structural Model for High Fit Extension Product

Structural Paths			Unstandardized Estimates	Standardized Estimates	Standard Error	t-values
Perceived Fit	< ---	Parent Brand Quality	-.184	-.168	.095	-1.940
Perceived Fit	< ---	Portfolio Breadth	.439	.349	.091	4.818***
Perceived Fit	< ---	Portfolio Quality Variance	-.362	-.327	.086	-4.221***
Perceived Fit	< ---	Emotional Connection (BRQ1)	-.136	-.137	.079	-1.726
Perceived Fit	< ---	Partner Quality & Love (BRQ2)	.143	.164	.074	1.946
Perceived Fit	< ---	Intimacy (BRQ3)	.182	.141	.075	2.446*
Perceived Fit	< ---	Corporate Image	.166	.122	.092	1.805
Attitudinal Responses	< ---	Parent Brand Quality	.388	.345	.081	4.782***
Attitudinal Responses	< ---	Portfolio Breadth	-.207	-.161	.079	-2.634**
Attitudinal Responses	< ---	Portfolio Quality Variance	-.070	-.061	.073	-.950
Attitudinal Responses	< ---	Emotional Connection (BRQ1)	-.057	-.056	.066	-.852
Attitudinal Responses	< ---	Partner Quality & Love (BRQ2)	.061	.068	.062	.984
Attitudinal Responses	< ---	Intimacy (BRQ3)	-.086	-.065	.063	-1.379
Attitudinal Responses	< ---	Corporate Image	.018	.013	.077	.236
Attitudinal Responses	< ---	Perceived Fit	.732	.715	.047	15.554***
Behavioral Responses	< ---	Parent Brand Quality	.114	.096	.092	1.240
Behavioral Responses	< ---	Portfolio Breadth	-.127	-.093	.085	-1.503
Behavioral Responses	< ---	Portfolio Quality Variance	.062	.052	.077	.810
Behavioral Responses	< ---	Emotional Connection (BRQ1)	.246	.229	.071	3.472***
Behavioral Responses	< ---	Partner Quality & Love (BRQ2)	-.034	-.036	.066	-.525
Behavioral Responses	< ---	Intimacy (BRQ3)	.000	.000	.066	-.004
Behavioral Responses	< ---	Corporate Image	.228	.156	.082	2.791**
Behavioral Responses	< ---	Perceived Fit	-.036	-.033	.077	-.469
Behavioral Responses	< ---	Attitudinal Responses	.745	.706	.084	8.912***

$\chi^2(1280) = 4131.086$ p-value = .000 Normed $\chi^2 = 3.227$
RMR = .114 RMSEA = .067 GFI = .732 CFI = .906 NFI = .870 TLI = .899

Notes: *** p<0.001. ** p<0.01. * p<0.05

Table 47. Results of the Alternative Structural Model for Moderate Fit Extension Product

Structural Paths			Unstandardized	Standardized	Standard	
			Estimates	Estimates	Error	t-values
Perceived Fit	< ---	Parent Brand Quality	-.006	-.005	.099	-.065
Perceived Fit	< ---	Portfolio Breadth	.120	.087	.092	1.312
Perceived Fit	< ---	Portfolio Quality Variance	-.022	-.018	.089	-.244
Perceived Fit	< ---	Emotional Connection (BRQ1)	.229	.210	.083	2.758**
Perceived Fit	< ---	Partner Quality & Love (BRQ2)	.298	.310	.078	3.843***
Perceived Fit	< ---	Intimacy (BRQ3)	.084	.059	.078	1.083
Perceived Fit	< ---	Corporate Image	.292	.195	.097	3.015**
Attitudinal Responses	< ---	Parent Brand Quality	.139	.112	.088	1.568
Attitudinal Responses	< ---	Portfolio Breadth	.117	.083	.082	1.432
Attitudinal Responses	< ---	Portfolio Quality Variance	.055	.044	.079	.698
Attitudinal Responses	< ---	Emotional Connection (BRQ1)	-.182	-.164	.074	-2.454*
Attitudinal Responses	< ---	Partner Quality & Love (BRQ2)	.052	.053	.071	.741
Attitudinal Responses	< ---	Intimacy (BRQ3)	.051	.035	.069	.738
Attitudinal Responses	< ---	Corporate Image	.216	.141	.087	2.473*
Attitudinal Responses	< ---	Perceived Fit	.708	.694	.048	14.792***
Behavioral Responses	< ---	Parent Brand Quality	.271	.212	.078	3.468***
Behavioral Responses	< ---	Portfolio Breadth	-.151	-.103	.072	-2.090*
Behavioral Responses	< ---	Portfolio Quality Variance	.103	.080	.070	1.478
Behavioral Responses	< ---	Emotional Connection (BRQ1)	.059	.051	.066	.901
Behavioral Responses	< ---	Partner Quality & Love (BRQ2)	.057	.056	.062	.923
Behavioral Responses	< ---	Intimacy (BRQ3)	.062	.041	.061	1.024
Behavioral Responses	< ---	Corporate Image	.131	.083	.077	1.705
Behavioral Responses	< ---	Perceived Fit	.289	.274	.056	5.163***
Behavioral Responses	< ---	Attitudinal Responses	.465	.449	.054	8.560***
$\chi^2(1280)=4364.868$ p-value =.000 Normed $\chi^2=3.410$						
RMR =.117 RMSEA =.069 GFI =.716 CFI =.903 NFI =.868 TLI =.895						

Notes: *** p<0.001. ** p<0.01. * p<0.05

Table 48. Results of the Alternative Structural Model for Low Fit Extension Product

Structural Paths			Unstandardized	Standardized	Standard	
			Estimates	Estimates	Error	t-values
Perceived Fit	< ---	Parent Brand Quality	-.078	-.067	.133	-.585
Perceived Fit	< ---	Portfolio Breadth	.038	.029	.123	.309
Perceived Fit	< ---	Portfolio Quality Variance	-.184	-.157	.120	-1.542
Perceived Fit	< ---	Emotional Connection (BRQ1)	.167	.159	.111	1.508
Perceived Fit	< ---	Partner Quality & Love (BRQ2)	.112	.121	.103	1.082
Perceived Fit	< ---	Intimacy (BRQ3)	-.420	-.308	.106	-3.974***
Perceived Fit	< ---	Corporate Image	.107	.074	.129	.830
Attitudinal Responses	< ---	Parent Brand Quality	.083	.060	.112	.743
Attitudinal Responses	< ---	Portfolio Breadth	.137	.086	.104	1.320
Attitudinal Responses	< ---	Portfolio Quality Variance	.080	.057	.101	.787
Attitudinal Responses	< ---	Emotional Connection (BRQ1)	-.152	-.120	.094	-1.616
Attitudinal Responses	< ---	Partner Quality & Love (BRQ2)	.055	.049	.087	.629
Attitudinal Responses	< ---	Intimacy (BRQ3)	.166	.101	.091	1.832
Attitudinal Responses	< ---	Corporate Image	.095	.055	.109	.875
Attitudinal Responses	< ---	Perceived Fit	.877	.730	.045	19.285***
Behavioral Responses	< ---	Parent Brand Quality	.158	.119	.070	2.255*
Behavioral Responses	< ---	Portfolio Breadth	-.120	-.079	.065	-1.841
Behavioral Responses	< ---	Portfolio Quality Variance	.085	.063	.063	1.349
Behavioral Responses	< ---	Emotional Connection (BRQ1)	.128	.107	.059	2.191*
Behavioral Responses	< ---	Partner Quality & Love (BRQ2)	-.044	-.041	.054	-.805
Behavioral Responses	< ---	Intimacy (BRQ3)	-.005	-.003	.056	-.088
Behavioral Responses	< ---	Corporate Image	.024	.014	.067	.349
Behavioral Responses	< ---	Perceived Fit	.248	.217	.039	6.318***
Behavioral Responses	< ---	Attitudinal Responses	.691	.728	.034	20.310***

χ^2 (1280) = 4307.897 p-value = .000 Normed χ^2 = 3.366
RMR = .118 RMSEA = .069 GFI = .723 CFI = .905 NFI = .870 TLI = .897

Notes: *** p<0.001. ** p<0.01. * p<0.05

Since the path estimates for the constructs other than the three BRQ constructs are very similar to the ones in the basic structural model in size, direction and significance, only the estimates for the BRQ constructs, which are emotional connection, partner quality & love and intimacy, are discussed in the next section.

Test of Research Hypotheses

The difference between the basic structural model and the alternative structural model proposed is that in the latter model, each BRQ dimension is postulated as a discrete construct rather than a summated construct of all dimensions. Since all the relationships hypothesized in this study are tested in the previous section on the basic structural model, only the results on the relationships each BRQ construct has with the three latent dependent variables (perceived fit, attitudinal responses and behavioral responses) are discussed in this section. A summary of these structural paths of the alternative structural model is provided in Table 49.

Direct Effects of BRQ Constructs on Attitudinal and Behavioral Responses

While partner quality & love and intimacy are found to have no significant effect on consumers' attitudinal and behavioral responses for any of the extension products, emotional connection has an evident influence on consumers' responses. As shown in Table 49, emotional connection has a positive and significant effect on behavioral responses to high fit and low fit extensions products, with standardized path estimates of $\gamma = .246$ ($p < .001$) and $\gamma = .128$ ($p < .05$), respectively. Emotional connection also

Table 49. Summary of the Structural Paths for the Alternative Structural Model

STRUCTURAL PATHS	HIGH FIT	MODERATE FIT	LOW FIT
Emotional Connection→ Perceived Fit	n.s	.229**	n.s
Emotional Connection → Attitudinal Responses	n.s	-.182*	n.s
Emotional Connection → Behavioral Responses	.246***	n.s	.128*
Partner Quality & Love→ Perceived Fit	n.s	.298***	n.s
Partner Quality & Love → Attitudinal Responses	n.s	n.s	n.s
Partner Quality & Love → Behavioral Responses	n.s	n.s	n.s
Intimacy→ Perceived Fit	.182*	n.s	-.420***
Intimacy → Attitudinal Responses	n.s	n.s	n.s
Intimacy → Behavioral Responses	n.s	n.s	n.s

Notes: *** p<0.001. ** p<0.01. * p<0.05
n.s means non-significant

has a significant effect on attitudinal responses to moderate fit extension products, but this effect, contrary to the expectations, is negative, with a standardized path estimate of $\gamma = -.182$ ($p < .05$).

Structural Relationships between Perceived Fit and BRQ Constructs

One of the most important findings of the basic structural model is that BRQ has a very significant effect on perceived fit in the case of moderate fit extension products and a weaker but still significant effect in the case of high fit extension products. The results of the alternative model also support these prior findings. As seen in Table 49, in the moderate fit condition, emotional connection and partner quality & love have a positive and significant effect on perceived fit with standardized path estimates of $\gamma = .229$ ($p < .01$) and $\gamma = .298$ ($p < .001$), respectively. However, in the high fit condition, intimacy has a positive and significant effect on perceived fit with a standardized path estimate of $\gamma = .182$ ($p < .05$).

Even if the results of the basic structural model reveal no significant effect of BRQ on perceived fit for the low fit condition, the results of the alternative model show that intimacy indeed has a negative and significant effect on perceived fit in the case of low fit extension products, with a standardized path estimate of $\gamma = -.420$ ($p < .001$). This unexpected and relatively strong effect will be discussed in the next chapter.

Proportion of Variances in the Endogenous Constructs

Table 50 lists the proportion of variances explained by each endogenous construct in the alternative structural model. The values are quite similar to those reported for the basic structural model, with very minor changes and thus, generally supportive, indicating that the proposed factors explain a significant portion of variances. As in the basic structural model, the only exception is the low fit condition where perceived fit is the endogenous construct. Only 1% of the variance in perceived fit is explained by the identified factors. However, as previously mentioned, this result is not surprising given that in the low fit condition none of the success factors is influential enough to enhance perceived fit.

Table 50. Proportion of Variances in the Endogenous Constructs for the Alternative Structural Model

Endogenous Constructs	High Fit	Moderate Fit	Low Fit
Perceived Fit	52 %	55 %	1 %
Favorable Attitudinal Responses	76 %	71 %	58 %
Favorable Behavioral Responses	73 %	78 %	84 %

Direct, Indirect and Total Effects

The standardized direct, indirect and total effects demonstrated by the alternative structural model are presented in Tables 51- 53. These effects are quite similar to those observed for the basic structural model. As illustrated in Table 51, for the high fit extension product, the strongest direct effect observed is the influence of perceived fit on consumers' attitudinal responses to brand extensions. The size of this direct effect is .715. The strongest indirect effect is the influence of perceived fit on consumers' behavioral responses to brand extensions and the size of this indirect effect is .505.

Table 51. Direct Effects, Indirect Effects and Total Effects for the High Fit Extension Product- The Alternative Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Emotional Connection	Partner Quality &Love	Intimacy	Perceived Fit	Attitudinal Responses
Standardized Direct Effects									
Perceived Fit	-.168	.349	-.327	.122	-.137	.164	.141		
Attitudinal Responses	.345	-.161	-.061	.013	-.056	.068	-.065	.715	
Behavioral Responses	.096	-.093	.052	.156	.229	-.036	.000	-.033	.706
Standardized Indirect Effects									
Perceived Fit									
Attitudinal Responses	-.120	.249	-.233	.087	-.098	.117	.101		
Behavioral Responses	.164	.051	-.197	.067	-.104	.125	.020	.505	
Standardized Total Effects									
Perceived Fit	-.168	.349	-.327	.122	-.137	.164	.141		
Attitudinal Responses	.225	.089	-.295	.100	-.154	.186	.035	.715	
Behavioral Responses	.260	-.042	-.145	.223	.125	.089	.020	.471	.706

Table 52. Direct Effects, Indirect Effects and Total Effects for the Moderate Fit Extension Product- The Alternative Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Emotional Connection	Partner Quality & Love	Intimacy	Perceived Fit	Attitudinal Responses
Standardized Direct Effects									
Perceived Fit	-.005	.087	-.018	.195	.210	.310	.059		
Attitudinal Responses	.112	.083	.044	.141	-.164	.053	.035	.694	
Behavioral Responses	.212	-.103	.080	.083	.051	.056	.041	.274	.449
Standardized Indirect Effects									
Perceived Fit									
Attitudinal Responses	-.004	.060	-.012	.136	.145	.215	.041		
Behavioral Responses	.047	.088	.010	.178	.049	.205	.050	.311	
Standardized Total Effects									
Perceived Fit	-.005	.087	-.018	.195	.210	.310	.059		
Attitudinal Responses	.109	.144	.032	.277	-.018	.268	.076	.694	
Behavioral Responses	.260	-.015	.089	.260	.100	.261	.091	.585	.449

Table 53. Direct Effects, Indirect Effects and Total Effects for the Low Fit Extension Product- The Alternative Structural Model

	Brand Quality	Brand Portfolio Breadth	Brand Portfolio Quality Variance	Corporate Image	Emotional Connection	Partner Quality &Love	Intimacy	Perceived Fit	Attitudinal Responses
Standardized Direct Effects									
Perceived Fit	-.067	.029	-.157	.074	.159	.121	-.308		
Attitudinal Responses	.060	.086	.057	.055	-.120	.049	.101	.730	
Behavioral Responses	.119	-.079	.063	.014	.107	-.041	-.003	.217	.728
Standardized Indirect Effects									
Perceived Fit									
Attitudinal Responses	-.049	.021	-.115	.054	.116	.088	-.225		
Behavioral Responses	-.007	.084	-.077	.096	.032	.127	-.157	.531	
Standardized Total Effects									
Perceived Fit	-.067	.029	-.157	.074	.159	.121	-.308		
Attitudinal Responses	.011	.107	-.058	.109	-.004	.138	-.123	.730	
Behavioral Responses	.112	.005	-.013	.110	.139	.085	-.160	.749	.728

The strongest total effect in the model is the total effect of perceived fit on consumers' attitudinal responses to brand extensions and the size of this total effect is .715.

The standardized direct, indirect and total effects for the moderate and low fit extension products are also illustrated in Table 52 and Table 53, respectively. At this point, it is important to emphasize the significant role different BRQ constructs play in the moderate fit and low fit conditions. In the moderate fit condition, both emotional connection and partner quality & love constructs have relatively strong direct effects on perceived fit, with effect sizes of .210 and .310 , respectively. However, in the low fit condition, intimacy has a relatively strong yet negative direct effect on perceived fit, with an effect size of -.308.

Analysis of the Control Variables

As noted in Chapter Three, in the questionnaire, the respondents are asked to answer a number of demographic questions. Analysis of variance (ANOVA) is conducted including seven of those variables as control variables to examine whether they have a significant effect on the respondents' fit perceptions, attitudinal responses and behavioral responses. The seven variables examined are gender, age, marital status, having children or not, education, occupation and income. Three separate set of analyses are conducted, first using the fit perceptions, then the attitudinal responses and finally the behavioral responses as the dependent variable. The effect of each control variables is checked for each fit condition. Table 54 shows the results of ANOVA tests.

Table 54. ANOVA Results for Control Variables

VARIABLE		HIGH FIT			MODERATE FIT			LOW FIT		
		Perceived Fit	Attitudinal Responses	Behavioral Responses	Perceived Fit	Attitudinal Responses	Behavioral Responses	Perceived Fit	Attitudinal Responses	Behavioral Responses
Gender	Significance	.799	.352	.494	.648	.713	.818	.467	.869	.468
	F Value	.065	.868	.469	.209	.135	.053	.530	.027	.527
Age	Significance	.449	.251	.032	.676	.390	.161	.856	.196	.714
	F Value	.948	1.327	2.470	.632	1.046	1.590	.390	1.476	.581
Marital Status	Significance	.250	.379	.278	.108	.030	.272	.174	.626	.684
	F Value	1.352	1.053	1.277	1.908	2.697	1.291	1.596	.652	.571
Have Any Children	Significance	.283	.589	.104	.668	.231	.768	.732	.447	.889
	F Value	1.155	.293	2.645	.184	1.440	.087	.117	.580	.019
Education	Significance	.614	.897	.638	.547	.114	.405	.005	.001	.001
	F Value	.713	.327	.681	.805	1.787	1.021	3.415	4.170	4.042
Occupation	Significance	.789	.410	.011	.756	.555	.400	.029	.026	.005
	F Value	.525	1.022	2.814	.568	.820	1.038	2.360	2.414	3.151
Income	Significance	.065	.189	.312	.332	.371	.846	.693	.903	.975
	F Value	2.090	1.497	1.192	1.151	1.079	.404	.609	.317	.166

The results indicate that for the seven variables examined, no significant between-group differences are found across all fit conditions. However, some variables have a significant effect on dependent variables in one of the fit conditions. For example, the education level and the occupation of the respondents are observed to have a significant effect on fit perceptions, attitudinal responses and behavioral responses in the low fit condition, but this effect is not observed in any of the other two fit conditions. These differences in findings across fit conditions should be studied in depth in further studies.

CHAPTER SIX

DISCUSSION AND CONCLUSION

In this concluding chapter, the findings and implications for marketing theory and practice are provided. Specifically, this chapter first provides an overview of the study findings. The implications of the study to marketing theory and practice are presented next. Finally, the limitations of this research as well as potential areas for future research are discussed.

Discussion

The findings of this study not only support the importance of some success factors previously discussed in the brand extension literature but also introduce BRQ as a new success factor that has significant effects, especially in the high and moderate fit conditions. This distinction concerning fit conditions is very important since the results show that the direction and the size of the estimated relationships change at varying levels of fit. A similar effect is also observed for the brand extension success. While some factors are found to have a significant effect only on consumers' attitudinal responses to brand extensions, some are found to have a significant effect on behavioral responses. Thus, it is very important to consider the effects of each factor on attitudinal and behavioral responses separately for the accurate interpretation of the findings.

This study supports that perceived fit is the most important factor that influence brand extension success. In line with prior research that mostly investigate brand extension success in terms of attitudinal responses, the results reveal that perceived fit has a very influential role on consumers' attitudes in all fit conditions. Perceived fit also directly affects consumers' behavioral responses but to a less extent in the moderate and low fit conditions while it has no significant effect in the high fit condition. These findings suggest that even if perceived fit has a direct effect on behavioral responses, this effect is rather limited and perceived fit most of the time influence behavioral responses indirectly through its effect on attitudinal responses. This relationship is further supported by the attitude-behavior link tested in the model. In line with the Theory of Reasoned Action, attitudes are found to be a direct determinant of behavior in all fit conditions.

In the literature, the effect of parent brand quality on brand extension evaluations has always been an issue of major dispute. While a number of researchers claim that it has a positive and significant effect on brand extension evaluations (e.g., Bottomley and Doyle, 1996; Bottomley and Holden, 2001; Sunde and Brodie, 1993), others argue that there is no such direct link and the relationship is strong only when there is a basis of fit between the two product classes (e.g., Aaker and Keller, 1990; Echambadi, Arroniz, Reinartz, and Lee, 2006). The findings of this study in a way represent this controversy in prior studies. Parent brand quality is found to affect consumers' attitudinal responses only in the high fit condition. In other fit conditions, this effect is found to be insignificant. However, in these cases, parent brand quality is found to influence behavioral responses. One explanation for this difference in effects can be explained by the categorization theory. In cases of high fit, an extension product is quickly

categorized as a category member and hence all the components of the category (i.e., affect and cognition associations) are transferred to this new product shaping attitudes. In cases of moderate or low fit, however, since the extension product is not directly categorized as member, there is no such automatic transfer of associations and thus, consumers' attitudes toward the extension is not affected. However, consumers use parent brand quality as a heuristic to facilitate their behavioral responses.

Considering that prior research has mostly considered consumers' evaluations of brand extensions in terms of attitudinal responses, it is not surprising that prior research has limited the effect of parent brand quality to high fit extensions. In this regard, the incorporation of behavioral responses as a measure of brand extension success can provide a more accurate picture and help to solve the discrepancy observed in prior findings.

In this study, the direct effects of two brand portfolio characteristics, which are portfolio breadth and portfolio quality variance, on brand extension success are also investigated. Contrary to the expected positive effect, the results show that portfolio breadth has a negative effect on brand extension success in all fit conditions, supporting the pessimistic position in the literature. As previously mentioned, the pessimists (e.g., Smith and Park, 1992) argue that as the number of products associated with a brand increases, the effects associated with the brand becomes blurred in the minds of consumers and the brand's effectiveness diminish resulting in less favorable evaluations of the brand extensions.

When the effect of portfolio breadth is investigated separately in terms of attitudinal and behavioral responses, it is observed that, as in the case of parent brand quality, portfolio breadth has a significant effect on attitudinal responses but not on behavioral responses in the high fit condition. The effect of portfolio breadth on

behavioral responses is limited to moderate and low fit conditions and the effect observed is quite small in size.

Though not studied much in the brand extension literature, the potential effect of portfolio quality variance on brand extension success is also investigated in this context. However, no significant direct effects either on attitudinal responses or on behavioral responses are observed.

It is interesting that while parent brand characteristic such as quality or portfolio breadth generally have a direct effect only on attitudinal responses in the high fit condition, the effects of corporate image and BRQ are rather observed only on behavioral responses. The results reveal that when consumers encounter a high fit extension, the corporate image of the firm introducing the extension or the quality of the relationship they have with the brand positively influence behavioral responses but have no significant effect on attitudinal responses. Since the extension product is quickly categorized as a member in the high fit condition, the characteristics directly related to the brand itself such as quality or portfolio breadth have a more determining role on attitudes. Even if corporate image and BRQ are not able to shape consumers' attitudes in this context, as the results suggest, they clearly facilitate consumers' behavioral responses.

The effect of BRQ on behavioral responses is not limited to high fit extensions. The results reveal that in all fit conditions BRQ, although it has no significant effects on attitudes, positively influence behavioral responses. No matter how much the extension fits the parent brand category, consumers with high BRQ behave favorably toward the extension product for the sake of strengthening or at least maintaining their relationship with the brand. These findings support the widely accepted view in the marketing

literature that consumer relationships are a valuable asset that firms need to manage very diligently (Grönroos, 1997; Sheth and Parvatiyar, 2002).

At this point, the role that each BRQ dimension plays on behavioral responses should also be investigated. Of the three BRQ dimensions tested in the alternative model, emotional connection is found to be the most important one in terms of affecting behavioral responses. The results reveal that emotional connection has a positive and significant effect on consumers' behavioral responses in the high fit and low fit conditions, while has no significant effect in the moderate fit condition. Surprisingly, in the moderate fit condition it is found that emotional connection has a negative and significant effect on attitudinal responses. One possible explanation, as suggested by Czellar (2003), is that consumers with strong relationships with a brand through time develop a possessive brand attitude whereby they become less favorable to even slight changes in the brand offer and thus, evaluate such moderate fit extension products less favorably.

For many years, the literature has encouraged marketers to introduce an extension if it has a high degree of fit with the parent brand and discouraged them from offering low fit extensions with the underlying assumption that marketers have little power in managing perceived fit. However, in the last decade, some researchers have conducted studies showing that perceived fit for moderately far extensions can actually be enhanced through tactics such as positive mood (e.g., Barone, Miniard, and Romeo, 2000) or repeated exposures to the extension (e.g., Klink and Smith, 2001).

In line with these recent studies, this study also contends that fit can be managed and by raising perceptions of fit, it is possible to enhance extension evaluations. The results show that in the case of moderate fit, BRQ has a very influential effect on

perceived fit. When consumers encounter a moderate fit extension, they cannot automatically categorize it as either high fit or low fit and thus, they engage in a kind of piecemeal thinking process. At that point, consumers with high levels of BRQ start thinking about the shared memories and feelings they have with the brand and since they have a pervasive desire to maintain or increase the scope of their interactions, they gradually make themselves believe that the extension somehow fits the parent brand. This effect is less pronounced in the high fit condition since the extension is quickly categorized as fitting and there is not really much time for the shared memories or feelings to surface and affect the thinking process. Thus, the observed effect on perceived fit is quite limited.

At this point, it is very important to consider the results of the alternative model in order to see the role each BRQ dimension plays on perceived fit. Although this model gives similar results to those of the basic model proposed, it is interesting to note that the observed effect of BRQ on perceived fit in the moderate fit condition is mostly driven by the emotional connection and partner quality & love dimensions whereas the relatively limited effect observed in the high fit condition is driven by the intimacy dimension. In other words, in the moderate fit condition, consumers' fit perceptions are enhanced due to high emotional connection or partner quality & love. In the high fit condition, however, it is the intimacy dimension that enhances fit perceptions.

In terms of managing fit, corporate image has an effect on perceived fit in the moderate fit condition, but to a less extent compared to BRQ. Consumers partially consider the corporate image of the firm introducing the extension when trying to categorize the extension as fitting. However, this effect is not observed at all in the high fit condition.

The high fit condition needs to be specially considered since the extension products offered in this context already fit their parent brand. Still, the results of this study reveal that some of the proposed success factors may have a strengthening or weakening effect on fit perceptions. Even if the categorization process is very quick in the case of high fit extension products, two portfolio characteristics- portfolio breadth and portfolio quality variance- have a clear effect on this process. The results reveal that while greater portfolio breadth enhances fit perceptions significantly, greater portfolio quality variance has the opposite effect. This finding is important since it implies that even a high fit extension product runs the risk of being perceived as less fitting and evaluated accordingly if there is too much quality variance among the products in the brand portfolio.

The results of this study also show that parent brand quality has a negative effect on fit perceptions in the high fit condition. This finding is surprising and clearly calls for further research. Yet, one possible explanation for this unexpected finding may be that when the parent brand and its current products are associated with such a high quality in the minds' of the consumers, it may seem very unlikely for a new product to reach this high level of quality even if it perfectly fits to the parent brand category. The parent brand and its current products are so unique in that sense that consumers cannot categorize any other product as fitting.

Even if the results support that fit perceptions can be somehow managed in the high fit and moderate fit conditions, in the low fit condition fit perceptions are totally immovable. This finding is not unexpected since when consumers encounter a low fit extension product, they quickly classify it as out of category and move on without spending much cognitive effort. Even if firms have the potential to expand the

boundaries of extension products, there is a limit to that. In cases of low fit, even consumers with high levels of BRQ do not try to categorize a low fit product as a member just for the sake of maintaining their relationship with the brand. As the results of the alternative model suggest, especially the consumers who are very intimate with a parent brand show very negative responses to such low fitting extensions. Believing that their self-connection to the brand is at risk, these consumers feel betrayed and definitely reject this new product as a possible category member. This is why the results reveal such a powerful negative relationship between the intimacy dimension and fit perceptions in the low fit condition. Based on these findings, it is not advisable for firms to extend their brands too far even when they believe that they have a segment of highly loyal and emotionally attached consumers.

Theoretical Implications

The findings of this study have some theoretical implications that greatly add to the existing literature. First, this study contributes to the brand extension research by providing concrete evidence for the strategic importance of consumer-brand relationships. With the exception of a few recent attempts (e.g., Park and Kim, 2001; Park, Kim, and Kim, 2002), BRQ has by no means been fully investigated in this context. The results reveal that consumers with higher levels of BRQ are not only more willing to show favorable behavioral responses to brand extensions but also more likely to categorize the extension as a part of the parent brand even when the fit of the extension is only moderate. Thus, this study adds to the current body of knowledge by clarifying how BRQ operates in the context of brand extension introductions.

For years, given that a positive relationship exists between perceived fit and extension evaluations, the literature has advised marketers to account for fit in deciding whether to launch brand extensions with the underlying assumption that marketers have little power in managing perceived fit (Klink and Smith, 2001). The results of this study, however, clearly reveal that in the case of moderate fit extensions, consumers with higher levels of BRQ also more likely to categorize the extension as a part of the parent brand; a similar effect is also observed for corporate image. Thus, this study suggests that fit can indeed be managed and some success factors can elevate extension evaluations by raising perceptions of fit.

Prior research also tends to measure consumers' evaluations of brand extensions by consumers' general attitude toward the extension, their perception of the extension's quality and their purchase intention of the extension. This study, however, enriches the limited measurement of brand extension evaluations and investigates the effect of various success factors on attitudinal and behavioral responses separately. The results show that depending on the level of perceived fit, some factors have a significant effect only on consumers' attitudinal responses, while some have a significant effect only on behavioral responses. For example, brand quality has a significant effect only on attitudinal responses in the high fit condition, while it has a significant effect only on behavioral responses in the moderate fit and low fit conditions. However, BRQ has a significant effect only on behavioral responses in all fit conditions. Thus, this study reveals that it is very important to consider the effects of each factor on attitudinal and behavioral responses separately for the accurate interpretation of the findings.

Managerial Implications

Besides its theoretical implications, this study holds important implications for managers launching brand extensions. First, it is imperative for management to have knowledge of what contributes to the success of this strategy. It will be particularly useful if factors under the firm's control are identified as pivotal. By understanding some of the variables that influence consumers' attitudinal and behavioral attitudes to brand extensions, marketers should be better able to develop more effective strategies. Thus, the results of this study serve as a reference for marketers when implementing brand extension strategies.

From a managerial perspective, it is also important to know the relative influence of each success factor on the consumers' evaluations of brand extensions. With the exception of some recent studies (e.g., Völckner and Sattler, 2006), thus far, little is known about the relative importance of success factors in explaining brand extension success. The results indicate that relative importance varies considerably across the success factors depending on the extension product (high fit, moderate fit or low fit) chosen. Thus, managers should divide the large number of potentially relevant success factors into essential factors and less relevant or unimportant factors and pay the greatest attention to the success factors that considerably influence brand extension success.

Even if this study once again confirms that perceived fit is the most important determinant of brand extension success in all cases, it also shows that perceived fit may not be as restrictive as prior research implies and it can be managed to some level. This is not to suggest companies indiscriminately extend their brands. However, the results show that, in cases of moderate fit extensions, BRQ has a significant positive effect on

fit perceptions and a similar effect is also observed for corporate image but to a less extent. Thus, this study suggests that by strengthening their consumers' relations with their brands and their perceptions of corporate image, firms can actually expand the boundary of their extension products.

Limitations

While this study makes important theoretical and managerial contributions, the findings must be examined in the light of some limitations. First, inferences to causality are limited given the cross-sectional nature of the data set. Since longitudinal research captures temporal order by assessing the influence of a predictor at a time subsequent to its cause, longitudinal data are believed to possess superior causal inference ability (Jap and Anderson, 2004). Thus, longitudinal studies should be designed to untangle the causal relationships.

Moreover, cross-sectional survey research is believed to be especially prone to potential common method variance. Because the measures for both the independent and the dependent variables come from the same source, common method variance is known to inflate structural relationships, resulting in overestimations of the effect of hypothesized predictors. Future attempts are needed to examine the impact of common method variance on this study's results or to control over common variance when replicating this study. Longitudinal surveys may also be a solution to common method variance because temporal separation reduces the cognitive accessibility of responses to predictors collected at an earlier time, which in turn reduces the likelihood that these

earlier responses will influence subsequent responses to outcome variables (Rindfleisch, Malter, Ganesan, and Moorman, 2008).

Another limitation of this study is the limited generalizability of the findings. The limited nature of the stimuli used (i.e., three brands from white consumer goods industry and three potential extensions) makes the generalizability of these results somewhat tenuous. A future study where numerous brands and product categories are examined will be highly valued. In addition, since the findings are limited to the consumer durables industry, it will be interesting to investigate the extent to which they generalize to other fields, such as FMCGs or services.

The sampling method employed by this study also limits the generalizability of the findings. Although a sample of 502 people is randomly chosen by a two-stage area sampling and the overall response rate of is quite high, the sample composition is limited to Istanbul and these consumers may not be representative of the whole population of Turkish consumers. Therefore, replication studies with varying sampling procedures and different samples that reflect diverse demographic compositions are needed to provide more confidence in these findings.

The scenario under which the data are collected also imposes some limitations. In this study, respondents are asked to give their reactions to hypothetical extensions of real brands and they are neither exposed to any prototypes of these extensions nor given any clues about these extensions. Attitudes formed about hypothetical stimuli by such scenarios are likely to be different from attitudes formed about real extensions encountered in a natural setting. While hypothetical products provide the benefit of allowing the focus to remain directly on the variables of interest, it does limit the ability to generalize the results beyond initial reactions to extension concepts. In the case of an

actual extension, consumers have access to substantially more information about the product including product test reports or consumer reports and product inspection before trial. This type of information on an actual extension is likely to dilute the importance of brand names and the information held in brand related schemata (DelVecchio, 2000). Thus, to enhance the practical usefulness of this research, it is necessary to conduct further replications with real extensions to detect whether the key concepts hold true.

Finally, in the basic model proposed, the BRQ construct is measured as a first-order construct and a summated score of each factor is used as an indicator while in the alternative model, each BRQ dimension is used as a discrete construct. A better approach would be to model BRQ as a second-order construct that is measured by the original dimensions identified in the study of Fournier (1994). Thus, further replications of this study that measure BRQ as a second-order construct are needed.

Suggestions for Further Research

In addition to the potential areas of research delineated in the preceding section, this study suggests several specific issues that warrant further inquiry. First, due to the use of hypothetical extensions rather than real extensions, all variables concerning an extension's marketing activities have to be omitted. There is little doubt that in real life consumers' evaluations are greatly influenced by active marketing activities. Thus, an important area for future research would be to replicate this study with real extensions and examine the roles played by different marketing mix elements such as advertising, sales promotions, pricing or distribution.

Since practical considerations limit the number of variables that can be included in the model, there are other variables though not tested in this study might be appropriately included as an opportunity of future research. One of these variables is competitive context of brand extensions. Competitive pressures are among the key challenges and opportunities facing brand management today (Shocker, Srivastava, and Ruekert, 1994) and therefore, understanding the essential features of the competitive context is critical for developing a complete theoretical account of brand extensions. To comprehend fully the effects of competition, it is important to include the dynamic nature of competition in future studies and to examine its impact over time.

Individual consumer heterogeneity as a background factor can also be taken into account in future studies. Previous research on brand extensions has identified several individual consumer characteristics such as expertise/product knowledge with regard to product category (e.g., Broniarczyk and Alba, 1994; Muthukrishnan and Weitz, 1991), innovativeness (e.g., Klink and Smith, 2001), culture (e.g., Han and Schmitt, 1997) or mood (e.g., Barone, Miniard, and Romeo, 2000) that can moderate the relationship between perceived fit and consumer evaluations of brand extensions. It would be very helpful to test the model proposed in this study with a wide range of these variables and examine the interaction effects among them.

This study measures brand extension success in terms of consumers' favorable attitudinal and behavioral responses. Until recently, behavioral responses to brand extensions have been limited to purchase intention. Even if this study considers willingness to search and spread word of mouth as other behavior responses, there are still other behavioral responses such as willingness to pay or forgive that can be integrated to the measurement model in further research.

Future studies should also explore the potential effects of BRQ in the context of feedback (reciprocal) effects, that is, the effects that the extension product can have on the parent brand. The studies conducted in the brand extension literature suggest that when extension information related to product attributes and/or quality is inconsistent with the parent brand image, brand extensions dilute beliefs associated with the parent brand (e.g., Gürhan-Canlı and Maheswaran, 1998; Loken and Roedder-John, 1993; Roedder-John, Loken, and Joiner, 1998). However, brands that have strong relationships with their consumers may be less vulnerable to dilution in case of inconsistent brand extensions. Since consumers with high levels of BRQ generally have a pervasive desire to maintain or increase the scope of interactions with the parent brand, their beliefs associated with the brand are likely to be strongly held and resistant to change. Undoubtedly, future research addressing this issue would be of great importance.

Concluding Remarks

The primary contribution of this dissertation is to present an empirically tested theoretical foundation from which to conduct further research on the role of BRQ in brand extension introductions and help to solve the current discrepancy between prior research and marketplace observations. It is hoped that this research will be beneficial to both practitioners and academicians by generating knowledge that will lead to a better understanding, explanation and prediction in brand extension success.

APPENDIX A:
INITIAL POOL OF ITEMS

Construct& Items	Statements	Expert Judges	Pretests
BRAND QUALITY			
PBQ1	[Brand name] offers superior products relative to competing brands.	Retained	Retained
PBQ2	[Brand name] offers high-quality products.	Retained	Retained
PBQ3	The workmanship of the [brand name] products is very high.	Retained	Retained
PBQ4	The [brand name] products are very reliable and durable.	Retained	Retained
	The likelihood that this [brand name] product is dependable is very high.	Eliminated	
BRAND PORTFOLIO BREADTH			
BREADTH1	[Brand name] makes lots of different kinds of products.	Retained	Retained
BREADTH2	[Brand name] means very limited product categories. (R)	Retained	Retained
	[Brand name] represents diverse product categories.	Eliminated	
	There is only a small number of product categories [brand name] represents. (R)	Eliminated	
BREADTH3	[Brand name] seems to represent a wide range of product categories.	Retained	Retained
	Product categories represented by [brand name] are highly interrelated to each other. (R)	Retained	Eliminated
	Product categories represented by [brand name] are conceptually similar to each other. (R)	Eliminated	
	Technically similar product categories are represented by [brand name]. (R)	Eliminated	
BREADTH4	Product categories represented by [brand name] complement one another. (R)	Retained	Retained
BREADTH5	Product categories represented by [brand name] are very similar (share many features). (R)	Retained	Retained
BRAND PORTFOLIO QUALITY VARIANCE			
QUALVAR1	If I were to buy a [brand name] product, I would feel very certain of the level of quality that I am getting. (R)	Retained	Retained
QUALVAR2	The products offered by [brand name] are consistent in terms of their quality. (R)	Retained	Retained

Construct& Items	Statements	Expert Judges	Pretests
QUALVAR3	The products offered by [brand name] provide very predictable levels of quality. (R)	Retained	Retained
	The products offered by [brand name] are very similar to each other in terms of their quality. (R)	Eliminated	
BRAND RELATIONSHIP QUALITY			
BRQ1_1	This brand plays an important role in my life.	Retained	Retained
BRQ1_2	Something would be missing from my life if this brand were not around any longer.	Retained	Retained
BRQ1_3	I feel that this brand and I are really “meant for each other”.	Retained	Eliminated
	Every time I use this brand, I am reminded of how much I like and need it.	Retained	Retained
BRQ1_4	I am addicted to this brand in some ways.	Retained	Retained
BRQ1_5	I would be very upset if I could not find the brand when I wanted it.	Retained	Eliminated
	There are times when I really long to use this brand again.	Retained	Retained
BRQ1_6	No other brand in the category can quite take the place of this brand.	Retained	Eliminated
	I feel like something is missing when I have not used the brand for a while.	Retained	Eliminated
BRQ1_7	I feel very loyal to this brand.	Retained	Retained
	This brand can count on me to always be there.	Retained	Eliminated
BRQ1_8	I have made a pledge of sorts to stick with this brand.	Retained	Eliminated
	I will stay with this brand through good times and bad.	Retained	Retained
BRQ1_9	I have always been faithful to this brand in spirit.	Retained	Retained
	I am willing to make small sacrifices in order to keep using this brand.	Retained	Eliminated
BRQ2_1	I have a lot of faith in my future with this brand.	Retained	Eliminated
	The brand is a part of me.	Retained	Retained
BRQ2_2	This brand takes good care of me.	Retained	Eliminated
	This brand treats me like an important and valuable customer.	Retained	Retained
BRQ2_3	This brand shows a continuing interest in me.	Retained	Retained
BRQ2_3	This brand has always been good to me.	Retained	Retained

Construct& Items	Statements	Expert Judges	Pretests
BRQ2_4	This brand is reliable/ dependable.	Retained	Retained
BRQ2_5	I really love this brand.	Retained	Retained
	I have feelings for this brand that I do not have for many other brands.	Retained	Eliminated
	This brand is my favorite brand for all.	Retained	Eliminated
BRQ1_10	The brand says a lot about the kind of person I am or want to be.	Retained	Retained
BRQ1_11	The brand reminds me of who I am.	Retained	Retained
BRQ1_12	The brand's image and my self image are similar in a lot of ways.	Retained	Retained
	This brand and I have a lot in common.	Retained	Eliminated
	This brand helps me make a statement about what is important to me in life.	Retained	Eliminated
BRQ1_13	This brand will always remind me of a particular phase of my life.	Retained	Retained
	The brand reminds me of things I have done or places I have been.	Retained	Eliminated
BRQ1_14	This brand reminds me of what I was like at previous stage of my life.	Retained	Retained
BRQ1_15	I have at least one fond memory that involves using this brand.	Retained	Retained
	Using this brand somehow makes me feel "at home".	Retained	Eliminated
BRQ3_1	I know a lot about this brand.	Retained	Retained
BRQ3_2	I feel as though I really understand this brand.	Retained	Retained
BRQ3_3	I feel as though I have known this brand forever.	Retained	Retained
BRQ3_4	I know a lot about the company that makes this brand.	Retained	Retained
CORPORATE IMAGE			
CI1	Disrespected (disregarded) vs. respected (regarded)	Retained	Retained
CI2	Unprofessional vs. professional	Retained	Retained
CI3	Unsuccessful vs. successful	Retained	Retained
CI4	Unstable vs. stable	Retained	Retained
	Not well-established vs. well-established	Eliminated	
CI5	Not at all trustworthy vs. very trustworthy	Retained	Retained
	Not at all dependable vs. very dependable	Eliminated	
CI6	Not at all concerned about customers vs. very concerned about customers	Retained	Retained

Construct& Items	Statements	Expert Judges	Pretests
PERCEIVED FIT			
FIT1	Given the existing [brand name] products, it would be appropriate for [brand name] to introduce the [extension product].	Retained	Retained
	Given the existing [brand name] products, it would be logical for [brand name] to introduce the [extension product].	Eliminated	
FIT2	The [extension product] fits in well (has good fit) with the existing line of [brand name] products.	Retained	Retained
FIT3	The [extension product] is similar to other products that [brand name] makes.	Retained	Retained
FIT4	[Brand name] and the [extension product] go together really well.	Retained	Retained
FIT5	The [extension product] is an integral part of the [brand name] brand family.	Retained	Retained
FIT6	The [extension product] is a natural extension for [brand name].	Retained	Retained
ATTITUDINAL RESPONSES TO BRAND EXTENSIONS			
ATT1	How positive are you to the [extension product]?	Retained	Retained
ATT2	What attitude do you have towards [extension product]?	Retained	Retained
ATT3	What is your overall evaluation of the [extension product] relative to existing brands in the extension category?	Retained	Retained
BEHAVIORAL RESPONSES TO BRAND EXTENSIONS			
BEH1	How likely are you be to buy the [extension product] the next time you buy ... ?	Retained	Retained
BEH2	How willing are you to search the [extension product]?	Retained	Retained
BEH3	How likely are you to recommend the [extension product] to someone you know?	Retained	Retained
	How likely are you to tell people good things about the [extension product]?	Eliminated	
BEH4	How likely are you to share information about the [extension product] with someone you know?	Retained	Retained

Note: (R) means reverse coded.

APPENDIX B:
QUESTIONNAIRE IN ENGLISH

 Boğaziçi University	Survey no	
	Interviewer	
	Date	

BRAND PERCEPTION SURVEY-OCTOBER 2009

Dear participant,

This questionnaire is part of a research conducted at the Department of Management of Boğaziçi University. It will take approximately 30 minutes to fill in the questionnaire. Please feel free to ask for any clarifications on the questions.

The answers that you will provide in this questionnaire will be very important and useful to us. In order to ensure the efficiency of the study, it is crucial that you answer all of the questions. The information you provide will be used for academic purposes only.

Thank you for your participation and contribution.

Research Assistant Esra Arıkan
Boğaziçi University
Department of Management
E-mail: esra.arikan@boun.edu.tr

What is the image in your eyes of the [holding company name] holding company that has created [brand name]? Please state the most appropriate number between the bipolar adjectives)								
Disrespected (disregarded)	1	2	3	4	5	6	Respected (regarded)	Q1.
Unprofessional	1	2	3	4	5	6	Professional	Q2.
Unsuccessful	1	2	3	4	5	6	Successful	Q3.
Unstable	1	2	3	4	5	6	Stable	Q4.
Not at all trustworthy	1	2	3	4	5	6	Very trustworthy	Q5.
Not at all concerned about customers	1	2	3	4	5	6	Very concerned about customers	Q6.
Below are some statements about [brand name] brand. Please indicate how strongly you agree or disagree with these statements.								
	Strongly Disagree			Strongly Agree				
[Brand name] offers high-quality products.	1	2	3	4	5	6		Q7.
[Brand name] offers superior products relative to competing brands.	1	2	3	4	5	6		Q8.
The workmanship of the [brand name] products is very high.	1	2	3	4	5	6		Q9.
The [brand name] products are very reliable and durable.	1	2	3	4	5	6		Q10.
[Brand name] makes lots of different kinds of products.	1	2	3	4	5	6		Q11.
[Brand name] means very limited product categories.	1	2	3	4	5	6		Q12.
[Brand name] seems to represent a wide range of product categories.	1	2	3	4	5	6		Q13.
Product categories represented by [brand name] complement one another.	1	2	3	4	5	6		Q14.
Product categories represented by [brand name] are very similar (share many features).	1	2	3	4	5	6		Q15.
If I were to buy a [brand name] product, I would feel very certain of the level of quality that I am getting.	1	2	3	4	5	6		Q16.
The products offered by [brand name] are consistent in terms of their quality.	1	2	3	4	5	6		Q17.
The products offered by [brand name] provide very predictable levels of quality.	1	2	3	4	5	6		Q18.

Below are some statements about your relationship with [brand name] brand. Please indicate how strongly you agree or disagree with these statements.

	Strongly Disagree					Strongly Agree	
This brand plays an important role in my life.	1	2	3	4	5	6	Q19.
Something would be missing from my life if this brand were not around any longer.	1	2	3	4	5	6	Q20.
Every time I use this brand, I am reminded of how much I like and need it.	1	2	3	4	5	6	Q21.
I am addicted to this brand in some ways.	1	2	3	4	5	6	Q22.
There are times when I really long to use this brand again.	1	2	3	4	5	6	Q23.
I feel very loyal to this brand.	1	2	3	4	5	6	Q24.
I will stay with this brand through good times and bad.	1	2	3	4	5	6	Q25.
I have always been faithful to this brand in spirit.	1	2	3	4	5	6	Q26.
The brand is a part of me.	1	2	3	4	5	6	Q27.
This brand treats me like an important and valuable customer.	1	2	3	4	5	6	Q28.
This brand shows a continuing interest in me.	1	2	3	4	5	6	Q29.
This brand has always been good to me.	1	2	3	4	5	6	Q30.
This brand is reliable/ dependable.	1	2	3	4	5	6	Q31.
I really love this brand.	1	2	3	4	5	6	Q32.
The brand says a lot about the kind of person I am or want to be.	1	2	3	4	5	6	Q33.
The brand reminds me of who I am.	1	2	3	4	5	6	Q34.
The brand's image and my self image are similar in a lot of ways.	1	2	3	4	5	6	Q35.
This brand will always remind me of a particular phase of my life.	1	2	3	4	5	6	Q36.
This brand reminds me of what I was like at previous stage of my life.	1	2	3	4	5	6	Q37.

	Strongly Disagree					Strongly Agree	
I have at least one fond memory that involves using this brand.	1	2	3	4	5	6	Q38.
I know a lot about this brand.	1	2	3	4	5	6	Q39.
I feel as though I really understand this brand.	1	2	3	4	5	6	Q40.
I feel as though I have known this brand forever.	1	2	3	4	5	6	Q41.
I know a lot about the company that makes this brand.	1	2	3	4	5	6	Q42.

NEW PRODUCT- AUTOMOBILE COOLER FRIDGE

Just presume that [brand name] is producing automobile cooler fridges as its new product. Please choose the most appropriate number between the bipolar statements which are about [brand name]'s production of automobile cooler fridges as its new product.

How positive are you to the [brand name] automobile cooler fridge?	Very Negative	1	2	3	4	5	6	Very Positive	Q43.
What attitude do you have towards [brand name] automobile cooler fridge?	Certainly Dislike	1	2	3	4	5	6	Certainly Like	Q44.
What is your overall evaluation of the [brand name] automobile cooler fridge relative to existing brands in the automobile cooler fridge category?	One of the Worst	1	2	3	4	5	6	One of the Best	Q45.
How likely are you to buy the [brand name] automobile cooler fridge the next time you buy an automobile cooler fridge?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q46.
How willing are you to search the [brand name] automobile cooler fridge?	Very Unwilling	1	2	3	4	5	6	Very Willing	Q47.
How likely are you to recommend the [brand name] automobile cooler fridge to someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q48.

How likely are you to share information about the [brand name] automobile cooler fridge with someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q49.
Below are the various statements about [brand name]'s production of automobile cooler fridges as its new product. Please indicate how strongly you agree or disagree with these statements.									
	Strongly Disagree							Strongly Agree	
The automobile cooler fridge is similar to other products that [brand name] makes.	1	2	3	4	5	6			Q50.
The [brand name] and the automobile cooler fridge go together really well.	1	2	3	4	5	6			Q51.
The automobile cooler fridge is an integral part of the [brand name] brand family.	1	2	3	4	5	6			Q52.
The automobile cooler fridge is a natural extension for the [brand name].	1	2	3	4	5	6			Q53.
The automobile cooler fridge fits in well (has good fit) with the existing line of [brand name] products.	1	2	3	4	5	6			Q54.
Given the existing [brand name] products, it would be appropriate for [brand name] to introduce the automobile cooler fridge.	1	2	3	4	5	6			Q55.

NEW PRODUCT- DIGITAL SPHYGMOMANOMETER

Just presume that [brand name] is producing digital sphygmomanometers as its new product. Please choose the most appropriate number between the bipolar statements which are about [brand name]'s production of digital sphygmomanometers as its new product.									
How positive are you to the [brand name] digital sphygmomanometer?	Very Negative	1	2	3	4	5	6	Very Positive	Q56.
What attitude do you have towards [brand name] digital sphygmomanometer?	Certainly Dislike	1	2	3	4	5	6	Certainly Like	Q57.

What is your overall evaluation of the [brand name] digital sphygmomanometer relative to existing brands in the digital sphygmomanometer category?	One of the Worst	1	2	3	4	5	6	One of the Best	Q58.
How likely are you to buy the [brand name] digital sphygmomanometer the next time you buy a digital sphygmomanometer?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q59.
How willing are you to search the [brand name] digital sphygmomanometer?	Very Unwilling	1	2	3	4	5	6	Very Willing	Q60.
How likely are you to recommend the [brand name] digital sphygmomanometer to someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q61.
How likely are you to share information about the [brand name] digital sphygmomanometer with someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q62.
Below are the various statements about [brand name]'s production of digital sphygmomanometers as its new product. Please indicate how strongly you agree or disagree with these statements.									
		Strongly Disagree						Strongly Agree	
The digital sphygmomanometer is similar to other products that [brand name] makes.		1	2	3	4	5	6		Q63.
The [brand name] and the digital sphygmomanometer go together really well.		1	2	3	4	5	6		Q64.
The digital sphygmomanometer is an integral part of the [brand name] brand family.		1	2	3	4	5	6		Q65.
The digital sphygmomanometer is a natural extension for the [brand name].		1	2	3	4	5	6		Q66.
The digital sphygmomanometer fits in well (has good fit) with the existing line of [brand name] products.		1	2	3	4	5	6		Q67.

		Strongly Disagree						Strongly Agree	
Given the existing [brand name] products, it would be appropriate for [brand name] to introduce the digital sphygmomanometer.		1	2	3	4	5	6		Q68.
NEW PRODUCT-WRISTWATCH									
Just presume that [brand name] is producing wristwatches as its new product. Please choose the most appropriate number between the bipolar statements which are about [brand name]'s production of wristwatches as its new product.									
How positive are you to the [brand name] wristwatch?	Very Negative	1	2	3	4	5	6	Very Positive	Q69.
What attitude do you have towards [brand name] wristwatch?	Certainly Dislike	1	2	3	4	5	6	Certainly Like	Q70.
What is your overall evaluation of the [brand name] wristwatch relative to existing brands in the wristwatch category?	One of the Worst	1	2	3	4	5	6	One of the Best	Q71.
How likely are you to buy the [brand name] wristwatch the next time you buy a wristwatch?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q72.
How willing are you to search the [brand name] wristwatch?	Very Unwilling	1	2	3	4	5	6	Very Willing	Q73.
How likely are you to recommend the [brand name] wristwatch to someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q74.
How likely are you to share information about the [brand name] wristwatch with someone you know?	Very Unlikely	1	2	3	4	5	6	Very Likely	Q75.

Below are the various statements about [brand name]'s production of wristwatches as its new product. Please indicate how strongly you agree or disagree with these statements.

	Strongly Disagree						Strongly Agree	
The wristwatch is similar to other products that [brand name] makes.	1	2	3	4	5	6		Q76.
The [brand name] and the wristwatch go together really well.	1	2	3	4	5	6		Q77.
The wristwatch is an integral part of the [brand name] brand family.	1	2	3	4	5	6		Q78.
The wristwatch is a natural extension for the [brand name].	1	2	3	4	5	6		Q79.
The wristwatch fits in well (has good fit) with the existing line of [brand name] products.	1	2	3	4	5	6		Q80.
Given the existing [brand name] products, it would be appropriate for [brand name] to introduce the wristwatch.	1	2	3	4	5	6		Q81.

DEMOGRAPHICS

Gender	1> Female	2> Male		Q82.
Age				Q83.
Marital Status	1> Single 3> Married 5> Widowed	2> Living together 4> Divorced		Q84.
If married, for how many years?	 years			Q85.
Do you have children? If yes, how many?	 child/children 0> No child			Q86.
Number of people living at your household (including you)	 people			Q87.
Level of education (with respect to the latest degree achieved)	1> Literate 3> Secondary school 5> University	2> Primary school 4> High school 6> Graduate school		Q88.
Current working status	1> Wage earner 2> Self-employed 3> Unemployed/ job seeker 4> Housewife 5> Retired 6> Student 7> Cannot work because of old age or disability Other			Q89.

(For wage earners or self-employed people) What is your profession/ current working position?		 Q90.
Considering the sum of the incomes earned monthly by all members of your household, into which of the following income ranges does your average monthly household income fall?	1> 1000 TL or less	Q91.
	2> 1000-1999 TL	
	3> 2000-2999 TL	
	4>3000-3999 TL	
	5> 4000-4999 TL	
	6> 5000 TL or more	
Please state whether you have at your household the following consumer durable products and if you have, please name the brand for each product owned.		
Brand		
Refrigerator	1> No 2> Yes	 Q92.
Oven	1> No 2> Yes	 Q93.
Toaster oven	1> No 2> Yes	 Q94.
Dish washer	1> No 2> Yes	 Q95.
Washing machine	1> No 2> Yes	 Q96.
Television	1> No 2> Yes	 Q97.
Computer (desktop or laptop)	1> No 2> Yes	 Q98.
CD/DVD player	1> No 2> Yes	 Q99.
Automobile	1> No 2> Yes	 Q100.

THANK YOU FOR YOUR VALUABLE CONTRIBUTIONS.

NAME SURNAME

NEIGHBORHOOD

STREET

BUILDING NUMBER

FLAT NUMBER

OTHER

DISTRICT

HOME TELEPHONE NUMBER

CELL TELEPHONE NUMBER

APPENDIX C:
QUESTIONNAIRE IN TURKISH

 Boğaziçi Üniversitesi	Anket no	
	Anketör	
	Tarih	

MARKA ALGI ARAŞTIRMASI -EKİM 2009

Değerli katılımcı,

Bu anket çalışması Boğaziçi Üniversitesi İşletme Bölümü’nde yapılan bir araştırma kapsamında gerçekleştirilmektedir. Anketimiz yaklaşık 30 dakikanızı alacaktır. Sorularda açıklığa kavuşturulmasını istediğiniz herhangi bir nokta olursa lütfen çekinmeden sorunuz.

Bu ankete vereceğiniz cevaplar bilimsel açıdan çok değerli olacaktır. Ancak çalışmanın verimliliği için tüm soruları eksiksiz yanıtlamanız çok önemlidir. Paylaştığınız tüm bilgiler gizli tutulacak ve sadece akademik amaçla kullanılacaktır.

Katılımınız ve katkılarınız için teşekkür ederiz.

Araş. Gör. Esra Arıkan
Boğaziçi Üniversitesi
İşletme Bölümü
E-posta: esra.arikan@boun.edu.tr

[Marka adı]'nın yaratıcısı [markanın bağlı olduğu holdingin adı] Holding'in sizin gözünüzdeki imajı nedir? (İki uçlu sıfatların arasındaki numaralardan size en uygun geleni belirtiniz.)

İtibarı düşük	1	2	3	4	5	6	İtibarı yüksek	S1.
Profesyonel değil	1	2	3	4	5	6	Profesyonel	S2.
Başarısız	1	2	3	4	5	6	Başarılı	S3.
İstikrarsız	1	2	3	4	5	6	İstikrarlı	S4.
Kesinlikle güvenilirmez	1	2	3	4	5	6	Kesinlikle güvenilir	S5.
Müşterilerine kesinlikle ilgisiz	1	2	3	4	5	6	Müşterilerine kesinlikle ilgili	S6.

Aşağıda [marka adı] markası ile ilgili bazı ifadeler yer almaktadır. Lütfen bu ifadelere ne derece katıldığınızı söyleyiniz.

	Kesinlikle Katılmıyorum						Kesinlikle Katılıyorum	
[Marka adı] yüksek kalitede ürünler sunar.	1	2	3	4	5	6		S7.
[Marka adı] rakiplerine göre üstün ürünler sunar.	1	2	3	4	5	6		S8.
[Marka adı] markalı ürünlerin işçiliği oldukça yüksektir.	1	2	3	4	5	6		S9.
[Marka adı] markalı ürünlerin güvenilirliği ve dayanıklılığı oldukça yüksektir.	1	2	3	4	5	6		S10.
[Marka adı] çok sayıda değişik türde ürün yapar.	1	2	3	4	5	6		S11.
[Marka adı] oldukça kısıtlı ürün kategorisi anlamına gelir.	1	2	3	4	5	6		S12.
[Marka adı] geniş çaplı bir ürün yelpazesini temsil eder.	1	2	3	4	5	6		S13.
[Marka adı] markasının temsil ettiği ürün kategorileri birbirini tamamlar.	1	2	3	4	5	6		S14.
[Marka adı] markasının temsil ettiği ürün kategorileri birçok özellik paylaşır (birbirine benzerdir)	1	2	3	4	5	6		S15.
[Marka adı] markalı bir ürün alıyorsa, o ürünün kalitesi hakkında kesinlikle şüphe duymam.	1	2	3	4	5	6		S16.
[Marka adı] markasıyla sunulan farklı ürünler kalite açısından uyumludur.	1	2	3	4	5	6		S17.
[Marka adı] markasıyla sunulan ürünler öngörülebilir bir kalite seviyesindedir.	1	2	3	4	5	6		S18.

Aşağıda [marka adı] markası ile olan ilişkiniz hakkında bazı ifadeler yer almaktadır. Lütfen bu ifadelere ne derece katıldığınızı söyleyiniz.

	Kesinlikle Katılmıyorum						Kesinlikle Katılıyorum	
Bu marka hayatımda önemli bir rol oynar.	1	2	3	4	5	6		S19.
Eğer bu marka etrafta/ çevremde olmasaydı, hayatımda bir şeyler eksik olurdu.	1	2	3	4	5	6		S20.
Bu markayı her kullandığımda onu ne kadar sevdiğimi ve ona ne kadar ihtiyaç duyduğumu hatırlarım.	1	2	3	4	5	6		S21.
Bu markaya bazı açılardan bağımlıyım.	1	2	3	4	5	6		S22.
Bu markayı tekrar/yeniden kullanmaya gerçekten özlem duyduğum zamanlar oluyor.	1	2	3	4	5	6		S23.
Bu markaya çok sadığım.	1	2	3	4	5	6		S24.
İyi ve kötü zamanlarda/günlerde bu markayı kullanmaya devam edeceğim.	1	2	3	4	5	6		S25.
Bu markaya ruhen hep sadık kaldım.	1	2	3	4	5	6		S26.
Bu marka yaşamımda vazgeçilmez bir yere sahiptir.	1	2	3	4	5	6		S27.
Bu marka bana önemli ve değerli bir müşteri gibi davranır.	1	2	3	4	5	6		S28.
Bu marka bana sürekli bir ilgi/alaka gösterir.	1	2	3	4	5	6		S29.
Bu marka bana karşı her zaman iyi olmuştur.	1	2	3	4	5	6		S30.
Bu markaya itimat edilebilir.	1	2	3	4	5	6		S31.
Bu markayı gerçekten seviyorum.	1	2	3	4	5	6		S32.
Bu marka olduğum veya olmak istediğim insan hakkında çok şey söylüyor.	1	2	3	4	5	6		S33.
Bu marka bana kim olduğumu hatırlatıyor.	1	2	3	4	5	6		S34.
Bu markanın imajı ile benim kendim için arzuladığım imaj birçok yönden benzer.	1	2	3	4	5	6		S35.

	Kesinlikle Katılmıyorum							Kesinlikle Katılıyorum	
Bu marka bana hep hayatımın belli bir dönemini hatırlatır.	1	2	3	4	5	6		S36.	
Bu marka bana hayatımın önceki dönemlerinde nasıl olduğumu hatırlatıyor.	1	2	3	4	5	6		S37.	
Bu markayı kullanmak ile ilgili en az bir güzel anım var.	1	2	3	4	5	6		S38.	
Bu marka hakkında çok şey biliyorum.	1	2	3	4	5	6		S39.	
Bu markayı gerçekten anladığımı hissediyorum.	1	2	3	4	5	6		S40.	
Sanki bu markayı kendimi bildim bileli tanıyorum.	1	2	3	4	5	6		S41.	
Bu markayı üreten firma hakkında çok şey biliyorum.	1	2	3	4	5	6		S42.	

YENİ ÜRÜN-ARAÇ BUZLUĞU

Şimdi farz edin ki [marka adı] yeni bir ürün olarak araç buzluğu üretiyor olsun. [Marka adı]'nın yeni ürün olarak araç buzluğu (piknik tipi, seyyar buzluk) üretmesiyle ilgili sıralanan iki uçlu ifadelerin arasındaki numaralardan size en uygun geleni belirtiniz.									
[Marka adı] araç buzluğuna karşı yaklaşımınız ne kadar olumlu olur?	Çok olumsuz	1	2	3	4	5	6	Çok olumlu	S43.
[Marka adı] araç buzluğuna karşı tutumunuz nedir?	Kesinlikle sevmem	1	2	3	4	5	6	Kesinlikle severim	S44.
Araç buzluğu üreten diğer markaları düşündüğünüzde [marka adı] araç buzluğunun bu kategorideki durumunu nasıl değerlendirirsiniz?	En kötülerden biri olur	1	2	3	4	5	6	En iyilerden biri olur	S45.
Bir araç buzluğu almanız söz konusu olsa, [marka adı] araç buzluğu alma olasılığınız nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S46.

[Marka adı] araç buzluğunu arayıp bulmak için ne kadar istekli olursunuz?	Hiç istekli olmam	1	2	3	4	5	6	Çok istekli olurum	S47.
Tanıdığınız birine [marka adı] araç buzluğunu tavsiye etme ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S48.
Tanıdıklarınızla [marka adı] araç buzluğu hakkında bilgi paylaşma ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S49.
Aşağıda [marka adı] 'nın yeni ürün olarak araç buzluğu üretmesiyle ilgili çeşitli ifadeler yer almaktadır. Lütfen bu ifadelere ne derece katıldığınızı söyleyiniz.									
	Kesinlikle Katılmıyorum							Kesinlikle Katılıyorum	
Araç buzluğu, [marka adı] markalı diğer ürünlerle benzerlik göstermektedir.	1	2	3	4	5		6		S50.
Araç buzluğu, [marka adı] markasına yakışır (markasıyla iyi giden) bir üründür.	1	2	3	4	5		6		S51.
Araç buzluğu, [marka adı] ailesinin bir parçası gibidir.	1	2	3	4	5		6		S52.
Araç buzluğu, [marka adı] ailesi için doğal bir ek ürün sayılır.	1	2	3	4	5		6		S53.
Araç buzluğu, mevcut [marka adı] markalı ürünlerle uyumludur.	1	2	3	4	5		6		S54.
[Marka adı] markalı ürünler düşünüldüğünde [marka adı] 'nın araç buzluğu üretmesi uygundur.	1	2	3	4	5		6		S55.
YENİ ÜRÜN- DİJİTAL TANSİYON ALETİ									
Şimdi farz edin ki [marka adı] yeni bir ürün olarak dijital tansiyon aleti üretiyor olsun. Aşağıda [marka adı] 'nın yeni ürün olarak dijital tansiyon aleti üretmesiyle ilgili sıralanan iki uçlu ifadelerin arasındaki numaralardan size en uygun geleni belirtiniz.									
[Marka adı] dijital tansiyon aletine karşı yaklaşımınız ne kadar olumlu olur?	Çok olumsuz	1	2	3	4	5	6	Çok olumlu	S56.

[Marka adı] dijital tansiyon aletine karşı tutumunuz nedir?	Kesinlikle sevmem	1	2	3	4	5	6	Kesinlikle severim	S57.
Dijital tansiyon aleti üreten diğer markaları düşündüğünüzde, [marka adı] dijital tansiyon aletinin bu kategorideki durumunu nasıl değerlendirirsiniz?	En kötülerden biri olur	1	2	3	4	5	6	En iyilerden biri olur	S58.
Bir dijital tansiyon aleti almanız söz konusu olsa, [marka adı] dijital tansiyon aleti alma olasılığınız nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S59.
[Marka adı] dijital tansiyon aletini arayıp bulmak için ne kadar istekli olursunuz?	Hiç istekli olmam	1	2	3	4	5	6	Çok istekli olurum	S60.
Tanıdığınız birine [marka adı] dijital tansiyon aletini tavsiye etme ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S61.
Tanıdıklarınızla [marka adı] dijital tansiyon aleti hakkında bilgi paylaşma ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası	S62.
Aşağıda [marka adı] 'nın yeni ürün olarak dijital tansiyon aleti üretmesiyle ilgili çeşitli ifadeler yer almaktadır. Lütfen bu ifadelere ne derece katıldığınızı söyleyiniz.									
	Kesinlikle Katılmıyorum							Kesinlikle Katılıyorum	
Dijital tansiyon aleti, [marka adı] markalı diğer ürünlerle benzerlik göstermektedir.	1	2	3	4	5	6			S63.
Dijital tansiyon aleti, [marka adı] markasına yakışır (markasıyla iyi giden) bir üründür.	1	2	3	4	5	6			S64.
Dijital tansiyon aleti, [marka adı] ailesinin bir parçası gibidir.	1	2	3	4	5	6			S65.
Dijital tansiyon aleti, [marka adı] ailesi için doğal bir ek ürün sayılır.	1	2	3	4	5	6			S66.

	Kesinlikle Katılmıyorum						Kesinlikle Katılıyorum	
Dijital tansiyon aleti, mevcut [marka adı] markalı ürünlerle uyumludur.	1	2	3	4	5	6		S67.
[Marka adı] markalı ürünler düşünüldüğünde [marka adı] 'nın dijital tansiyon aleti üretmesi uygundur.	1	2	3	4	5	6		S68.

YENİ ÜRÜN-KOL SAATİ

Şimdi farz edin ki [marka adı] yeni bir ürün olarak kol saati üretiyor olsun. Aşağıda [marka adı] 'nın yeni ürün olarak kol saati üretmesiyle ilgili sıralanan iki uçlu ifadelerin arasındaki numaralardan size en uygun geleni söyleyiniz.								
[Marka adı] kol saatine karşı yaklaşımınız ne kadar olumlu olur?	Çok olumsuz	1	2	3	4	5	6	Çok olumlu S69.
[Marka adı] kol saatine karşı tutumunuz nedir?	Kesinlikle sevmem	1	2	3	4	5	6	Kesinlikle severim S70.
Kol saati üreten diğer markaları düşündüğünüzde, [marka adı] kol saatinin bu kategorideki durumunu nasıl değerlendirirsiniz?	En kötülerden biri olur	1	2	3	4	5	6	En iyilerden biri olur S71.
Bir kol saati almanız söz konusu olsa, [marka adı] kol saati alma olasılığınız nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası S72.
[Marka adı] kol saatini arayıp bulmak için ne kadar istekli olursunuz?	Hiç istekli olmam	1	2	3	4	5	6	Çok istekli olurum S73.
Tanıdığınız birine [marka adı] kol saatini tavsiye etme ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası S74.
Tanıdıklarınızla [marka adı] kol saati hakkında bilgi paylaşma ihtimaliniz nedir?	Hiç olası değil	1	2	3	4	5	6	Çok olası S75.

Aşağıda [marka adı] 'nın yeni ürün olarak kol saati üretmesiyle ilgili çeşitli ifadeler yer almaktadır. Lütfen bu ifadelere ne derece katıldığınızı söyleyiniz.

	Kesinlikle Katılmıyorum						Kesinlikle Katılıyorum	
Kol saati, [marka adı] markalı diğer ürünlerle benzerlik göstermektedir.	1	2	3	4	5	6		S76.
Kol saati, [marka adı] markasına yakışır (markasıyla iyi giden) bir üründür.	1	2	3	4	5	6		S77.
Kol saati, [marka adı] ailesinin bir parçası gibidir.	1	2	3	4	5	6		S78.
Kol saati, [marka adı] ailesi için doğal bir ek ürün sayılır.	1	2	3	4	5	6		S79.
Kol saati, mevcut [marka adı] markalı ürünlerle uyumludur.	1	2	3	4	5	6		S80.
[Marka adı] markalı ürünler düşünüldüğünde [marka adı] 'nın kol saati üretmesi uygundur.	1	2	3	4	5	6		S81.

DEMOGRAFİK BİLGİLER

Cinsiyet	1> Kadın	2> Erkek		S82.
Yaşınız				S83.
Medeni durumunuz	1> Bekar 3> Evli 5> Dul	2> Birlikte yaşıyor 4> Boşanmış		S84.
EVLİ İSE Kaç yıllık evlisiniz?	 yıl			S85.
Çocuğunuz var mı? Varsa kaç tane?	 çocuk 0> Çocuğu yok			S86.
Hanenizde siz dahil kaç kişi yaşıyorsunuz?	 kişi			S87.
Eğitim durumunuz (son mezun olduğunuz okula göre):	1> Okuryazar 3> Ortaokul/İlköğretim 5> Üniversite	2> İlkokul 4> Lise 6> Lisansüstü		S88.
Mevcut çalışma durumunuz	1> Ücretli çalışıyor 2> Kendi hesabına çalışıyor 3> İşsiz-iş arıyor 4> Ev kadını 5> Emekli 6> Öğrenci 7> Yaşlılık veya engeli nedeniyle çalışmıyor Diğer.....			S89.

Mesleğiniz/çalıştığınız yerdeki görev pozisyonunuz nedir?		S90.
Hanenize giren tüm gelirleri	1> 1000 TL'den az	S91.
düşündüğünüzde yaklaşık aylık	2> 1000-1999 TL	
hane gelirinüz hangi aralıkta yer	3> 2000-2999 TL	
almaktadır?	4> 3000-3999 TL	
	5> 4000-4999 TL	
	6> 5000 TL ve üzeri	
Şimdi size sayacağım dayanıklı tüketim ürünlerin hanenizde bulunup bulunmadığını, varsa markasını söyler misiniz?		
Markası		
Buzdolabı	1> Yok 2> Var	S92.
Ocaklı Fırın	1> Yok 2> Var	S93.
Mini fırın	1> Yok 2> Var	S94.
Bulaşık makinesi	1> Yok 2> Var	S95.
Otomatik çamaşır makinesi	1> Yok 2> Var	S96.
Televizyon	1> Yok 2> Var	S97.
Bilgisayar (masaüstü veya dizüstü)	1> Yok 2> Var	S98.
CD/DVD oynatıcı	1> Yok 2> Var	S99.
Araba	1> Yok 2> Var	S100.

DEĞERLİ KATKILARINIZ İÇİN TEŞEKKÜR EDERİZ.

ADI SOYADI

MAHALLE

SOKAK-CADDE

BİNA NO

KAPI NO

DİĞER

İLÇE

EV TELEFONU

CEP TELEFONU

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