INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®
Competitive Effects on The Evaluation of Brand Extensions

By
Harish Kapoor
(BA, MBA, MMS)
PhD Candidate (Management)
Eric Sprott School of Business
Carleton University

A Dissertation Submitted to
The Faculty of Graduate Studies and Research
In Partial Fulfillment of
The requirement for the degree of
Doctor of Philosophy (Management)

Eric Sprott School of Business
Faculty of Public Affairs and Management
Carleton University
Ottawa, Ontario, K1S 5B6

Copyright © Harish Kapoor
June 2005
NOTICE:
The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.
Abstract

This research examined the influence of competition on the evaluation of brand extensions. Previous research on the brand extension evaluation has primarily focused on product and/or brand attributes with some emphasis on consumer decision making, while ignoring product competition and category structure. Product and brand attributes are important variables, but when examined in isolation from competition they are unlikely to provide a complete picture of the extension evaluation process, since consumers usually do not operate in a vacuum where competitive forces do not exist. In some cases where brand extensions introduce new categories, the impact of direct competition may be minimal. However, in the present competitive landscape where product life cycles are short and competitive pressures strong, any new category established through a brand extension is unlikely to remain without competition for long.

Based on literature from categorization, consumer behavior and marketing strategy, a series of relationships were hypothesized to determine the effects of competition on the evaluation of brand extensions. The moderating roles of consumer knowledge, target category structure, and provision and format of competitive information were investigated. A series of three experiments was conducted to test the hypotheses. The results of the experiments demonstrated that competition significantly affects the evaluation of brand extensions. The results of the experiment 1-a & b indicate that competitive interference is present in a number of different contexts even when an extension is seen as a logical step to enter market entry. Results also indicate that consumers who possess higher knowledge of the target category are particularly sensitive to the presence of competition even if the parent brand is highly familiar to them.

The second experiment built on the findings from the first experiment and examined the provision of category structure on the extensions evaluation outcome. The results show that providing category structure results in higher competitive effects. Finally, the third experiment was conducted to examine whether goal-deriven or taxonomic categorization of a brand extension would be more affected by the competition. Contrary to the hypothesized relationship, the findings fail to indicate any difference between the two types of categorization.
Acknowledgements

karmany evadhikaras te,
ma phalesu kadacana
ma karma-phala-hetur bhur
ma te sango' s tv akarmani
-- (Shri Bhagvad Gita, 2:47)

(You have a right to perform your prescribed duty, but you are not entitled to the fruits of action. Never consider yourself the cause of results of your activities, and never be attached to not doing your duty)

I have been fortunate to be associated with a number of wonderful individuals from whom I have benefited immensely throughout my years as a doctoral student. They have enriched my life in so many different ways and I owe them my sincere gratitude. I want to begin by thanking the Sprott School of Business for providing me with the conducive environment and various opportunities to support me as a doctoral student.

I owe a special thanks to Prof. Louise Heslop for her role as my friend, mentor, and, sometimes, as a thesis supervisor. Her constant encouragement and willingness to share ideas generously, regardless of time and place guided the development of this dissertation.

I have had the privilege of working with Drs. Judith Madil and Alex Ramirez on my dissertation committee and benefiting from their insights. I am also deeply grateful to Profs. George Haines and Roland Thomas who were generous with their time in bringing clarity to my thinking on various issues.

My wife and my mother provided me with unfailing support during thick and thin. I thank and appreciate my sisters who assumed most of my responsibilities to look after our parents in my absence. This dissertation is dedicated to the memory of my late father - a kind and loving man who always believed in me and inspired me to fulfill my dreams.

Tanya and Tyreen – Wind Beneath My Wings
Table of Contents

LIST OF TABLES .................................................................................................................. VII

TABLE OF FIGURES ............................................................................................................. VIII

1 INTRODUCTION ................................................................................................................ 1

1.1 WHAT IS A BRAND EXTENSION? .................................................................................. 1

1.2 BENEFITS OF BRAND EXTENSIONS ......................................................................... 4

1.3 RESEARCH IN BRAND EXTENSIONS ......................................................................... 6

2 LITERATURE REVIEW ................................................................................................... 8

2.1 EVALUATION OF BRAND EXTENSIONS .................................................................. 8

2.2 EVALUATION OF BRAND EXTENSIONS AND ATTITUDE TRANSFER ......................... 9

2.2.1 The Categorization Process and Measures of Fit ...................................................... 14

2.3 PRODUCT-CATEGORY FIT AND EVALUATION OF BRAND EXTENSIONS ............... 16

2.3.1 Multiple Brand Extensions and Extension Evaluation .............................................. 20

2.3.2 Parent Brand Characteristics and Extensions Evaluation ......................................... 21

2.3.3 Brand Concept Consistency and Extensions Evaluation .......................................... 23

2.3.4 Relative Importance of Fit Measures ......................................................................... 27

2.3.5 Degree of Fit and Extensions Evaluation .................................................................. 29

2.3.6 Key Moderating Variables and Evaluation of Brand-Extension ............................... 31

2.3.6.1 Consumers Characteristics ..................................................................................... 32

2.3.6.2 Pricing and Price Promotions .................................................................................. 34

2.3.6.3 Advertising .............................................................................................................. 36

2.3.6.4 Corporate Image ..................................................................................................... 38

2.3.7 Reciprocal Impact of Brand Extensions on the Parent Brand .................................. 39

2.4 CONCLUSION ................................................................................................................. 44

3 RESEARCH DIRECTION, FRAMEWORK, AND HYPOTHESES ...................................... 48

3.1 RESEARCH DIRECTION ............................................................................................. 48

3.2 RESEARCH FRAMEWORK - COMPETITION AND THE EVALUATION OF BRAND EXTENSIONS ........................................................................................................... 54

3.2.1 Product Markets and Levels of Competition ............................................................ 55

3.2.2 Product Markets, Levels of Competition and Product Positioning .......................... 59

3.3 DEVELOPMENT OF HYPOTHESES ........................................................................... 61

3.3.1 Market Structure and Evaluation of Brand Extensions .............................................. 61

3.3.2 Consumer Knowledge and Evaluation of Brand Extensions .................................... 64

3.3.3 Competition Intensity on the Evaluation of Brand Extensions .................................. 65

3.3.4 Provision of Category Structure and Evaluation of Brand Extensions .................... 68

3.3.5 Categorization and Evaluation of Brand Extensions ................................................ 70

4 RESEARCH DESIGN, DATA COLLECTION AND ANALYSIS ........................................... 75

4.1 RESEARCH DESIGN - AN EXPERIMENTAL STUDY .................................................. 75

4.2 STUDENT SAMPLE ......................................................................................................... 76

4.3 QUESTIONNAIRES ......................................................................................................... 77

4.4 BRAND REPLICAES ...................................................................................................... 77

4.4.1 Pre-Test 1 .................................................................................................................. 78

4.4.2 Pre-Test 2 .................................................................................................................. 79

4.4.3 Pre-Test 3 .................................................................................................................. 79

4.4.4 Experiment 1 ............................................................................................................. 83

4.4.4.1 Research Design ..................................................................................................... 83

4.4.5 Experiment 1-a ......................................................................................................... 85

4.4.5.1 Independent Variables .......................................................................................... 85

4.4.5.1.1 Competition ......................................................................................................... 85

4.4.5.1.2 Brand Dominance .............................................................................................. 85
# List of Tables

1. **Brand Extension Evaluation Research: Key Areas** ................................................................. 11
2. **Questionnaire Scales and Measures** .................................................................................. 77
3. **Product Category Familiarity, Major Brands and Category Competitiveness** .................. 80
4. **Proposed Brand Extensions and Fit Ratings** ................................................................. 81
5. **Competitive Effects – Experiment 1-A** ........................................................................... 90
6. **Category Knowledge Effects – Experiment 1-A** ............................................................. 91
7. **Category Dominant Brand Effects – Experiment 1-A** ........................................................ 92
8. **Category Competitive Effects – Experiment 1-B** ........................................................... 99
9. **Category Dominant Brand Effects – Experiment 1-B** ...................................................... 99
10. **Relative Brand Strength Ratings – Experiment 1-A & B** .................................................. 108
11. **Major Product Subcategories – Experiment 2** ............................................................... 112
12. **Competitive Effects – With/Without Category Structure** ............................................... 115
13. **Category Competitive Effects – Experiment 2** ............................................................... 116
14. **Competitive Effects – Mean Brand Ratings** .................................................................. 118
15. **Brand Extension Core Benefits – Experiment 3** ............................................................. 124
16. **Competitive Effects – Experiment 3** ............................................................................. 127
Table of Figures

1. BRAND EXTENSION EVALUATION PROCESS – AN INTEGRATED MODEL ........................................49
1 Introduction

This chapter provides an introduction and background to the topic of brand extensions as well as an overview of the organization of this document.

1.1 What is a Brand Extension?

At the very minimum, branding is the practice of assigning a name, logo, sign or a term to a product. Specifically, according to American Marketing Association a brand is:

"A name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition."

(American Marketing Association 2004).

This definition of branding suggests that brands not only serve identification purposes, but also create competitive advantage. A brand name also provides customers with a sense of product quality and standardization, therefore, significantly aiding customers in their purchase decisions. However, branding is much more than a sign, symbol and a logo and a clear understanding of its scope is essential. Keller emphasizes that the scope of branding is much wider and brand awareness and associations should be created based on a firm's strategic goals rather than limiting it to a symbol or a logo.

"... defining a brand in terms of having actually created a certain amount of awareness, reputation, prominence, and so on in the marketplace. In some sense, a distinction can be made between the AMA definition of a "small-b brand" and the industry practice of a "big-b brand." (Keller 2003, p. 3)."
Branding is an important managerial activity that is undertaken to systematically create consumer awareness about the brand, its benefits and certain associations and differentiate it from the competition. Brands are important assets that any organization, regardless of its purpose, can have. In some cases, the value of a brand can constitute a large portion of a company’s book value. For example, the market capitalization of the Coca Cola Company as of early 2004 was approximately $120 billion, out of which $70 billion was its brand value (Businessweek 2004). Similarly, Cadbury-Schweppes paid $220 million to purchase “Hires” and “Crush” product lines from Procter & Gamble, out of which approximately 90% of the total price was attributed to brand assets (Kamakura and Russell 1991).

New product development and introduction is one of the most expensive business undertakings with high failure rates. The cost estimates of a new product development and introduction vary depending on the type of product. Keller (2003) estimates that it costs somewhere between $30-$80 million to introduce a new grocery product. The development costs for some consumer goods can be significantly higher. For example, it is estimated that Gillette Mach 3 was developed and launched at an estimated cost of $1 billion (www.boston.com).

Besides product development costs, marketing a new product requires substantial planning and associated costs. Branding is one of the key considerations during the new product introduction stage and requires the choice of one of the three alternatives (1)
develop a new brand, (2) apply an existing brand; or (3) a combination of the above two strategies (Keller 2003).

In order to minimize the risks associated with developing and marketing a new brand, a business may decide to rely on its existing brand to introduce a new product, thereby, capitalizing on its existing brand equity. 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 \textit{brand extension} or a \textit{line extension}. It is important to distinguish between the two: A line extension is the use of an existing brand name in the same product category (Aaker and Keller 1990). Examples of line extensions include Cherry Coke, Liquid Ivory, Kodak Gold Films, and Kraft Light Cheese. When a brand name is used to enter a new product category, the strategy is called brand extensions. Examples of brand extensions are Dell TVs and Sony computers.

Given numerous financial and marketing benefits, brand and line extensions have been extensively used as a key growth strategy in a number of industries (Aaker 1990). In the year 2000, a total of 31,432 new consumer packaged goods were introduced in the US market alone, which is about 21% higher than the number of new consumer packaged goods introduced in 1999 (Marketing Intelligence Service 2001). It has been estimated that on average 95% of new product introductions are line or brand extensions (Aaker 1991).
1.2 Benefits of Brand Extensions

The motivation underlying the introduction of a brand extension is to capitalize on the equity that a brand has accrued over time. Therefore, brand equity must be understood in the context of brand extension evaluations. A number of definitions of brand equity have been proposed some of which are based on the strategic marketing perspective, (e.g, Aaker 1991, 1996; and Keller 1993), whereas others are motivated by financial theories. Aaker’s definition is:

"Brand equity is a set of assets/liabilities associated with a brand such as name awareness, loyal customers, perceived quality, and associations that are linked to the brand that add/subtract value to the product or service being offered" (Aaker 1996, p. 7).

However, Keller (1993) defines brand equity based on customers’ perceptions of the brand, therefore, called customer-based brand equity:

"The differential effect of brand knowledge on consumer response to the marketing of the brand," (Keller 1993, p. 2).

Brand equity as defined above has far reaching consequences for marketers and can guide a firm’s growth strategy in the long run. A growth strategy rooted in a firm’s brand equity can also result in marketing efficiencies. For example, the most important predictors of trial purchase for a new product are the familiarity with the brand name and the level of promotion used. Both these variables have more impact than distribution, packaging, and brand awareness achieved by advertising (Aaker 1990). In virtually all tests of new product concepts, an established brand name greatly enhances the initial reaction, interest, and willingness to consider the product (Aaker 1990). Specifically, strong brand equity helps firms in reducing the marketing costs associated with the
introduction of a new product support a higher price, resulting in increased profitability.

In a study of 98 consumer brands Sullivan (1990), found that firms with successful brand extensions spent less on advertising than did comparable new-name brands.

A strong brand also results in increased customer loyalty leading to higher profits for a firm, since it has been documented that retaining existing customers is more cost efficient than attracting new ones (Aaker 1992). A strong brand name attached to a new product assures the prospective buyer and helps reduce the uncertainty that the firm is reliable and will be there to support its offerings (Aaker 1990). Also, an extension can help strengthen the original brand by creating awareness among a new group of customers.

Given the benefits a firm can derive from strong brand equity, brand extensions are becoming increasingly popular in the highly competitive marketplace with ever increasing costs new product introductions.

However, the brand extension strategy is not without drawback. A poorly executed brand extension strategy can result in damaging brand and corporate associations that can hurt a firm in numerous ways (Ries and Trout 1986, Loken and Roedder-John 1993). An extension of a reputed brand name does not guarantee success when prospective customers perceive that the use of the established name does not add value to the product. Instead, customers may see such brand extensions as an exploitative strategy. The premium brand name given to an ordinary product may cause trivialization of the brand, and customers may feel that the name adds nothing but increased price (Aaker and Keller 1990). A failed brand extension may hurt not only the extension but also the core brand
if the extension is perceived as incompatible with the core brand. For example, Levi Strauss and Co. introduced the Levi Tailored Classics, a line of men's suits sold as separates. However, the brand name Levi did not fit the concept of quality tailored suits because of its strong associations with casual living and rugged material. At the same time, brand extensions may prevent businesses from creating and establishing new brand names in the market resulting in missed opportunities to build new brands (Aaker 1990).

1.3 Research in Brand Extensions

Given the importance of brands and the strategy of brand extensions, marketing scholars have extensively examined various aspects of brand extension strategy for more than a decade (see Appendix A for a summarized list of research studies). Using categorization as a theoretical framework, a number of empirical studies have been conducted contributing substantially to the domain of brand marketing. However, most of these research efforts have been concentrated on understanding the role of fit between a brand and its extensions, that is, why some brand extensions succeed while others do not. This overemphasis on research in examining the fit has come at the cost of ignoring other important issues related to fully understanding the process of extension evaluation.

The marketing strategy formulation is a complex and dynamic process that simultaneously considers numerous factors related to price, promotion, distribution and competition. Though it is difficult to examine all these factors concurrently in a given context, the current research attempted to fill one particularly important gap regarding the impact of competition on the evaluation of brand extensions.
The remainder of this document is organized as follows. The Chapter 2 reviews the literature on brand extension evaluations in order to identify areas of research that were covered in the present research. Based on the review in Chapter 2, the next chapter develops a research direction, framework and hypotheses. The fourth chapter builds on the discussions in Chapters 3 and 4 leading to the development of hypotheses. Chapter 5 discusses the data collection process and tests of the hypotheses, and discussion of the results. The last chapter, Chapter 6, concludes with theoretical and managerial implications of the research findings, as well as, identification of areas for future research.
2 Literature Review

2.1 Evaluation of Brand Extensions

The role and importance of branding has been recognized since the days of pre-industrial revolution. There is evidence that businesses in the eighteenth and the nineteenth century actively undertook branding activities to establish themselves and sell their offerings competitively (Koehn 2001). Modern marketers have displayed an even greater interest in branding from both demand and supply side perspectives. The nature and role of branding has been systematically examined beginning in the 1940s and the 50s (Banks 1950; Brown 1950; Gardner and Levy 1955; Tyler 1957; Wolfe 1942). The moderate interest in the study of branding continued in the sixties and seventies resulting in the topic becoming one of the most widely researched in the eighties and nineties (Ries and Trout 1986; Boush et al 1987; Tauber 1988; Aaker 1990, 1991; Keller 1993; Dacin and Smith 1994; Dawar 1996; Milberg et al 1997; Sheinin 1998, among others). The renewed interest in branding in the 1980s and 1990s was in part due to changed market conditions in which national brands lost markets to private brands, thus, creating managerial and academic interest in studying brand extensions (Tamilia et al 2000). As indicated earlier, given the immense expense and risk associated with introducing a new product in the market, businesses rely on extending their existing, well established brands to grow their businesses and enter new product markets. It is important for marketers to understand how brand extensions work, especially from the consumers’ perspective, that is, what are the underlying decision mechanisms that consumers undertake to evaluate a brand extension, and what factors affect this process.
Aaker and Keller (1990) suggest that brand extensions work when (1) consumers hold positive beliefs and favorable attitudes toward the core brand, (2) these positive beliefs and attitudes can be transferred to brand extensions, and (3) negative associations are neither created nor transferred to the proposed brand extensions. However, the three conditions set by Aaker and Keller (1990) do not capture the intricacies involved in the brand choice process and its context. A review of the literature on branding in the following sections suggests that the process of brand extension evaluation is affected by a number of factors, including, product, firm, market, and individual specific characteristics. These factors are important considerations because, even if all the three assumptions set by Aaker and Keller are met, the brand extension may still not be successful in the market because of the impact of the contextual factors. Given this background, two questions are of interest here, (1) what is the underlying process of brand extension evaluation and attitude transfer from the parent brand to the extension, and (2) what factors affect the transfer of attitude from the parent brand to the extension.

The next section examines the process of attitude transfer followed by the factors that affect the extension evaluation process.

2.2 Evaluation of Brand Extensions and Attitude Transfer

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. Though important how attitudes are formed, the key concern here is to understand how attitude is transferred from an existing brand to its extension(s) in a different category and what factors affect this transference. Some of the processes of attitude transfer that have been examined in the context of brand extension evaluation are, semantic generalizations (Kerby 1967); affect generalization (Boush et al 1987; Boush and Loken 1991); and categorization and schema congruency theories (Boush et al 1987, Aaker and Keller 1990, Bridges 1990). Categorization and schema congruency are the most widely applied theoretical frameworks to explain the process of attitude transfer in the evaluation of brand extensions.

Additionally, a number of other important factors that moderate the attitude transfer process have been identified and researched, such as, parent brand portfolio or the number and types of products associated with the parent brand, consumer characteristics, the corporate image, and marketing mix variables, i.e., price, promotion, and positioning of the brand extensions. Table 1 presents a list of key studies that have examined how attitude transfers occurs in evaluating brand extensions and the factors that moderate this process.

Very limited research (e.g. Kerby 1967) has examined the role of semantic generalization in the process of attitude transfer from a brand to an extension. Semantic generalization is informed by research in psycholinguistics (Osgood 1963), which states that two objects
can be judged similar, regardless of their physical differences, if they carry a similar name. Based on this, Kerby (1967) hypothesized that:

"... meaning should be transferred between two or more products that are physically dissimilar, if they share a common brand name." (p. 314)

Table 1

Brand Extension Evaluation Research: Key Areas

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Research Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Attribute Based Brand-Category Fit</td>
<td>Boush et al (1987); Aaker and Keller (1990); Chakaravarti et al (1990); Boush and Loken (1991);</td>
</tr>
<tr>
<td>Parent Brand-Extension Concept Consistency</td>
<td>Park et al (1991); Broniarczyk and Alba (1994); Herr et al (1996); Martin and Stewart (2001);</td>
</tr>
<tr>
<td>Multiple Brand Extensions and Extension Evaluation</td>
<td>Keller and Aaker (1992); Dawar and Anderson (1994);</td>
</tr>
<tr>
<td>Parent Brand Portfolio and Extension Evaluation</td>
<td>Rangaswamy et al (1993); Dacin and Smith (1994); Dawar (1996);</td>
</tr>
<tr>
<td>Consumer Mood, Knowledge, Expertise and Extension Evaluation</td>
<td>Broniarczyk and Alba (1994); Gaeff (1996), Barone et al (2000);</td>
</tr>
<tr>
<td>Pricing and Extension Evaluation</td>
<td>Ragubir and Korfman (1999); Suri et al (2000); Jun et al (2004);</td>
</tr>
<tr>
<td>Promotion, Advertising, Corporate Image and Extension Evaluation</td>
<td>Gaeff (1996); Han and Schmitt (1996); Pryor and Brodie (1998); Bridges et al (2000); Lane (2000); Ruyter and Wetzel (2000); Zhang and Sood (2002);</td>
</tr>
<tr>
<td>Brand Positioning and Extension Evaluation</td>
<td>Han (1998); Sheinin (1998); Maoz and Tybout (2002);</td>
</tr>
</tbody>
</table>

Contrary to the hypothesis, the results of the study by Kerby (1967) failed to show affect 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 and disregards the role of brand affect and fit. Most research on the evaluation of brand extensions has provided strong evidence that extension evaluation is a much more
complex process where depending on a brand, individuals engage in a variety of processes.

Another process of attitude transfer, affect generalization from the 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 has been 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 the 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 extensions.

"The greater the similarity of the new product to the existing product, the greater the transfer of positive or negative affect to that product." (Boush et al 1987, p. 234)

Boush and Loken (1991) further demonstrate that not only the transfer of affect is impacted by similarity judgments, but also results in a varying underlying attitude transfer process.

"Moderately typical extensions were evaluated in a more piecemeal and less global way that were either extremely typical or extremely atypical extensions. Subjects' attitude toward brand extensions were correlated highly with their ratings of brand extensions typicality." (Boush and Loken 1991, p. 16)
Finally, the categorization theories have been most widely used by the brand researchers to understand and explain the process of attitude transfer from a brand to its extension. The extension evaluation research based on categorization theory suggests that consumers evaluate an extension favorably if the parent brand and the brand extension “fit” with each other. A number of fit measures have been suggested that would enhance the favorable evaluation of a brand extension. These measures of fit vary from fit based on a product’s physical attributes (Aaker and Keller 1990, Keller and Aaker 1992) to brand concept consistency (Park et al 1991; Broniarczyk and Alba 1994). The appropriateness of each type of fit measure has been extensively debated and examined in the marketing literature in a variety of contexts using a diverse range of brands. Despite a lack of agreement as to which measure of fit is more important, there is a consensus among marketing scholars that a positive “fit” between a brand and its extension enhances the evaluation of brand extensions.

The measures of fit used to understand the attitude transfer process have been adapted from theories on categorization. Therefore, before proceeding to review and discuss the literature on the evaluation of brand extensions, the next section briefly describes major developments in the categorization literature that form the bases for the process of attitude transfer from a parent brand to its extension.
2.2.1 The Categorization Process and Measures of Fit

Categorization involves the process of classifying objects and drawing inferences about them. Categories provide a mechanism to treat different objects/events equivalently.

"A category exists whenever two or more distinguishable objects or events are treated equivalently." (Mervis and Rosch 1981, P. 89)

Categories 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 we do not have to remember details of each and every category member individually; instead we can generalize about the category, thus, leading to cognitive economy (Medin 1989). Second, using our knowledge about categories we can draw inferences about the new instances of the category and make predictions about them. That is, categorization helps transfer and apply the knowledge associated with a category to draw inferences about instances of a category. There are three major theoretical perspectives on how categories are formed, each with a different set of assumptions: These are “the classical,” “the probabilistic or similarity-based,” and “the theory-based.”

The classical view of categorization is based on strict assumptions that assumes equality of all category members and does not account for non-equal members. This view also assumes that categories have clear boundaries with minimal within-category variation and large between-category differences. Categories are rarely composed of objects that are equal to each other. In most categories some members are more typical of a category than other members. In some instances a particular object can be classified in more than
one category (fuzzy categories), thus giving rise to the criticism against the classical view of categorization that it does not adequately explain the process of categorization.

The probabilistic view is more flexible than the classical view as the latter relies heavily on the notion of attribute similarity giving rise to an hierarchy variously termed as "goodness," "prototypicality or typicality," or "graded structure." The notion of similarity or *family resemblance* (Wittgenstein 1953) can accommodate instances into a category that do not possess defining attributes. However, in the probabilistic view of categorization there has been unduly heavy emphasis on attribute similarity to the point that similarity on non-relevant product attributes can create meaningless categories. This necessitates the need to put constraints on categories attributes. Though more appealing than the classical view, the probabilistic view of categorization is not without shortcomings, and this has prompted researchers to further explore other bases for categorization. Key criticisms against the probabilistic view of categorization are that the graded structure is not context independent and there is no *a priori* knowledge of the similarity attributes and their relative importance (Medin 1989).

It has been argued that coherence may be obtained in the absence of attribute similarity and that, "*similarity is neither necessary nor sufficient to determine category membership*" (Rips 1989). Individuals can form categories of diverse objects around a goal (Barsalou 1982, 1985) and find similarity among eclectic objects based on their background knowledge. "Concepts are coherent to the extent that they fit people’s background knowledge or naïve theories about the world" (Murphy and Medin 1985). The goal-deriven or theory/knowledge-based categorization helps create categories of
items that may have little or nothing in common with each other in terms of product attributes. The notion that individuals hold background knowledge provides flexibility and cohesiveness to categories.

Researchers in marketing have extensively relied on the categorization theories to better understand why some brand extensions succeed and others fail. The following sections in the remaining part of this chapter review the theoretical developments in marketing related to the role of fit in evaluating brand extensions. Appendix A presents a summary of empirical studies on extension evaluation and the measures of fit used in each.

2.3 Product-Category Fit and Evaluation of Brand Extensions

In one of the earliest attempts, commonly known as the University of Minnesota Consumer Behavior Seminar, Boush and his colleagues (1987) investigated the evaluation of brand extensions and the role of brand-category fit. They systematically manipulated affect toward the parent brand (in terms of product quality) and similarity between the parent brand and its extension. The results of their research indicated that if the parent brand and the extension were similar, the affect transfer from the parent brand to its extensions was direct and positive.

"The greater the similarity of the new product to the existing product, the greater the transfer of positive or negative affect to the new product." (Boush et al 1987, p. 234)

Similarity played such a strong role in Boush et al's (1987) research that a favorable attitude towards the parent brand resulted in negative evaluations of the extension if the
extension was perceived to be dissimilar from the parent brand. Aaker and Keller (1990) through two experimental studies put forward an explanation similar to that of Boush et al’s (1987), that:

"The relationship between positive quality image and that of its extension was strong only when there was a fit between the two."

(Aaker and Keller 1990, p. 38)

The findings from the two studies discussed above point to a process of attitude transfer mediated by fit judgments. It is important to the success of a brand extension to determine which measures of fit would be more or less useful in successfully transferring positive attitude from a brand to its extensions. According to Aaker and Keller (1990) the positive quality beliefs were transferred from the parent brand to its extension subject to their fit based on complementarity and substitutability between the parent brand and the proposed extension. They define complementarity as two products being consumed jointly, and substitutability is the "extent, to which consumers view two product classes as substitutes," (Aaker and Keller 1990, p. 30). Their research also points to a negative correlation between complementarity and substitutability, that is, only one measure of fit is required for the positive transfer of beliefs from the parent brand to its extension.

However, complementarity and substitutability are not universal measures of fit across different types of products and brand extensions. Different researchers have proposed different bases of fit that would affect the extension evaluation. According to Chakravarti et al (1990) similarity between an existing brand and its extension has a positive effect on the evaluation of brand extension, however, which specific measures of fit consumers employ to assess an extension would depend on the type of associations
invoked during the evaluation process. Given the multitude of factors that can affect fit between parent brand and its extension, it is hard to predict a priori which associations would be activated because,

"A complex cluster of associations may exist between an established brand name and an extension product category." (Chakravarti et al 1990, p. 7)

It is argued that a brand name is more likely to be transferred successfully when an old and a new product category share multiple associations resulting in numerous bases of fit (Chakravarti et al 1990). However, only the “salient, relevant and favorable” associations are activated during the extension evaluations processes (Keller 1993). Which associations become salient and relevant would also depend on the context in which a brand extension is evaluated, as some brand associations are salient regardless of the context (e.g. Sony is a premium brand) whereas others are context dependent (e.g., Sony specializes in miniature electronics) (Chakravarti et al 1990). However, Aaker and Keller (1990) observed that negative evaluations of extensions were specific to brand attributes, whereas positive evaluations were abstract and brand beliefs specific. Similar to brand associations, category specific associations also affect the evaluation of brand extensions, therefore, further complicating the extension evaluation process. For example, fast food is unhealthy is a category attribute; and McDonald’s serves inexpensive food is a brand association.

Boush and Loken (1991) provided a different perspective on fit and argued that rather than looking for product-category similarity to judge an extension’s potential success, brands should be viewed as categories comprising of different products associated with
them, and extensions typical of the brand would be evaluated more favorably than the atypical extensions. Typicality of an object to its category is a subjective assessment reached by individuals based on their knowledge and perception of the two. To better explain the effects of typicality in the context of brand extension evaluation, Boush and Loken's (1991, p. 17) introduce the notion of brand breadth as, "the variability among product types represented by a brand name." This argument implies that the number of shared attributes between a core brand and its extension does not determine the fit, rather it is based on how typical an extension is perceived to be of the existing product category. The advantage of typicality-based fit is that it overcomes the limitations associated with placing varying levels of importance on one or more attributes to ascertain product-category fit.

In their study, Boush and Loken (1991) varied the typicality of the proposed brand extensions with the parent brand. According to them, depending on the typicality of extensions with the parent brand, the extensions are evaluated either in a "categorical" or "piecemeal" process. The brand extensions that were most typical and most atypical were evaluated more rapidly than moderately typical brand extension. Extremely typical and atypical brand extensions were evaluated categorically, thus, invoking fewer piecemeal processes than would moderately typical brand extensions. Moderately typical brand extensions, on the other hand, were evaluated in a "piecemeal" manner, thereby carefully matching the extension with the parent brand. This suggests that measures of fit used to evaluate an extension would also depend on the typicality of an extension with the parent brand.
2.3.1 Multiple Brand Extensions and Extension Evaluation

Most research on the extension evaluation process assumes that firms do not introduce multiple brand extensions over time and the brand associations remain static. Some firms aggressively pursue a growth strategy through the introduction of multiple brand extensions wherein some of the brand extensions will be more successful than the others; and some brand extensions will fail. The introduction of a brand extension modifies the consumers' cognitive structures in terms of brand image and brand associations by "encoding, storage and utilization of new information about the brand" (Lynch and Srull 1982), thereby affecting the perception of fit between a brand and its future extensions. To address the dynamic nature of consumers' knowledge structure of brands and related products, Keller and Aaker (1992) suggested that the perception of fit between a core brand and its extension was moderated by whether or not the core brand had previously been extended, and the level of the core brand's quality. If a brand had been previously extended, the evaluation of the proposed brand extension would depend on, (1) whether or not the intervening brand extension(s) were successful, (2) whether there were multiple or a single intervening extension, and (3) whether or not the intervening extensions were similar to the core brand or the proposed extension (Keller and Aaker 1992). They argued that if a proposed brand extension was "dissimilar" (lacked fit) from the core brand, introduction of intermediate extensions could reduce the dissimilarity judgments between the two subject to perceived quality of the core brand. The results of their research indicated that proposed brand extensions were adversely affected if the intermediate extensions were not successful (i.e., were of low quality) and the core brand was perceived to be of high quality, but the successful (i.e., of high quality) intervening
extensions improved the proposed brand extensions if the core brand was of average quality. That is, there were no effects of the intervening extensions on the evaluation of the proposed brand extensions if the parent brand and the intervening extensions had similar quality levels. This suggests that as the consumers’ knowledge structure about a brand changes over time, the brand associations also go through changes resulting in corresponding changes in what measures of fit will become salient and relevant for the proposed brand extensions.

2.3.2 Parent Brand Characteristics and Extensions Evaluation

A brand’s associations can be defined in terms of product attributes, product benefits, consumer characteristics, or product usage situations (Keller 1993). Some brand names are “broad” and associated with a diverse range of products, such as, Sony, whereas other brands are “narrow” and are associated with one or a few products, such as, Close-Up (Boush and Loken 1991). Dacin and Smith (1994) questioned whether the product portfolio characteristics of the parent brand moderated product-category fit and the evaluation of brand extensions. They examined the effect of (1) the number of products associated with a brand, (2) the quality variance across these products, and (3) the relatedness of the products to each other and to the parent brand. The results of the Dacin and Smith’s (1994) research indicated that the number of products related to a brand positively affected consumers’ confidence in and evaluation of a brand provided the quality of the products under the brand name did not vary significantly. Adding products to a brand did not necessarily weaken the parent brand as long as the quality levels

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
associated with the parent brand were maintained. However, the results of their research also suggested that firms could not extend their brands indiscriminately into unrelated product categories despite high quality of the parent brand and the proposed brand extensions. Should a firm decide to enter an unrelated product category, it should do so gradually by extending its brand into moderately unrelated categories first to maintain the perception of relatedness.

Dawar (1996) also suggested that there was more to brand breadth than the number and types of products associated with a brand and that the evaluation of brand extension was influenced by the strength of association between a brand and its products. According to him:

"Products within the same category may differ in their strength and nature of association to the brand, leading to context-specific differences in accessibility or retrievability that influence evaluations of brand extensions." (Dawar 1996, p. 190)

A brand name may be associated with multiple products, but not all products will have an equally strong association with the brand, thus, affecting the retrievability and evaluation of products when brand cues are offered. The evaluation of extensions for a parent brand associated with a single product is affected by brand knowledge and context; whereas extensions for brands associated with multiple brand association is influenced by the context alone (Dawar 1996).
2.3.3 Brand Concept Consistency and Extensions Evaluation

Brand associations continually undergo changes as firms modify their current offerings, introduce new products, enter different markets, or reposition the existing products in response to the evolving market needs. This means that the measures of fit important in introducing one brand extension may not be relevant when over time another extension under the same brand name is introduced. Park et al (1991) questioned the validity of the fit measures solely based on the physical similarities and argued that the brand concept between a parent brand and its extension must be consistent for a brand extension to be positively evaluated. According to them, brand concepts are:

"Brand-unique abstract meanings (e.g., high status) that typically originate from a particular configuration of product features (e.g., high price, expensive-looking design, etc.) and a firm’s effort to create meanings from these arrangements (e.g., “the relentless pursuit of perfection” by Lexus).” (Park et al. 1991, p. 186)

Based on goal-driven theory of categorization (Barsalou 1983; and Murphy and Medin 1985), Park et al (1991) argued that objects could also be grouped together based on similarities other than product attributes, such as, a common brand concept. The implications of this argument are that object similarity, though important, does not adequately explain the brand-category fit for an extension: Two objects may share many physical attributes but the underlying brand concepts for those products may be totally different. For example, Seiko and Rolex watches share several product-level features, but the underlying concepts for the two brands is very different from each other – Seiko is considered to be a functional brand whereas Rolex is a prestige brand (Park et al 1991).
Therefore, they suggested that the measures of fit should not be limited to the physical product attributes only.

"The degree of perceived fit is a function of both product-feature similarity perceptions and brand-concept-consistency perceptions." (Park et al 1991, p. 186)

The relative importance of physical attribute similarity and brand concept consistency is moderated by the nature of the brand concept. The concept consistency is relatively more important for prestige brands than for functional brand, and prestige brands could extend to a dissimilar category as long as the extension brand concept or image was consistent with that of the parent brand (Park et al 1991).

Broniarczyk and Alba (1994) concurred with Park et al (1991) and contended that the role of affect and product-category similarity have been exaggerated by previous researchers since there exist a number of other determinants of brand extension evaluation with relatively different effect. They demonstrated through three experiments that brand-specific associations (BSAs) override the role of affect and category similarities between a brand and its extensions when consumer knowledge of the brands under consideration was high. Broniarczyk and Alba (1994) questioned the assumptions of product-category fit on which previous studies of brand extensions were based. They argued that:

"... there is no necessary reason to expect consumers to make judgments of overall similarity between a brand’s original category and an extension category... Instead, a single connection may provide a persuasive connection between the brand and an otherwise dissimilar extension category." (Broniarczyk and Alba 1994, p. 215)
The brand-category fit based on product feature similarity would suggest that brands with narrow associations could not extend far from their core brand resulting in missed opportunities. However, at times companies foresee a lucrative business opportunity in markets distant from their current product offerings and business capabilities. Such a perceived distance would discourage a firm from entering the new distant markets due to lack of brand-category fit. Dawar and Anderson (1994) addressed the issue of entering product categories that are conceptually “distant” from the core brand, especially when a firm introduced multiple brand extensions in different product categories. They argued that fit is a perception that can be altered without changing product features. The success of an extension depends on consumers’ judgment of the coherence of the extension based on the existing meaning of the brand name to them, that is, defining fit not necessarily in terms of a product-to-product comparison. Dawar and Anderson (1994) demonstrated that multiple extensions in different product categories could be made coherent resulting in higher fit by introducing them in a pre-determined order by gradually increasing the “distance” from the core brand. They also hypothesized that “direction,” like “distance,” in which brands extend was also an important consideration that affected the evaluation of brand extensions. According to Dawar and Anderson (1994), distance is the perceived closeness between the parent brand and the target category, i.e., the higher the closeness, the shorter the distance. They conceptualized direction as the orientation of brand extensions in a space based on their fit with the core brand, that is, conceptual consistency between a brand and its extension. The results of Dawar and Anderson’s (1994) research indicated that consistency in direction of extensions was an important consideration for brands that introduced multiple extensions.
"... extensions in a consistent direction are more likely to be perceived coherent and have greater purchase likelihood than those that are in inconsistent direction." (Dawar and Anderson 1994, p. 127)

These findings are significant as they suggest that there is more to brand fit than shared physical product features. The perceived coherence of the product fit can be changed without altering the product features and brand characteristics (Dawar and Anderson 1994). These findings are consistent with previous assertions from psychology (Murphy and Medin 1985) that categories can extend by mechanisms other than product attribute matching and that some categories can be composed of eclectic objects grouped together by theories supplied by individuals.

Similar to Dawar and Anderson’s (1994) research findings, Herr et al (1996) also suggested that fit between a brand and its extension can be assessed in terms of interrelatedness of the parent and the target category. They proposed that inter-category relatedness is a broader and more inclusive concept than the product attribute based measures of similarity. It is based on conceptual closeness between the parent and the target category. This conceptualization of category interrelatedness is based on knowledge-based (Barsalou 1983) categorization processes that would suggest that a brand could be successfully extended into a physically dissimilar category, as long as there is conceptual coherence between the two. Conceptual coherence in the context of brand extension refers to treating brands as concepts wherein coherent brand extensions are along the lines of a brand’s core meaning. For example, Nike’s extension into tennis rackets is a physically dissimilar but a conceptually coherent brand extension.
Martin and Stewart (2001) examined past research on brand extension evaluation and contend that the similarity measures based on product attribute/feature similarity and conceptual coherence lack clarity and are difficult to be operationalized in a meaningful way. To overcome these shortcomings they proposed a “goal-deriven” measure of similarity, which stated that objects could be classified based on their intended purpose (Barsalou 1985). Such a measure of similarity is consistent with the prevailing view among marketing scholars and practitioners that consumers purchase benefits, not products (Ratneshwar and Shocker 1991). Martin and Stewart (2001) concluded that,

"Perceived similarity is a multidimensional construct and that the number and structure of these dimensions of similarity are different when products differ in their degree of goal congruency."

(p. 471)

2.3.4 Relative Importance of Fit Measures

Klink and Smith (2001) questioned the reliance on fit to examine the success of brand extensions and argued that consumers rely on brand names to reduce perceived risk. According to them the role of fit in evaluating brand extensions varies with consumers’ innovativeness, and the frequency and content of the information on extensions provided to consumers. Their findings are based on the notion that consumers high in innovativeness tend to be risk-takers, whereas late adopters usually try to minimize the risk and pay attention to multiple information sources other than the brand name itself. Klink and Smith (2001) suggested that an increase in consumers’ innovativeness and providing higher information content on brand extensions consumers can reduce the role of fit in assessing brand extensions.
From the discussion so far it is evident that brand-category “fit” is a multi-dimensional construct and the measures of fit may vary from one brand extension to the next. Product-category fit is usually described in terms of physical product attributes whereas brand concept measures of fit are described in terms of conceptual consistency and coherence between an extension and the parent brand. Boush and Loken (1991) treat a brand as a category and measure fit of an extension in terms of its typicality to the parent brand. In this sense, a graded structure or “distance” of various extensions from the parent brand can be ascertained to assess their relative fit between the two. Similarly, Keller and Aaker (1992) suggest the notion of distance in terms of “close,” “intermediate,” and “distant” extensions to indicate their overall fit with the parent brand. It seems that some measures of fit provide a better explanation of the extension evaluation process than others. For example, Park et al (1991) and Broniarczyk and Alba (1994) emphasize that brand concept based measures of fit provide a better indication of an extension’s potential success than product attribute based measures. Tauber (1993) has also criticized the studies that measure fit based on product attributes and category similarity as these studies “concentrate on fit rather than leverage.” According to him:

“If the concept were not important in thinking of brand extendibility, literally any well-known brand name could be fine... thus, a marketer could enter any category as long as there was a well-known brand name available.” (Tauber 1993, p. 316)

In conclusion, it appears that brand extensions that are conceptually coherent with the parent brand are evaluated more favorably regardless of their similarity or distance from
the parent brand, as well as, any physical dissimilarity between the two. How much fit is necessary before an extension is deemed valuable is discussed next.

2.3.5 Degree of Fit and Extensions Evaluation

The fit between a brand and its extension plays an important role in the evaluation of brand extensions, and the dimensions used to assess fit vary with the brand and product category under consideration and can not be predicted in advance. The conclusions from a number of studies on brand extension evaluation suggest that there exists a linear, positive fit-evaluation relationship, i.e., the higher the fit, the better the extension evaluation (Boush et al 1987, Aaker and Keller 1990, Chakravarti et al 1990, Boush and Loken 1991, Park et al 1991, Keller and Aaker 1992). This begs the question as to how much fit is desirable and on what dimensions before an extension is evaluated positively. It should be recalled here that the findings of the Aaker and Keller (1990) research demonstrated that difficulty in manufacturing an extension was positively related to the evaluation of brand extensions and the extensions that were seen as easy to make were negatively evaluated. This suggests that extensions that are closer to the parent brand are not necessarily more successful. On the contrary, extensions that are perceived to be very close to the parent brand are viewed as too easy to make and may actually be harmful. Meyers-Levy et al (1994) explained the level of fit desired in evaluating brand extensions. Their research is informed by Mandler’s (1982) schema congruency theory, which states that objects that are moderately incongruent from their category are evaluated more positively than the extremely congruent and extremely incongruent
objects. According to Mandler (1982), the underlying explanation for this phenomenon is that individuals feel rewarded when they undertake successful cognitive elaboration to resolve a moderately incongruent object with the category. Evaluation efforts of objects congruent with a category are less attractive to individuals due to their predictable outcome, whereas, extremely incongruent objects require elaborate cognitive effort and, therefore, are disliked. Mandler (1982) also posited that moderately incongruent objects are evaluated in a piecemeal fashion, and both congruent and extremely incongruent objects are evaluated categorically. In line with Mandler’s (1982) predictions, results of the Meyers-Levy et al.’s (1994) research demonstrated that the brand extensions that were moderately incongruent with the parent brand resulted in favorable evaluations compared with the congruent and extremely incongruent brand extensions, in effect.

Similarly, Sheinin and Schmitt (1994) examined the role of brand-category congruency in the evaluating brand extensions. They argued that brand extension evaluation is a function of brand congruency, brand breadth, and brand affect. Unlike the Meyers-Levy et al.’s (1994) findings, the results of Sheinin and Schmitt’s (1994) research indicated that extremely incongruent brand extensions were evaluated most favorably for the broad brands. Broad brands appear to allow individuals to accommodate brand extensions regardless of their level of congruency. However, there was no negative impact on the evaluation of congruent (also termed easy-to-make) extensions for broad brands. Similar to Aaker and Keller’s (1990) research findings, Sheinin and Schmitt (1994) also found that highly regarded, congruent extensions that were perceived to be easy to make in terms of required expertise and capabilities were judged negatively.
Maoz and Tybout (2002) examined the role of involvement and differentiation on the evaluation of brand extensions with varying levels of brand-category congruency. They hypothesized that moderately incongruent brand extensions don’t automatically lead to positive evaluation. The findings from Maoz and Tybout’s (2002) research indicated that when the task involvement was low, a congruent extension was evaluated more favorably than the moderately incongruent or extremely incongruent extension. They also found that differentiation affected the evaluation of brand extensions. Brand differentiation may form the bases for positive brand extension evaluation regardless of its level of (in) congruency with the parent brand.

It is apparent from the preceding discussion that brand-category fit plays a critical role in the positive evaluation of brand extensions and is moderated by brand breadth, brand affect, task involvement and brand differentiation. In general, it appears that a complete overlap between a brand and its extension does not help the extension. Therefore, firms should not introduce easy to make brand extensions as these may be perceived as trivial and exploitative and such trivial extensions may in turn adversely affect the parent brand (Aaker and Keller 1990).

2.3.6 Key Moderating Variables and Evaluation of Brand-Extension

A disproportionately large amount of research on the evaluation of brand extensions does not take into consideration the impact of contextual factors, as well as, the marketing mix variables that are under the control of a marketing manager. The introduction of a brand
extension is a managerial activity that requires extensive planning in reaching the decision. It is reasonable to assume that managers responsible for introducing a brand extension would actively consider the role of factors that may moderate the fit perceptions in evaluating brand extensions, such as, consumer characteristics, organizational factors, marketing mix variables, and the competitive environment. However, a rather limited research has been done in this area.

2.3.6.1 Consumers Characteristics

Consumer characteristics are known to affect the evaluation of brand extensions and have been examined in a number of studies (Broniarczyk and Alba 1994, Graeff 1996, 1997, Sheinin 2000, Zhang and Sood 2002). Most frequently studied consumer characteristics that affect the brand extension evaluation process are consumer knowledge and expertise regarding the core brand. It has been shown that expert consumers tend to evaluate brand extensions in a different manner than novice consumers and use different measures to assess the goodness of fit between a brand and its extensions (Broniarczyk and Alba 1994). Expert consumers look to the deeper, embedded meaning of a brand and its brand associations; whereas novice customers are motivated by brand awareness and affect in evaluating brand extensions (Broniarczyk and Alba 1994).

Likewise, it has also been argued that consumers’ self-concept will also play a role in how they evaluate a brand extension. Self-concept and personality theorists have often claimed that consumers’ “self-concept” (who they think they are) and their “ideal self-
concept" (who they think they would like to be) greatly affects the type of products and brands consumers choose. "Image congruence hypothesis" suggests that consumers purchase products that provide them with "self-consistency." Therefore, it can be argued that brand extensions from brands with which certain consumers identify would be more acceptable to them. According to Graeff (1996) some consumers are more aware and concerned about their self-image than others and, therefore, are readily influenced by brands and advertisements that are congruent with their self-image.

Aaker (1996) demonstrated this through "Self-Expression Model," that states that:

"...for certain groups of customers, some brands become vehicles to express a part of their self-identity. This self-identity can be their actual identity or an ideal-self to which they might aspire...Brands that people like, admire, discuss, buy, and use also provide a vehicle for self-expression." (Aaker 1996, p. 153)

Similarly, Graeff (1996) demonstrated that self-image and advertising content interacted and moderated the evaluation of brand extensions.

"...when advertising encourages consumers to think about self-image, thoughts about using the product and its fit with the self-image are significant predictors of brand and ad attitudes...when advertising encourages consumers to think about only product quality, thoughts about using the product and its fit with the self-image have no effects on attitudes." (Graeff 1996, p. 14)

Graeff (1997) also contended that "self-concept" was not a static concept, rather its multidimensional and highly situation specific as individuals play multiple roles in their day-to-day lives. It is well recognized in the consumer behavior literature that individuals prefer different brands in different consumption situations and tend to choose different brands for the private and public consumption situations (Belk 1975).
"Those consumers with self-images consistent with the brand image had favorable brand evaluations irrespective of the type of the consumption situation, but those consumers with self-images inconsistent with the brand image had significantly more favorable brand evaluations in the public consumption situations." (Graeff 1997, p. 58)

Consumer knowledge, personality and self-concept are relatively stable characteristics compared to other transient states consumers frequently go through. The argument can be advanced that these transient states would also affect how consumers evaluated a brand and its extension. For example, Barone et al (2000) examined the role of “positive mood” on the evaluation of brand extensions. They concluded that positive mood resulted in more favorable evaluations for moderately incongruent brand extensions than for congruent and incongruent brand extensions. It has been suggested that positive mood leads to cognitive flexibility, thereby, resulting in identification of non-salient bases of fit between a brand and its extension. The implication of the preceding argument is that brand similarity can be manipulated by affecting consumers’ mood states. However, it should also be noted here that brand extensions that are considered to be “far”, (extensions that share few similarities with the parent brand) are not affected by the positive mood.

2.3.6.2 Pricing and Price Promotions

Expert and novice consumers not only evaluate brand extensions differently but they resort to different information sources to arrive at a decision. There is ample evidence in marketing that in the absence of sufficient product information, price acts as a proxy for
product quality. The very idea behind introducing brand extensions is to capitalize on the existing brand information. However, the price of the brand extension and that of its parent brand provide additional cues and can affect the evaluation of an extension (Jun et al 2004). It has been empirically demonstrated that price of the parent brand and the parent category play a crucial role in the evaluation of brand extensions and extension’s price expectations (Jun et al 2004). It is also argued that price as an information cue is more likely to be used by novice consumers in evaluating brand extensions that by product-category experts (Raghubir and Korfinan 1999). Among those who use price as an information cue to product quality, the format of information presentation also affects the manner in which the price information is used. Suri et al (2000) compared the impact of fixed price and discounted price formats on brand evaluations and found that each type of price information was used for different purposes. For example, they noted that consumers in their study used fixed price format to assess product quality, whereas the discounted price format was used to evaluate the monetary sacrifices rather than to judge the quality of a product.

In addition to price, the promotions associated with a brand extension can also affect the extension evaluation process. Consistent with the general beliefs in marketing that frequent price promotions dilute a brand’s equity, Raghubir and Korfinan (1999) found that:

"Offering a promotion is more likely to lower a brand’s evaluation when the brand has not been promoted previously... Promotions are more likely to result in negative evaluations when they are uncommon in the industry.” (p. 219)
At the same time price promotions have no effect on brand evaluation in industries where price promotions are common and consumers have significant prior experience (Davis et al. 1992).

2.3.6.3 Advertising

As mentioned earlier, Chakravarti et al. (1990) suggested that brands were linked to a complex set of associations some of which were salient and others were not. They also contended that the salience of an association was context dependent - Some attributes that were not salient in one context became salient in another, thereby, making it difficult to specify a priori which brand associations would be used to evaluate fit between a brand and its extension. Advertising is often used to prime specific brand attributes and make them salient in a given context. Boush (1993) investigated the role of advertising and how it moderated fit judgments between a brand and its extension and concluded that:

"A brand extension is evaluated more favorably and judged similar to the family branded products if the advertising slogan primes attributes that the brand extension shares with the existing products than if the slogan primes attributes that the brand extension does not share with existing family brands." (Boush 1993, p.75)

Pryor and Brodie (1998) replicated Boush’s (1993) study and found similar results that were not as strong as those obtained by Boush. These findings challenge the previous research results that consumers' initial perception of fit is crucial to the evaluation of brand extensions. They pointed to the important and active role that marketing strategy can play in guiding consumers evaluations of brand extensions and suggest to consumers...
as to which measures of fit they should focus on, thereby, resulting in positive evaluations. Lane (2000) in a similar effort examined the role of advertising content and repetition on incongruent brand extensions. She found that repeated advertising exposure affected consumer responses to incongruent brand extensions resulting in more “favorable evaluations, higher usage intentions and increased elaboration” than did participants who viewed the ad only once. Congruent brand extensions did not result in significantly more favorable evaluations after repeated advertising than they were prior to the single exposure, that is, repeated advertising benefits incongruent brand extensions more than the congruent ones (Lane 2000). Additionally, under incongruent extension scenario only those repeated advertisements produced positive results (led to a judgment of consistency between a brand and its extension) that contained message highlighting the “benefit brand association,” where advertisements that evoked “peripheral” brand associations did not result in positive evaluations of the extension (Lane 2000). This indicates that advertising can work to enhance the evaluation of a brand extension only when an important yet non-salient brand association already exists. It should be noted here that firms traditionally engage in brand extension strategies to reduce the marketing costs associated with introducing a new product and the repeated advertising may not necessarily provide the desired cost efficiencies. However, there are reasons why firms sometimes extend into unrelated product markets. In this case the decision to engage in a repetitive advertising campaign to affect the fit perceptions could be justified by the potential long-term returns.
Brand equity encompasses multiple strengths and weaknesses associated with a brand, its products and the organization. In some instances the brand name itself is descriptive of some key product associations and any variation in the name can affect the brand associations. Wanke et al (1998) examined the impact of a brand extension’s name on its evaluation and concluded that:

"... model names that resemble the names of previous models will suggest continuation of the product line and will thus facilitate the transfer of brand beliefs, resulting in assimilation effects." (Wanke et al 1998, p. 303)

The results of their study supported the hypothesis that when all else was constant, a brand name continuation did have a positive impact on the evaluation of brand extensions.

2.3.6.4 Corporate Image

In addition to brand level associations, Keller and Aaker (1997) suggested that corporate brand image could also be leveraged to communicate a brand extension in unrelated markets. They argued that corporate brands encompass organizational characteristics spanning entire product classes and, therefore, likely to possess abstract associations compared to product-brand associations which tend to be concrete due to their product specificity.

These differences between a corporate and a product brand are evident in the market place where corporate brands are associated with a diverse range of product classes, such
as Sony, compared to the product brands, such as Ivory. Drawing on this distinction, Ruyter and Wetzels (2000) examined the role of corporate image on the extension of service brands. They reasoned that since services are intangible and do not possess tangible attributes as products do, corporate image may be more important to service brand extensions than it is for product brand extensions. The results of their research indicated that service extensions were more favorably evaluated when innovative "late-mover" firms as opposed to "pioneer" firms offered these extensions. Innovative late-mover firms in this case were seen to be more credible firms producing better quality products, as they appeared to have benefited from the learning provided by the pioneer firms.

### 2.3.7 Reciprocal Impact of Brand Extensions on the Parent Brand

It is almost a truism in marketing now that brand extensions succeed when positive attitude associated with the parent brand is successfully transferred to the extension and the transfer is subject to "similarity" or a "fit." However, not all brand extensions succeed. Some brand extensions may completely fail in the market and some may have limited success. It has been argued that repeated brand extensions and/or unsuccessful brand extensions can "wear out" and "dilute" the parent brand resulting in its death (Gibson 1990). The researchers studying brand extension evaluations have been also interested in examining the effects of failed extensions or extensions that have attributes inconsistent from the parent brand on the parent brand judgments.
Evidence from early research on this topic indicated that the negative information about the brand extension did not have any damaging effect on the parent brand (Romeo 1991; Keller and Aaker 1992). However, Loken and Roedder-John (1993) found that inconsistent brand extensions did have an adverse impact on the parent brand. However this negative impact was found to be limited to brand attributes rather than on the global brand affect that consumers regarded as closely linked with the parent brand. Gurhan-Canli and Maheswaran (1998) reconciled these seemingly conflicting results of inconsistent or unsuccessful brand extensions on the dilution of parent brands.

According to them, individuals processed information on new instances based on level of congruency with the existing schemas. Schemas are modified in three different ways based on the typicality of the new information, (1) the subtyping, (2) the bookkeeping model, and (3) the conversion model (Weber and Crocker 1983). The subtyping model states that the high incongruency or atypical instances of a category are considered to be unique and are subtyped resulting in a separate set of beliefs associated with a subtyped category. The bookkeeping model suggests that new pieces of information are incrementally added to the schema resulting in an overall modification of the schema at a higher level. According to the conversion model, schemas change when extremely atypical information is added to the existing schemas, that is, schemas do not change with the typical instances. Gurhan-Canli and Maheswaran (1998) explained a lack of dilution effect for Romeo (1991) and Keller and Aaker (1992) studies, and dilution of brand equity for Loken and Roedder-John (1993) research in the way new information was processed. The lack of dilution occurred as the atypical information was subtyped versus bookkeeping of the information when the parent brand equity was diluted. According to
Gurhan-Canli and Maheswaran (1998) the choice of subtyping or bookkeeping model depended on the motivation to process the new information vis-à-vis the existing schemas. The bookkeeping model assumes piecemeal evaluation of the information, whereas the subtyping model results from category-based information processing.

Building on the initial findings from Loken and Roedder-John (1993), Milberg et al (1997) furthered the research by examining the negative feedback effects of inconsistent brand extensions on the parent brand and suggested ways to overcome it. According to them, a sub-branding strategy overcomes the negative effects of inconsistent brand extensions.

"Sub-branding strategy... produces either equally favorable or more favorable evaluations relative to direct extensions. Sub-branding seems to allow consumers to resolve inconsistencies by providing them with a mechanism to differentiate the extension from the family brand, while at the same time providing brand equity benefits." (Milberg et al. 1997, p. 136)

Sheinin (2000) examined the role of parent brand familiarity, experience with the brand extension and success/failure of the brand extension on the parent brand beliefs. Unlike previous findings of unsuccessful extensions diluting the parent brand beliefs, Sheinin’s (2000) findings indicated that beliefs for unfamiliar parent brands weaken when their extensions were successful whereas unsuccessful extensions did not change the existing beliefs for the unfamiliar parent brand. It is argued that individuals demonstrate cognitive flexibility with regards to unfamiliar brands and that positive experiences bias judgments (Westbrook 1987). This means that brands that are not so well known in the target category, i.e., with low brand equity, should refrain from introducing brand
extensions in that category to avoid further dilution of their equity in the original category. The dilution of the parent brand equity would occur more severely in the long run if the low equity brands, compared to the high equity brands, attempted to extend using a trivial attribute (Broniarczyk and Gershoff 2003).

Much as inconsistent or unsuccessful brand extensions can dilute the parent brand equity, successful and consistent brand extensions enhance the parent brand’s equity in numerous ways. Jap (1993) demonstrated that consistent brand extensions positively affected brand equity of the parent brand by increasing the parent brand concept accuracy and accessibility. However, not all brands equally benefit from the successful introduction of an extension. In terms of product quality, positive reciprocal effects occur only for medium quality brands that introduce successful brand extensions (Keller and Aaker 1992). Whereas, for well-regarded (high quality) brands, successful introduction of an extension does not significantly change the parent brand evaluations (Keller and Sood 2003). This may be due to the consistency of information between a successful extension and the parent brand, that is, individuals expect to see a successful parent brand resulting in a successful extension.

Display of brands in a retail setting and its impact on brand image has also been shown to affect the parent brand equity. Buchanan et al (1999) emphasized the role of consistency among all marketing activities in order to maintain and enhance a brand’s equity. Their research showed that a brand display not in line with consumers’ overall expectations of a brand’s image could have adverse consequences for the brand image.
"... consumers have expectations about retail displays and the relationship among the displayed brands. Display conditions that disconfirm these expectations can lead consumers to reevaluate the brand." (Buchanan et al 1999, p. 345)

As discussed earlier, brand-category fit affects how an extension is evaluated. It is also believed that category similarity plays a moderating role in influencing both positive and negative feedback effects. Milberg et al (1997) demonstrated that negative feedback effects could occur in conditions of low similarity, whereas Keller and Sood (2003) argued that negative effects could also occur when the similarity is high. The roles of parent brand quality, attribute level, and category similarity have also been extensively studied in the context of reciprocal feedback effects.

Swaminathan et al (2001) used scanner panel data to examine whether and under what conditions feedback effects existed. They concluded that positive feedback, evidenced through increased market share of the parent brand, occurred for successful brand extensions among non-loyal and prior nonusers of the brand. Their results also indicated a strong moderating role for the category similarity. Swaminathan et al (2001) presented evidence that unsuccessful extensions resulted in negative feedback leading to a reduced market share for the parent brand only among the prior users of the parent brand.

Overall, there is considerable evidence that negative feedback effects exist at the brand attribute level. However, it is less clear whether such effects occur at the overall brand attitude level (Swaminathan et al 2001). It should be recalled here that the studies by Aaker and Keller (1990) as well as Loken and Roedder-John (1993) indicated that
negative evaluations and feedback were product attribute specific and did not adversely affect the overall parent brand attitude.

2.4 Conclusion

The research on brand extensions is an impressive body of literature over the last two decades. During this period a number of important areas related to the brand extension evaluation have been systematically examined leading to an improved understanding of the process. The majority of the research on the topic is empirical in nature based on experimental designs. The research on brand extensions can be mainly grouped into three categories: (1) the formation and transfer of attitude, (2) impact of marketing variables, primarily brand characteristics, and (3) the role of contextual factors. Figure 1 outlines various components of the extension evaluation process and the factors that affect it along with a list of major studies in the field.

The earlier studies (Boush et al 1987; Aaker and Keller 1990; Chakravarti et al 1990) attempted to understand the process of attitude transfer from the parent brand to the extension by focusing on why some brand extensions were successful and others were not. These studies led to the identification of fit, primarily based on physical attribute similarity, as a key variable in predicting the successful transfer of attitude from the parent brand to its proposed extensions. These studies were complemented by other research efforts in further exploring various measures of fit beyond physical similarity. Park et al (1991) and Broniarczyk and Alba (1994) focused on brand concept and key
brand associations as the main determinants of attitude transfer. Their findings indicated that regardless of physical similarity, an extension could be successfully introduced as long as it was conceptually consistent with the parent brand.

Apart from measures of fit, researchers also investigated the cognitive processes involved in evaluating brand extensions. Drawing upon research in schema congruency, Boush and Loken (1991), Morrin (1999), and Martin and Stewart (2001) examined the role of structure and organization of memory vis-a-vis brand-extension fit. The findings from their research indicate that fit does not play a linear role in the extension evaluation process. Similarly, the effect of memory and consumer knowledge has been investigated on the evaluation of extensions (Broniarczyk and Alba 1994; Klink and Smith 2001; Smith and Park 1992) resulting in mixed findings.

The role of parent brand breadth (Dacin and Smith 1994; Sheinin and Schmitt 1994; Dawar 1996), multiple brand extensions (Keller and Aaker 1992) and the order of extension introduction (Dawar and Anderson 1994) have also been researched. The results from these studies substantiated the earlier findings on the key role played by the fit. However, according to these studies, the fit is moderated by the brand and product-portfolio characteristics of the firm. At the same time, Loken and Roedder-John (1993), Milberg et al (1997), and Gurhan-Canli and Maheswaran (1998) investigated the impact of brand extensions on parent brands and concluded that all brand extensions are not good, and attention must be paid to the negative feedback effects of unsuccessful brand extensions.
With the process of attitude transfer fairly well understood, the second decade (1995-2005) of the research efforts have seen a shift away from the consumer decision making to the effect of marketing mix variables on the extension evaluation process. To this end, composite branding (Park et al 1996), advertising (Boush 1993; Pryor and Brodie 1998), retailer display (Buchanan et al 1999), communication strategies (Bridges et al 2000), ad repetition and ad content (Lane 2000), corporate image (Ruyter and Wetzels 2000), brand prestige (Wanke et al 1998; Lye et al 2001), pricing and promotions (Raghubir and Korfman 1999; Suri et al 2000; Jun et al 2004), have been researched. Taken together the findings from the two streams of research discussed thus far present a thorough understanding of how consumers evaluate brand extensions and the moderating role played by the marketing mix variables.

Relatively little research has been conducted about the contextual factors and their impact on the brand extension evaluation - the third of the three areas of brand extension research. Han (1998) examined the role of competition on extension evaluation by manipulating the extension positioning vis-à-vis existing brands. In a similar research effort, Smith and Park (1992) attempted to measure the effect of brand extension introduction on the market share and advertising efficiency.

Despite the significant amount of research on brand extensions, many areas remain that should be investigated. As discussed earlier, the role and effects of competition are the important areas that should be investigated because brand extensions are introduced in an established category to gain competitive advantage using the parent brand name.
In the next chapter, the topic of competition and its impact on brand extension is examined and the hypotheses are developed.
3 Research Direction, Framework, and Hypotheses

3.1 Research Direction

A review of the literature on the evaluation of brand extensions indicates that this area has been widely researched. These research efforts have made significant contributions in understanding how brand extensions are evaluated and should be created. Despite the amount of research and theoretical advancements in the area of brand extension, a number of gaps exist that must be filled to enhance our knowledge and understanding of the brand extension evaluation process. The research framework depicted in Figure-1 presents an integrated perspective of the brand extension evaluation process and indicates where research emphasis has been and what areas need to be researched. The evaluation process is affected by a number of factors that may be broadly classified as: (1) supply side factors and (2) demand side factors. This suggests that both firms and customers have a view of the market and competition that may be different from one another’s. In the research reported here, the focus is exclusively on the demand side of the competition and how it affects the extension evaluation from an individual customer’s perspective. The manner in which customers perceive competition for a brand, especially a brand extension that is being introduced into the market, depends on their knowledge of and experience with the parent brand and the target category. These factors help a customer define the scope of the competition for an extension – an important component that has been neglected in the research thus far. In the following sections, the argument is made
Figure 1: Brand Extension Evaluation Process: An Integrated Framework

Supply Side Factors

Firm Specific Competitive Environment
- Country of Origin Effects (22)
- Parent Brand Characteristics
  - Brand Equity (1, 12, 15)
  - Brand Product Portfolio (5, 7, 19)
  - Functional/Prestige (8, 36)
- Firm Characteristics
  - Image (21, 33)
  - Size (22)
  - Competency (1)

Demand Side Factors

Consumer Evaluation Process
- Parent Brand Category Fit Measures
  - Product-Category Similarity (1, 5, 16, 17, 23)
- Affective/Cognitive Processes (37)
- Functional/Prestige (8, 36)
- Brand Concept Consistency (10, 13, 18)
- Brand Associations (1, 35)

Past Research

Complementary Effects
- Brand Category Structure
- Competitive Intensity
- Financial/Goal-Driven

Direct Relationship
- Moderating Variables

Brand Category Fit Measures
- Brand-Category Similarity (1, 4, 5, 6, 7, 8, 16, 17, 23)
- Brand Concept Consistency (10, 13, 18)
- Brand Associations (1, 35)

Extension Evaluation
- Favorable
- Unfavorable
- Brand Differentiation and Indentification (39)

Past Research
why it is important to examine the role of competition when introducing a brand extension.

Given the expense and risk of new product failure, brand extensions are often used to enter an already well-established or rapidly growing product category. According to Tauber (1993) when a firm contemplates extending its brand into another category it usually is an already existing category:

"We are trying to extend into an established, or perhaps a new but rapidly growing category. In the majority of cases, another brand dominates the category. Our product, although not deficient, is most likely to be "me too" or, at best, marginally superior." (Tauber 1993, p. 316)

Previous research studies on the evaluation of brand extensions have failed to recognize the pre-existence of competing brands in the extension category and has not accounted for their impact on an extension’s evaluation. The past research has neglected the existence of competition in the target category or if the competition exists, the extension is perceived to be somehow immune from it. This is far from the current market conditions in most product categories, especially in the consumer goods categories, in which numerous brands compete for the same market.

"Consumers rarely conceive of a product in isolation, much to the dismay of wishful-thinking of brand managers who would prefer that a given brand occupy center stage all to itself." (Cohen and Basu 1987, p. 470)

Consumer choice decisions are frequently affected by the context as defined by the number of alternatives in a choice set (Payne et al 1992; Simonson and Tversky 1992). Consumers do not make purchase decisions in a competitive vacuum and their attitudes...
are affected by competitor activity, as well as, numerous other information sources (Han, 1998; Czellar 2003).

“In deciding whether or not to select a particular option, people commonly compare it with other alternatives that are currently available as well as with relevant alternatives that have been encountered in the past.” (Simonson and Tversky 1992, p. 282)

The literature on attitude formation, consumer decision-making, and brand choice processes clearly indicates that brand evaluation and choice decisions are not immune from competitive interferences. Woodside and Clokey (1974) emphasized the role competing brands played in the formation of brand attitudes. They developed a multi-attribute, multi-brand model of attitude formation and systematically examined the process of brand attitude formation. The results of the Woodside and Clokey (1974) study concluded that, “brand choice was more accurately predicted when attitudes toward other brands were also considered.” Similarly, the results of the Abe and Tanaka (1989) study found that the brand evaluation process was not independent of other brands in the competitive markets.

The introduction of a new brand in an established product category results in restructuring of the product category, brand associations and consumer knowledge. Chintagunta (1996 and 1999) examined the impact of the introduction of line extension or a new brand on the market structure. The results of his research concluded that the introduction of a new brand may significantly alter the existing market structure by shifting the brands in the perceptual map, and by changing the importance attached to different product category attributes. These market structure changes caused by new
brand entrants in an established product category significantly affect the “subjective brand judgments, brand preferences, and choice” of the existing brands (Pan and Lehman 1993) due to a shift in similarity judgments between them (Baker et al 2002). Given these shifts in similarity judgment, Simonson and Tversky (1992) suggested that:

“When designing a new product, managers should consider not only its attribute values, but also its likely position in the relevant choice set.” (p. 293)

Since a new brand entrant alters the evaluation of existing brands in a category, similarly, the existing brands can have a reciprocal impact on the evaluation of the new brand. Positive evaluation of a brand extension based on its fit with the parent brand while ignoring the brands it will compete with in the target category will likely not present a complete and accurate picture of the brand extension evaluation process. Therefore, a brand extension should be simultaneously evaluated in terms of its fit and position in the target category. Given this, a managerially relevant and theoretically significant research effort would involve examination of brand extensions in the presence of competing brands.

The numbers of studies that take into consideration the competitive effects on brand extension evaluation are limited. To date, only three published studies by Han (1998), Sheinin (1998), and Maoz and Tybout (2002) have to some extent examined aspects of the influence of competitive brands on the evaluation of brand extensions. However, these three studies did not take into consideration the competitive factors related to brand associations and category structure that may affect brand extension evaluations. For example, the research by Han (1998) and Sheinin (1998) examined the role of various
positioning strategies on the evaluation of brand extensions. Their research addressed some issues pertinent to product positioning but did not consider the effect of specific brand associations, target category structure and its fit with the extension on the evaluation of brand. It is important to consider both brand associations/positioning and category structure simultaneously, since extension evaluation is likely to be affected by the presence of other competing brands in the category.

Maoz and Tybout's (2002) research examined the role of differentiation and involvement in the evaluation of brand extensions. They examined differentiation specific to "category fit" in terms of product attributes only and did not include brand and category specific factors as differentiating factors. It is well recognized that consumers evaluate brand extensions based on perceived fit in terms of both "category" and "brand-level fit" (Bhat and Reddy 2001; Czellar 2003). Firms are increasingly extending their established brands into distant categories - sometimes these extended brands can be categorized into more than one category (Moreau et al 2001) where category fit based on product attributes is less important and evaluation depends instead on non-product attributes including brand and category associations. Therefore, this study examined competitive effects on the evaluation of brand extensions. As discussed in detail in the following sections, the nature and type of category structure plays an important role in how consumers form a consideration set and make choices, that is, categories define competition. Therefore, the current research focused on:

1. Market structure and its impact on the evaluation of brand extensions;
2. The nature and type of categories (taxonomic versus goal-driven) and their impact on evaluating brand extensions;

3. The impact of consumer knowledge on category formation and resulting evaluation of brand extensions;

4. The effect of the provision of a category structure on the evaluation of a brand extension in a competitive setting; and

5. The effect of competitive intensity on the evaluation of brand extensions.

3.2 Research Framework - Competition and the Evaluation of Brand Extensions

Though the role and importance of competition on brand attitude formation has long been recognized, the studies on the evaluation of brand extensions have not taken into account the impact of competition on the new brand entrants. Consumer preferences evolve with the market and do not stay fixed over a period of time during which new brands are introduced in a product category (Carpenter and Nakamoto 1989). These new entrants have significant impact on the product category in which they are introduced as they alter the category attribute structure and product perceptions. For example, the introduction of a line extension can,

"Alter the location of [existing] brands in the perceptual space and/or change the importance of the weights associated with the attribute." (Chintagunta 1996, p. 319)

Pan and Lehman (1993) suggested that impact of new brand introduction on the existing brands in the choice set goes beyond changes in the attribute importance associated with brands to an overall change in subjective brand judgments. They reasoned that subjective

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
brand judgments are different from product attribute specific evaluations within a given product category.

"Perceptual attributes are typically abstract... While perceptions tend to be heterogeneous, by contrast, objective brand specifications are concrete and unambiguous. For example, a $400 price tag on a brand of TV set is the description of that brand on the objective attribute of price, whereas regarding it as expensive or cheap is its subjective judgment." (Pan and Lehman 1993, p.77)

As discussed earlier, a brand extension positively evaluated in isolation may not be evaluated as favorably as in the presence of competing brands, thus, resulting in an overestimation of the potential of an extension's success in the market place. Therefore, it is important to examine the attractiveness of brand extensions vis-à-vis established brands in the extension category (Broniarczyk and Alba 1994) so that appropriate marketing strategies for the extension can be developed.

Before proceeding to examine the effect of competing brands on the evaluation of brand extensions, it is necessary to understand how consumers define competitive sets. To this end, the next section discusses various ways in which a product market is defined and different levels of competition associated with it.

3.2.1 Product Markets and Levels of Competition

Marketing strategies are designed keeping in view the activities of competitors. From a manager's perspective, identifying competition is a key activity as it helps define the market structure in which the product operates. At the same time, it is more important to
identify relevant competitors who have some impact on a firm’s business, rather than all possible competitors. The previous literature on the identification of competitors has suggested two broad approaches: the supply side approaches and demand side approaches (Clark and Montgomery 1999). The supply side approaches focus on factors internal to a firm, such as, its manufacturing technology, management policies and product offerings; whereas the demand side approaches focus on how customers identify competitors. The manner in which supply side defines product markets may not lead to the identification of the same competitive set as when the demand side defines the market. Given the customer-centric focus in marketing, a number of well-established demand side approaches to identifying product markets have been proposed (see Day et al 1979). In the context of the proposed research, demand-side approaches to product market definition are more relevant as consumers evaluate brand extensions and make brand choices.

Demand side competition for a brand can be defined in various ways at different levels of abstraction – the narrowest of which is at the product-form level (Lehman and Winer 2005).

“One way to delineate the set of competitors facing a brand is to consider other products in terms of their proximity to the physical attributes of the brand.” (Lehman and Winer 2005, p. 21)

This means that competitive set is defined in terms of all the brands that are targeting the same market with essentially the same type of product features. For example, this type of competitive set would include all 27” color TV manufactures targeting a market segment.
The product attribute/form based competitive set would not include TV sets with different size and types of screens (e.g., small, large, flat panel, etc).

At a higher level, the competitive set can be defined in terms of product category, that is, all products falling in a particular product category would be seen as competing with each other for the same target market. For example, all TV manufacturers regardless of the screen size and type. This is the level of competitive set at which, managers usually undertake marketing planning (Lehman and Winer 2005).

The third level of competition, termed generic competition (Kotler 2000), defines the market in terms of products fulfilling the same customer need. This type of competitive set would include, for example, all brands of TVs, VCRs, DVD players and stereo systems1 as they all provide entertainment. In this sense, a courier company can be seen as competing with fax and e-mails for delivering documents. At the highest level the competition is defined in terms of rivalry (Kotler 2000) or budget competition (Lehman and Winer 2002). This level of competition tends to be at the industry level rather than at the product or brand level, such as, home entertainment (e.g., renting a movie and ordering a pizza) may compete with the restaurant business (e.g., going out for dinner) for customers’ dollars in their leisure budget.

The preceding discussion of the levels of competition points to a product hierarchy representing varying levels of product category inclusiveness (Howard and Sheth 1969)

---

1 Assuming a customer is not buying a TV and a VCR/DVD player at the same time as complementary items, but as substitutes.
or product aggregation. Howard and Sheth (1969) proposed a classification or product hierarchy: (1) product class (cold beverage as a superordinate category), (2) product category (carbonated versus fruit juices as a basic category), and (3) brand (Pepsi or Minute Maid as a subordinate category) where brand level competition is at the bottom. Categorization theorists (Rosch et al 1976) have similarly defined categories at three levels of abstraction with varying levels of information contained in them as superordinate, basic, and subordinate levels. It appears that the Howard and Sheth (1969) hierarchy parallels the dimensions proposed by Rosch et al (1976).

It is important to determine at what level a firm’s offering of a brand extension will compete in the target market in order to design appropriate marketing strategies. It is important to address these competitive-level issues before an extension is introduced because brand extensions can be introduced at the category level or to establish a new product category (e.g., Crest Whitening strips) or to enter an already established category with a new product form (e.g., Colgate Teeth Whitening Gel). The identification of product markets and corresponding competitive levels have not been without controversy as product markets can be defined in numerous ways. It is generally believed that short to mid-term competition usually occurs at the product category and brand level and longer term competitive considerations are focused on the generic and budget levels (Lehman and Winer 2005). What is, then, the appropriate level of competition when a brand extension is introduced? One way to address this question would be to understand the level at which consumers categorize and process product information. It appears that consumers usually categorize information at the product category level, than either at the
product class or at the product form levels. It has been argued that the type of
categorization would depend on the level of consumers’ knowledge and task complexity.
The basic categories have been deemed to be the most information rich compared to the
super-ordinate or sub-ordinate categories wherein the super-ordinate categories are seen
as too general and the subordinate categories are viewed as too specific (Alpert 1987).

"Few people will stop their train of thought with, for example, "I
want a piece of fruit." Rather, they will go on to think, "I want an
apple." Unless faced with a choice set right in front of them, few
will go on to think "I want a golden delicious apple." (Alpert 1987,
p. 136)

The basic level categories are the most commonly invoked level in a product hierarchy
(Alpert 1987), and the level at which the most direct competition among different brands
occurs. Therefore, the most appropriate level of competition for a brand would be at the
product category level, that is, a brand name associated with a product category (basic
category) would have the most advantageous position than if it were to be associated with
a certain product form.

3.2.2 Product Markets, Levels of Competition and Product Positioning

The discussion concerning the level at which a product market or competitors should be
defined will be incomplete without also discussing its implications for product
positioning, since “positioning involves some prioritization of the competitors” (Lehman
and Winer 2005, p. 222). In general brand positioning is defined as:

"The positioning is the act of designing a company’s offerings and
image to occupy a distinctive place in the mind of the target
market.” (Kotler and Keller 2006, p. 310)
The choice of product positioning results in identifying all relevant alternatives with which a product will compete and how it will differentiate itself from other products. The goal of a new category entrant is to be included in the consideration set (Urban et al. 1993) by emphasizing similarities between the category members (Sujan and Dekleva 1987). At the same time the new brand strives to maintain a unique position within the category. Maintaining a balance between brand-category association and differentiation can define with “whom” and “how” a brand extension will compete.

One key difference between positioning for a brand extension and a product being introduced under a new name is that the new brand has no parent brand considerations in terms of brand-category fit and parent brand associations. In the context of brand extensions, the role of product positioning is particularly important for two reasons: (1) an extension will have to carefully build on the parent brand associations to obtain target category membership, that is, convey its brand-category fit, and (2) seek a market position so that there is minimal competitive effects on the evaluation of the extension without diluting the brand-category association.

As depicted schematically in Figure 1, the majority of the research on brand extensions has focused on the fit aspect of an extension and its implications on the extension evaluation (also see Appendix A), overlooking the role of competition. A rather limited number of studies have attempted to examine the role of brand extension positioning on evaluations (Han 1998; Sheinin 1998; Maoz and Tybout 2002). Han (1998) and Sheinin (1998) examined how various positioning strategies vis-à-vis the parent brand would
influence the evaluation of brand extensions. They both focused on various product attributes and brand associations, that is, at the product form level to conduct their respective studies rather at the category level. Though, Han (1998) and Sheinin (1998) made important contributions in connecting the role of positioning with extension evaluation, a product-form level analysis did not capture the overall competitive effects.

3.3 Development of Hypotheses

3.3.1 Market Structure and Evaluation of Brand Extensions

Some consumer choice models (e.g., Luce 1959) treat brands in a choice set as largely independent of each other, which is not a true reflection of the decision-making processes that consumers employ. Brands in a category interact with one another in numerous ways to affect the choice outcomes. A number of studies in the past have examined the role of a new brand entrant’s effect on the existing brands, their choice probabilities, and the market structure. These studies have concluded that brand choice is not independent of the competing brands (Woodside and Clokey 1974; Abe and Tanaka 1989; Sujan and Bettman 1989; Chintagunta 1996, 1999; Baker et al 2002). For example, Woodside and Clokey (1974) claim that by taking into consideration attitudes toward the competing brands, the brand choice prediction can be improved. Similarly, Abe and Tanaka (1989) concluded that the brand evaluation process is not independent of other brands in a competitive market. Similarly, Chintagunta (1996) specifically examined the impact of the introduction of line extensions on the market structure and observed that a new product introduction can result in (1) the relocation of existing products in the perceptual
space, (2) changes in the attribute importance along which the brands are positioned, and (3) changes in the competitive interaction among the brands in a product market. These perceptual and attribute changes affect the similarity judgments of the existing brands, i.e., making them appear more or less similar to each other (Baker et al 2002), thereby, affecting the brand judgments (Pan and Lehman 1993). Additionally, a new brand entrant can also make a previously unimportant attribute salient resulting in redefinition of a product category (Chintagunta 1999).

Changes in market structure and attribute importance would depend on how a product category is defined before and after a new brand is introduced. Therefore, it is also important to consider the product category characteristics and their impact on the choice outcomes vis-à-vis a new brand introduction. Similar to brands, product categories are also linked with certain associations that may range from concrete to abstract, such as, hamburgers are greasy (concrete) to investment brokers are untrustworthy (abstract association) (Keller 1993). The literature on brand extension evaluation indicates that the brand-category fit is an important predictor of an extension’s success, and the fit measures used to evaluate a brand extension can range from concrete product attributes to abstract brand associations (Broniarczyk and Alba 1994). In a competitive market, it is very likely that a brand in the target category will share some product attributes and brand associations with other brands, as well as, with the target category.

"Yet, unless the brand faces no competition, it will most likely share some associations with other brands. Shared associations can help to establish category membership and define the scope of the competition with other products or services." (Keller 1993, p. 6)
Common brand attributes among competing brands in a category are used to establish category membership for a new brand entrant, whereas the unique attributes are used to differentiate a brand from the competition. The number and types of common versus unique attributes between different brands in a category will determine their similarity (Tversky 1977), hence, their relative perceptual position in a product category.

"The introduction of a new brand which shares an attribute with an existing brand or shares the same level of an attribute with an existing brand will cause the existing brands to be seen as less similar to another existing brand." (Baker et al 2002, p. 45)

It is noteworthy that a new brand entrant alters not only the similarity perception of the existing products with each other, but also their similarity judgments in relation to the new brand (Sujan and Bettman 1989), thus affecting the choice probabilities associated with the new brand entrant as well in relation to the existing brands in the choice set.

Further, it has also been pointed out earlier that the measures of fit consumers will use to evaluate an extension cannot be predicted *a priori* and would depend on the contextual factors (Chakravarti et al 1990). In a competitive context, the complex interaction of associations among the brand extension, the target category, and the competing brands in a choice set may significantly alter the favorability of an extension’s evaluation compared to its evaluation without the competitive context.

The preceding arguments suggest that a brand extension may be affected not only by its fit with the target category, but also by its relative position among the competing brands.
Hypothesis 1 - The evaluation of a brand extension, regardless of high brand-category fit, will not be as favorable in the presence of competing brands as it is when evaluated on its own.

3.3.2 Consumer Knowledge and Evaluation of Brand Extensions

The effect of consumer knowledge on decision-making is well known and has been the subject of research for a considerable time. It has been shown that experts differ from novices in terms of what they know, how much they know, and how they organize the knowledge in their memories (Mitchell and Dacin 1996). Based in these findings, it is argued here that individual knowledge of the target category will play a key role in determining the evaluation of brand extensions. Individuals with higher knowledge of a product class are able to recall more product alternatives and specific product attributes than novices in terms of product usage and subcategories (Mitchell and Dacin 1996).

Not only do experts know more about different product alternatives in a product category, they also evaluate them differently than do novices. Gati and Tversky (1982; 1984) demonstrated that attribute similarity judgments are subject to development and richness of individuals' memory representations of the objects under consideration. Subjects knowledgeable about an object domain are likely to recall more common (distinctive) features in similarity (dissimilarity) tasks (Tversky and Gati 1978) and "memory representations become more finely tuned, as the familiarity with products increases" (Johnson and Russo 1984). As consumers' experience with a product category grows,
the consideration set size increases both for brands and product categories (Johnson and Lehman 1997) and also the depth of the (dis)similarity processes they engage in.

“In a marketing context, the number of features that consumers can draw upon ... depends to a certain extent upon consumer familiarity with a product category or with brands within the category.” (Dube and Schmitt 1999, p. 214)

The preceding discussion suggests that compared to low-knowledge consumers, consumers high in knowledge about a product category would (1) recall a large number of product alternatives (brands) from both within and across categories (2) and, would have pronounced (dis)similarity judgments (Dube and Schmitt 1999), resulting in greater comparison of existing brands and a new brand extension. This suggests that individuals with high-knowledge of the target category in terms of its attribute, structure, and goals would view competition for a brand extension differently than low-knowledge consumers. Therefore, it is proposed here that:

**Hypothesis 2** – Compared to low-knowledge consumers, the competitive effects on the evaluation of brand extensions will be greater for individuals with higher target category knowledge.

### 3.3.3 Competition Intensity on the Evaluation of Brand Extensions

So far, the discussion has focused on the effects of competition on the evaluation of brand extension, without specifying the level of competitive intensity for a brand extension in the target category. It is not uncommon to see different levels of competition in different
product categories when a new brand extension is introduced. Some product categories are dominated by one brand (Kleenex in facial tissue category); whereas other categories are dominated by two brands (Coke and Pepsi in cola drinks category) and a number of minor associated subcategories, such as, lemon-lime, fruit flavored, etc. Still, some other categories do not have any category dominant brand, but rather the category is populated by a number of equally representative brands, such as, Dentyne, Trident, Juicy Fruit, Extra, and Clorets, etc in the chewing gum category. Given the number of brands in a category, it is reasonable to expect a differential effect of competitive intensity on the evaluation of brand extensions.

As discussed earlier, the competitive intensity refers to the relative proximity of brands on a given attribute.

"The relative proximity of brands in the attribute space provides a measure of the intensity of competitive rivalry among brands."
(Chintagunta 1999, p. 315)

The above definition of competitive intensity would suggest that the chewing gum category is the most competitive of the three categories with the facial tissue category being the least competitive. From the perspective of introducing a brand extension, it would seem that the facial tissue category would be the hardest of the three to penetrate, as the dominant brand in this category defines the category, and brand associations are hard to isolate from the category associations. Brand-category association strength is a measure of how readily a brand can be recalled upon invoking a category (Posavac et al 2001), and this association represents the strength of a consumer’s cognitive structure regarding a brand and its link to a category.
"If a product category automatically activates a certain brand in memory, the brand is placed in a prominent position relative to other brands to be evaluated. Such a category-dominant brand may even preempt the choice process." (Herr et al 1996, p. 136)

Based on the associative network model of long-term memory, Herr et al (1996) defined brand-category association strength in terms of category and instance dominance.

"Category dominance is the strength of the category-to-brand association; instance dominance is the strength of brand-to-category association." (Herr et al 1996, p. 138)

This means, a category dominant brand would be the one that comes to mind when a product category is invoked; and an instance dominant brand would be the one that invokes a category\(^2\). For most brands, brand-category association is asymmetric, that is, either they are category dominant but not instance dominant, or vice-versa. However, a few brands have a symmetric brand-category association, that is, they are both category and instance dominant, such as, Crest toothpaste. Category dominant brands are recalled earlier, faster, more frequently, and are categorized easily (Fazio et al 1986). Most product markets are often categorized according to the consumption goals (Ratneshwar and Shocker 1991), resulting in choosing brands that are category dominant. In the absence of category dominant brands, instance dominant brands are considered next to meet the consumption goal (Herr et al 1996). Given this, it appears that competitive intensity when introducing a brand extension would not depend on the number of existing brands in a category, but on the number of brands and their associative strength with the

---

\(^2\) An example of dominance and instance dominance provided by Herr et al (1996) – The brand Nike is an instance of product category athletic shoes. Category dominance reflects the extent to which the product label (athletic shoes) evokes the subordinate brand (Nike); conversely, instance dominance reflects the likelihood the brand (Nike) evokes the product category (athletic shoes).
category. That means the minor brands from the target category are usually not recalled and are likely to have a minimal competitive effect on the new brand entrant.

As proposed earlier, the nature of competition will affect evaluation of a brand extension. However, this effect will be moderated by the intensity of the competition in the target category – e.g., whether it is category dominated or not. Therefore, the following is proposed:

**Hypothesis 3** – The competitive effects on the evaluation of brand extensions will be stronger in product categories with a category-dominated brand.

### 3.3.4 Provision of Category Structure and Evaluation of Brand Extensions

Introduction of a brand extension is a managerial activity that requires extensive deliberations and careful planning. It would be unrealistic to assume that the introduction of brand extensions is carried out without thorough examination of the target market and the product category. Firms carefully choose a positioning strategy on desired attributes or benefits that systematically includes or excludes competition with certain brands so as to provide the new brand entrant with a competitive advantage. The product positioning is often undertaken by analyzing the product category structure that affords marketing practitioners the ability to accurately analyze the competition (Day et al 1979). However, the majority of the discussion on product positioning assumes that consumers are aware
of the product category structure as conceptualized by the marketing managers (Nedungadi et al 2001).

"Research in consumer behavior suggests that even in familiar product categories, consumers may not either possess such knowledge or use this knowledge to guide brand recall and choice.” (Nedungadi et al 2001, p. 191)

In the absence of a firm-provided category structure, consumers will categorize products based on their own knowledge and familiarity with the product category. Such an idiosyncratic categorization may not be to a firm’s advantage if the brand is perceived as part of a minor subcategory that is not invoked when the major brand(s) in the category is (are) cued. For example, the sale of Sprite was less than satisfactory when it was positioned in a minor lemon-lime subcategory that was not often recalled by the customers. Coca Cola repositioned it as soda – a major superordinate category – with a lemon-lime flavour and the sales of Sprite picked up significantly (Zyman 1999). Firms often position their new product introductions vis-à-vis the existing major brands on a desired attribute so as to be included in consumers’ consideration set and may also provide consumers with the category structure. The provision of category structure may systematically influence which brands are recalled and included in the choice set (Nedungadi et al 2001), especially for broad and complex categories with a number of subcategories in it. The number of subcategories from which brands are recalled increases when a category structure is provided (Alba and Chattopadhyay 1985), resulting in an increased number of brands recalled especially from less salient subcategories since the category structure would enhance their salience (Nedungadi et al 2001).
The above discussion indicates that the category structure will moderate the effect of competition on the evaluation of brand extensions.

**Hypothesis 4** – The competitive effects on the evaluation of brand extensions will be higher when a product category structure is provided compared to when it is not provided.

### 3.3.5 Categorization and Evaluation of Brand Extensions

The manner in which consumers categorize products affects how they form a consideration set: This in turn determines which products are included in the choice set, thus, outlining the scope of competition for a brand. The degree of competitive effect on a new brand entrant would depend on the way the target category is structured. Past research has demonstrated that category structure does affect consumer decision-making on how member brands from a category are recalled and chosen (Alba and Chattopadhyay 1985, Alba and Hutchinson 1987, Nedungadi 1990, Dube and Schmitt 1999). The importance of the categorization process is further underscored by the fact that positive attitudes alone toward a brand are not helpful unless a product is properly categorized (Nedungadi 1990) and the categorization is consistent with the existing brand associations (Tauber 1988, Viswanathan and Childers 1999). Therefore, a thorough understanding of the target category structure and the categorization process is important as “categorization precedes evaluation and may influence it as well” (Sujan 1985).
Consumers usually organize product information into either taxonomic or goal-driven categories. It is generally believed that taxonomic categories and goal-driven categories represent within and across category product comparisons respectively (Ratneshwar et al 1996 and Felcher et al 2001). For taxonomic categories consumer choice is limited to one category, such as, choosing between Pepsi and Sprite when deciding on a beverage. The marketing managers commonly use taxonomic categorization to organize their products for competitive purposes, such as, coffee, yogurt, ice cream, etc. However, taxonomic categories fall short of completely explaining the consumer choice processes in instances where consumers seek to fulfill a need or a want by considering alternatives from different taxonomic categories (Johnson 1984, 1986, 1988, Bettman and Sujan 1987). For example, consumers may choose between orange juice and granola bar as breakfast alternatives. This view of goal-driven product comparison is also consistent with the prior beliefs in marketing that consumers do not buy products, instead they purchase benefits and consider product alternatives from different categories that best meet a single need (Ratneshwar and Shocker 1991). Thus, depending on the context, consumers make both within and across category choice decisions using taxonomic and goal-driven categorization, respectively.

The taxonomic and goal-driven categories differ from one another on a number of dimensions (Goldstone et al 1991). The members of a taxonomic category possess features that are context independent, that is, they are fixed and do not change with the context (Barsalou 1982). In contrast, members of a category held together by a goal tend to possess features that are context dependent, that is, they become salient only in a
context in which they are invoked (Barsalou 1982). The taxonomic categories tend to have a product focus whereas goal-deriven categories usually emphasize usage context and/or product benefit. Given this, goal-deriven product categories are likely to comprise of diverse products used to meet a specific goal whereas objects in a taxonomic category would be similar to each other in terms of their physical attributes.

Given the nature of the goal-deriven categories, they are believed to be more super-ordinate than the taxonomic categories (Loken and Ward 1990) and tend to be represented by abstract attributes. Subordinate categories, on the other hand, are perceived to be more concrete than super-ordinate categories (Rosch et al 1976). There is evidence that subordinate and basic-level categories share more common attributes across members of the category making them more similar to one another (Rosch et al 1976, Sujan and Deklava 1987, Loken and Ward 1990). According to the contrast model (Tversky 1977) overall similarity between objects is a linear combination of their common and distinctive features. Therefore, it could be argued that brands in a taxonomic category would be seen as more similar making them readily comparable on the salient attributes than products from a goal-deriven category. Johnson (1988) defines comparability as, “the degree to which consumers describe or represent products using the same non-price attributes.”

Do consumers employ different decision processes when choosing from a taxonomic versus a goal-deriven category? Researchers in the past have demonstrated that an across-category choice decision process is different from within category process (Lynch
et al 1988, Nedungadi 1990) because of the degree of ease with which individuals can access common attributes from taxonomic and goal-driven categories (Barsalou 1982, 1985). In a taxonomic (within) category choice process, there is a possibility of being able to compare product attributes (e.g., Pepsi is sweeter than Coke), whereas across-category choices have few or do not share any product feature commonality (e.g., an orange juice and granola bar) (Johnson 1984). This implies that members of the taxonomic categories will not only be more comparable than those in the goal-driven categories, but also be compared using more concrete and specific attributes (Mervis and Rosch 1981, Felcher et al 2001). Whereas products in goal-driven categories would be less comparable and any comparison would be based on abstract goal-oriented features (Bettman and Sujan 1987).

The taxonomic or goal-driven categorization can also be viewed in terms of product positioning. As discussed earlier in this chapter, a product can be positioned either on some concrete product attribute or on some abstract product benefit to achieve the desired positioning goal. Given the discussion so far in this section, categorizing a brand taxonomically appears analogous to attribute-based product positioning, whereas a goal-driven categorization parallels benefit-based product positioning.

The above discussion suggests that taxonomic categories have more concrete attributes than the goal-driven categories, and objects within them will be more similar and comparable to each other. At the same time, consumers use more attribute specific information to compare objects from taxonomic categories, thus, making their similarities
and differences more salient. It has been argued that similar products are seen as substitutes and lead to higher competition between them (Ratneshwar and Shocker 1991).

"The relative proximity of brands in the attribute space provides a measure of the intensity of competitive rivalry among brands." (Chintagunta 1999, p. 315)

Therefore, it is proposed that the evaluation of a brand extension that is categorized taxonomically will be affected more by the competing brands than an extension that is seen as part of a goal-driven category.

**Hypothesis 5** – The effect of competition will be greater on brand extensions that are categorized taxonomically than those that are categorized in a goal-driven manner.

The next chapter describes the data collection process, three experiments and tests of hypotheses.
4 Research Design, Data Collection and Analysis

4.1 Research Design – An Experimental Study

This chapter details the research methodology employed in testing the hypotheses developed in the previous section. Marketing decisions are made in complex, dynamic environments where a number of variables simultaneously affect an outcome. Likewise, consumers make their purchase decisions in less than unambiguous situations where the amount of information can be either too little or overwhelmingly large, but seldom appropriate. This complexity in the decision environment and context makes it harder to systematically isolate and examine the impact of a variable on consumers at a given time. Given the causal nature of the study, an experimental design was employed involving a series of experiments to isolate the effects of competition on the evaluation of brand extensions. An experimental design controls the extraneous variables and maximizes the experimental variance resulting in test of hypotheses with high internal validity. However, the results obtained from an experimental research do not possess high external validity.

"... when the focus of research is on theory testing, external validity may be sacrificed in favor of securing internal and construct validity. Instead of attempting to examine numerous background variables, it is useful to control background factors as much as possible in order to focus on the process underlying a particular consumer behavior" (Malhotra and King 2003, p. 43).

The experiments for this dissertation were conducted using student sample, however, the use of students as subjects is not without criticism. The next section details the rationale for using the student sample.
4.2 Student Sample

Student samples have been extensively used in the past to examine the evaluation of brand extensions (e.g., Boush et al 1987, Aaker and Keller 1990, Boush and Loken 1991, Park et al 1991, Broniarczyk and Alba 1994, Dawar and Anderson 1994, Gurhan-Canli and Maheswaran 1998, Han 1998, Sheinin 2000, Maoz and Tybout 2002). The use of student samples is not without criticism and its limitations in some contexts have been recognized (Cunningham et al 1974, Barr and Hit 1986, James and Sonner 2001). Specifically, the generalizability of the results obtained from using student samples has been questioned. However, it has also been realized that under some circumstances using student samples is an appropriate way to conduct research, in particular at initial stages of studies for theory development and testing and when involving tasks that students do undertake (Arnold 2004). Similar views have also been expressed that using student samples does not necessarily lead to a compromise on external validity:

"Samples and populations should not be construed as sets of respondents. The relevant populations in experimental consumer research consist of measures of behavior." (Lynch 1982, p. 238)

This suggests that as long as construct validity of a study, along with internal validity, is well understood and addressed, external validity of a study need not be a major issue. Since the primary aim of the proposed study was the test and development of a research framework, the use of student sample is justified. Moreover, students are also primary decision makers and consumers of the goods to be tested in the research and constitute a significant part of the population.
4.3 Questionnaires

The data were collected using structured questionnaires. For all three experiments, the scales used and, the question wordings were the same. Most of the items in the questionnaires have been used in past research to measure similar constructs as shown in Table 2 below.

Table 2

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measures/Scale</th>
<th>Supporting Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Familiarity</td>
<td>9-point Likert Type</td>
<td>Broniarczyk and Alba (1994)</td>
</tr>
<tr>
<td>Brand Affect</td>
<td>9-point Likert Type</td>
<td>Broniarczyk and Alba (1994)</td>
</tr>
<tr>
<td>Brand Quality</td>
<td>9-point Likert Type</td>
<td>Dawar (1992)</td>
</tr>
<tr>
<td>Brand Knowledge</td>
<td>9-point Likert Type</td>
<td>Dawar (1992)</td>
</tr>
<tr>
<td>Extension Fit</td>
<td>9-point Likert Type</td>
<td>Dawar (1992)</td>
</tr>
<tr>
<td>Extension Affect</td>
<td>9-point Likert Type</td>
<td>Broniarczyk and Alba (1994)</td>
</tr>
<tr>
<td>Category Knowledge</td>
<td>9-point Likert Type</td>
<td>McCarthy et al 2001</td>
</tr>
<tr>
<td>Category Competition</td>
<td>9-point Likert Type</td>
<td>New Item</td>
</tr>
<tr>
<td>Category Leader</td>
<td>Open-ended</td>
<td>New Item</td>
</tr>
<tr>
<td>Competition Rating</td>
<td>9-point Likert Type</td>
<td>MacInnis and Nakamoto (1990)</td>
</tr>
<tr>
<td>Purchase Likelihood</td>
<td>9-point Likert Type</td>
<td>Dawar (1992)</td>
</tr>
</tbody>
</table>

4.4 Brand Replicates

A total of six brands representing various product categories were included in the research. The focus of analysis was not brand specific, therefore, data for all six brands were collapsed on the grounds to those described below:

"The replication factors were included to demonstrate that the predicted results are generalizable and that the effect is due to the influence of the [treatment] rather than to some other aspect of the extension category." (Broniarczyk and Alba 1994, p. 217)
Similarly, data across product categories from both consumer durable and non-durable goods have been collapsed by various researchers (Chakravarti et al. 1990; Nedungadi 1990; Boush and Loken 1991; Dawar and Anderson 1994; Nedungadi et al. 2001).

Before the experiment was conducted, a series of pre-tests were undertaken to ensure that, (1) the brands included in the study were familiar to the students, (2) the proposed brand extensions to be included in the experiment had a high-fit with the parent brand as the central thesis of the present study is that the competitive effects will be present even if an extension highly fits with the parent brand, and (3) to select brands from a wide range of categories that were perceived to be highly competitive. The following sections outline the pre-tests.

4.4.1 Pre-Test 1

Brand extensions included in experiment #1 were chosen after a series of three pre-tests in which four marketing doctoral students and fifty-six undergraduate students enrolled in various business courses participated. In the first step, four doctoral students were provided with a list of 64 consumer product categories that have been frequently used in the previous branding studies and cover a wide range of products. The doctoral students were asked to rate their familiarity with them on a 9-point scale, where 1 = Not At All Familiar and 9 = Very Familiar (Appendix B). All product categories that scored a mean rating of 4.50 and above on the familiarity scale were retained for further pre-testing.
This resulted in a short-list of 20 products. The product categories and their mean rating are listed in the first two columns of Table 3.

4.4.2 Pre-Test 2

In the next step, thirty participants enrolled in undergraduate business programs were provided with the 20 consumer products categories retained from the first pre-test and were asked to list the major brands in each category along with their respective perceived market shares. They were also asked on a 9-point scale (1 = Not At All Competitive; 9 = Highly Competitive) to list the perceived competitiveness of each category (Appendix B). Each student evaluated five different product categories. The dominant brand from each category and category competitive scores are listed in the third column of Table 3. The category competitive scores were used to select categories that were perceived to have varying levels of competition.

4.4.3 Pre-Test 3

The purpose of this pre-test was to choose proposed brand extensions that have high fit with the parent brand. As indicated earlier, one of the central arguments in the current research is that the not-so-positive evaluation of brand extensions is due not only to a
Table 3

Product Category Familiarity, Major Brands and Category Competitiveness

<table>
<thead>
<tr>
<th>Product Categories</th>
<th>Mean Familiarity Ratings (1 = Not at All; 9 = Very Familiar)</th>
<th>Major Brand</th>
<th>Category Competitive Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic Shoes</td>
<td>7.75</td>
<td>Nike</td>
<td>7.14</td>
</tr>
<tr>
<td>Toothpaste</td>
<td>7.25</td>
<td>Crest</td>
<td>6.50</td>
</tr>
<tr>
<td>Color TVs</td>
<td>7.00</td>
<td>Sony</td>
<td>7.38</td>
</tr>
<tr>
<td>Cereal</td>
<td>7.00</td>
<td>Kellogg's</td>
<td>6.25</td>
</tr>
<tr>
<td>Laser Printers</td>
<td>6.75</td>
<td>Hewlett Packard</td>
<td>7.71</td>
</tr>
<tr>
<td>DVD Players</td>
<td>6.50</td>
<td>Sony</td>
<td>8.14</td>
</tr>
<tr>
<td>Digital Still Cameras</td>
<td>6.25</td>
<td>Sony</td>
<td>7.43</td>
</tr>
<tr>
<td>Camcorders</td>
<td>6.25</td>
<td>Sony</td>
<td>6.86</td>
</tr>
<tr>
<td>Frozen Pizza</td>
<td>5.75</td>
<td>Delissio</td>
<td>5.33</td>
</tr>
<tr>
<td>Ice Cream</td>
<td>5.75</td>
<td>Nestle</td>
<td>6.71</td>
</tr>
<tr>
<td>Detergent Powder</td>
<td>5.75</td>
<td>Tide</td>
<td>7.14</td>
</tr>
<tr>
<td>Chocolate Chip Cookies</td>
<td>5.75</td>
<td>President’s Choice</td>
<td>5.20</td>
</tr>
<tr>
<td>Chewing Gum</td>
<td>5.75</td>
<td>Wrigley’s</td>
<td>7.25</td>
</tr>
<tr>
<td>Yogurt</td>
<td>5.50</td>
<td>Danone</td>
<td>6.00</td>
</tr>
<tr>
<td>Shaving Cream</td>
<td>5.50</td>
<td>Gillette</td>
<td>6.60</td>
</tr>
<tr>
<td>Digital Wrist Watches</td>
<td>5.50</td>
<td>Timex</td>
<td>5.57</td>
</tr>
<tr>
<td>Vacuum Cleaners</td>
<td>4.75</td>
<td>Hoover</td>
<td>4.71</td>
</tr>
<tr>
<td>Toilet Paper</td>
<td>4.75</td>
<td>Charmin</td>
<td>6.43</td>
</tr>
<tr>
<td>Electric Toothbrushes</td>
<td>4.75</td>
<td>Oral-B</td>
<td>6.14</td>
</tr>
<tr>
<td>Facial Tissues</td>
<td>4.50</td>
<td>Kleenex</td>
<td>6.63</td>
</tr>
</tbody>
</table>

lack of fit, but also to other factors. For example, target category competition can also adversely affect the extension evaluation even when there is a high fit between a brand and its extensions. Therefore, it was necessary to choose brand extensions with high fit with the parent brand and then demonstrate the effects of competition through reduced extension evaluations.

A series of mostly hypothetical brand extensions were developed that would be introduced in the twenty most familiar categories identified previously. Twenty-six
undergraduate business students were asked to rate the potential brand extensions in terms of their fit with the parent brand on a 9-point Likert-type scale (1 = No Sense At All; 9 = A Lot of Sense) as shown in Appendix B. The proposed brand extensions and their fit ratings are listed in the Table 4.

Table 4

Proposed Brand Extensions and Fit Ratings

<table>
<thead>
<tr>
<th>Proposed Brand Extension</th>
<th>Fit Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kleenex Toilet Paper</td>
<td>8.71</td>
</tr>
<tr>
<td>Charmin Facial Tissues</td>
<td>8.44</td>
</tr>
<tr>
<td>Listerine Toothpaste</td>
<td>8.11</td>
</tr>
<tr>
<td>Kodak Camcorders</td>
<td>7.80</td>
</tr>
<tr>
<td>Sony Laser Printers</td>
<td>7.23</td>
</tr>
<tr>
<td>Starbucks Ice Cream</td>
<td>6.96</td>
</tr>
<tr>
<td>Dell Color TVs</td>
<td>6.87</td>
</tr>
<tr>
<td>Haagen-Dazs Yogurt</td>
<td>6.78</td>
</tr>
<tr>
<td>Oakley Athletic Shoes</td>
<td>6.72</td>
</tr>
<tr>
<td>Close-Up Chewing Gum</td>
<td>6.38</td>
</tr>
<tr>
<td>Ivory Detergent Powder</td>
<td>6.33</td>
</tr>
<tr>
<td>Oakley Digital Wrist Watches</td>
<td>6.12</td>
</tr>
<tr>
<td>Ivory Shaving Cream</td>
<td>6.00</td>
</tr>
<tr>
<td>Kodak DVD Players</td>
<td>5.66</td>
</tr>
<tr>
<td>Heinz Frozen Pizza</td>
<td>5.45</td>
</tr>
<tr>
<td>Heinz Sliced Cheese</td>
<td>5.00</td>
</tr>
<tr>
<td>Hershey Chocolate Chip Cookies</td>
<td>5.00</td>
</tr>
<tr>
<td>Sony Electric Toothbrush</td>
<td>4.67</td>
</tr>
<tr>
<td>IBM Digital Cameras</td>
<td>4.33</td>
</tr>
<tr>
<td>Sony Vacuum Cleaners</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Six brand extensions with the highest fit with their respective parent brands representing different product categories were retained for inclusion in the final experiments and used as replicates. The proposed extensions included in the first experiment are: (1) Kleenex
Toilet Paper, (2) Listerine Toothpaste, (3) Kodak Camcorders, (4) Sony Laser Printers, and (6) Dell TVs.

The pre-tests resulted in the following information that was used for the subsequent experiments to test the hypotheses:

1. Product categories most familiar to the students were identified;
2. The brand rankings from each category were obtained that would be used as an input for designing scenarios to cue competition;
3. Brand extensions were developed and their fit with the parent brands was measured;
4. Six brand extensions with the highest fit with their parent brands, representing six different product categories were short-listed to be included in the first experiment; and
5. Pre-tests also indicated that international students who were often not familiar with the brands and product categories to be included in the experiments. This information was used in selecting the respondents suited to the experiment.

The next section details the data collection process, analysis, and results of the first experiment.

Given the category similarity between Toilet Paper and Facial Tissues, Charmin was not included in the study to enhance the diversity of categories included in the experiment.
4.4.4 Experiment 1

The first experiment was designed to test three hypotheses, i.e., H1, H2 and H3. These hypotheses measure the effect of competing brands; the effect of consumer knowledge; and the presence (absence) of a dominant brand in the target category on the evaluation of brand extensions. The following hypotheses were tested in the first experiment.

**H1 =** The evaluation of a brand extension, regardless of its high fit, will not be evaluated as favorably in the presence of competing brands as it is when evaluated on its own.

**H2 =** Compared to low-knowledge consumers, the competitive effects on the evaluation of brand extensions will be greater for individuals with higher target category knowledge.

**H3 =** The competitive effects on the evaluation of brand extensions will be stronger in product categories with a category-dominant brand.

4.4.4.1 Research Design

The data were collected using a 3x6 between-subjects, replicated experimental design with three types of competition treatments (pre-competition, post-competition dominant, and post-competition non-dominant conditions) and six brand replicates. One set of questionnaires was used to collect data on the evaluation of brand extensions without cueing the competition from the target category (pre-competition scenarios) as shown in
Appendix B. Based on the pre-test results, another set of questionnaires was designed to induce competition (post-competition scenarios).

Two versions of the post-competition scenarios were developed to induce competition and the presence or absence of a dominant brand. Brand dominance was experimentally manipulated in the target category in two ways by varying the competing brands' market shares in different target categories and by asking the respondents to identify a dominant brand on their own. For example, in the category TV in which Dell TVs would be introduced, Sony was consistently rated as the number one brand with the highest market share. For the dominant condition scenario, the difference between Sony and the second ranking brand was 7% and included a statement after the market share table that "From the above table it is clear that Sony is the leading and dominant brand with a commanding presence in the TV market." For the non-dominant scenario, the difference between Sony and the 2nd brand was reduced to less than 2% and a statement followed the market share table that, "From the above table it is clear that all brands of TVs are equally competitive with more or less similar market shares. There is no leading and dominant brand in the TV market." A footnote was included in the questionnaire that stated the information was collected from the Consumers Reports to enhance the believability of the market share information.

A copy of the questionnaires for the two versions of the post-competition scenarios with a dominant brand and without a dominant brand can be found in Appendix B.
4.4.5  Experiment 1-a

The following paragraphs detail the independent and dependent variables for the experiment 1-a.

4.4.5.1  Independent Variables

4.4.5.1.1  Competition

The study was a between-subjects research design where a group of students was asked to evaluate brand extensions without cueing competition. The other group of respondents was presented with the same brand extensions as the first group and was asked to evaluate the same brand extensions after cueing the competition. Therefore, the effect of competition was measured by comparing the post-competition groups’ brand extension evaluation scores with those of the pre-competition group.

4.4.5.1.2  Brand Dominance

Brand dominance has been defined in a number of different ways in the marketing literature: To some, it is the strength of a brand’s association with a given category (Herr et al 1996) and can be measured by asking the respondents to recall the top brand once a category is primed. To other researchers, brand dominance is defined by how well entrenched a brand is in a category (Carpenter and Nakamoto 1989) and is measured by the market share it commands (Urban et al 1986). The two measures of brand dominance are based on different perspectives and may result in different results. The present study
retains both measures of brand dominance and also introduces a modification to the first measure. In a competitive context, a brand that is viewed as dominant in a category (the first brand to be recalled) may have its dominance instantly challenged once an equally strong brand introduces an extension. This means that brand dominance, from the perspective of brand extensions in a competitive context, is not static but is a dynamic concept and should be best captured by measuring “relative brand dominance.” That is, assess a dominant brand’s strength vis-à-vis the new entrant.

As discussed above, two measures of brand dominance were employed wherein respondents were (1) provided with a market structure for the target category indicating share of the leading brand, and (2) were asked to identify the dominant brand in a given target category and then compare its brand strength with the proposed brand extension on a 9-point scale anchored with 1 = Very Weak Brand and 9 = Very Strong Brand. This last measure yielded “relative brand dominance.”

4.4.5.1.3 Target Category Knowledge

In line with previous research (McCarthy et al 2001; Smith and Park 1992), a self-reported 9-point scale to measure the product category knowledge was used, where 1 = Not Knowledgeable at All and 9 = Very Knowledgeable.
4.4.5.2 Dependent Variable

In keeping with the objective of the study, two dependent measures were included in the questionnaire: (1) the brand extension attitude measured in pre and post competition scenarios, and (2) purchase intent for the brand extension during the pre and post competition scenarios. To demonstrate the effect of competition on the evaluation of brand extensions, it was hypothesized that the evaluations of both measures would drop significantly from the pre-competition to the post-competition scenarios.

4.4.5.3 Data Collection

The respondents, undergraduate business students, were randomly assigned to one of the three treatments (pre-competition or post-competition dominant/non-dominant). The data were collected in classroom settings. The respondents were told that the study was being conducted to evaluate the potential for introducing new products by some well-established brands. The subjects were provided with a definition of brand extension on the cover page of the questionnaire, as well as, verbally described after distributing the questionnaires. The results of the pre-tests had indicated that international students who participated in the research were not familiar with brands and product categories being included in the research. Therefore, it was announced before the start of the experiment that the study required a certain degree of familiarity with the brands available in the Canadian markets and those students who had not lived in Canada for at least five years prior to the date of the study should not participate in the study. Every student present in the class was provided with a copy of the questionnaire and those who did not meet the
residency requirement were urged to return the questionnaires blank. However, in keeping with the requirements for Ethical Clearance of the study the students were not asked to identify themselves publicly in any ways as international students. Students were also read the privacy statement and told that the participation in the study was voluntary.\footnote{These announcements regarding respondents' eligibility and privacy were made before each data collection phase during all experiments.}

The participants in the pre-competition scenario were asked to evaluate all six brand extensions that were short-listed through pre-tests, whereas those in the post-competition scenarios were asked to evaluate three brand extensions each. This was done to avoid respondent fatigue, as the post-competition scenario questionnaires were considerably longer and more involving than the pre-competition scenario questionnaire. For the post-competition scenarios, the participants were randomly assigned three of the six brands replicates. The questionnaires were in a booklet form. It took respondents approximately ten minutes to complete the questionnaire.

A total of 64 respondents participated in the pre-competition condition, resulting in a total of 379 usable observations. For the post-competition treatment, 52 and 59 students completed the dominant and non-dominant post-competition scenarios resulting in a total of 152 and 176 usable responses respectively.
4.4.5.4 Data Analysis and Results

The data were analyzed using the univariate analysis of variance (ANOVA) based on the general linear models procedure on SPSS 11.5.

4.4.5.5 Competition and Evaluation of Brand Extensions (H1)

The hypothesis H1 posited that evaluation of brand extensions, regardless of their high fit with the parent brand, will be lower in the presence of competing brands than when the brand extensions are evaluated on their own. Therefore, it was expected that the measure would be significantly lower in the post-competition cued scenarios than in the pre-competition scenarios. An analysis of the two dependent variables indicated a substantial and significant correlation between them ($r = 0.783$, $p = 0.000$). Therefore, the two dependent variables were combined and a new dependent measure was computed based on the average of the two.

The analysis of variance showed that there was a significant treatment effect among the three experimental conditions ($F_{2, 707} = 10.119$, $p = 0.000$). The means of the three treatment conditions along with their standard deviations are shown in Table 5 below. A pair-wise comparison showed that the pre-competition condition was significantly different in the expected direction from both post-competition (dominant brand $p = 0.001$), and post-competition (non-dominant brand $p = 0.000$) conditions. However, the two post-competition scenarios were not different from one another ($p = 0.768$).
Table 5

Competitive Effects – Experiment 1-a

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Competition</td>
<td>6.18</td>
<td>2.11</td>
</tr>
<tr>
<td>Post-Competition (Dominant Brand)</td>
<td>5.50</td>
<td>2.18</td>
</tr>
<tr>
<td>Post-Competition (Non-Dominant Brand)</td>
<td>5.44</td>
<td>2.02</td>
</tr>
</tbody>
</table>

The results indicate that the evaluation of brand extensions is less favorable from the pre-competition condition to the post-competition conditions, thus, supporting the hypothesis H1.

4.4.5.6 Target Category Knowledge and Evaluation of Brand Extensions (H2)

Given no difference between the two post-competition scenarios, the data from the two were collapsed to form one post-competition variable. The H2 predicted that compared to low-knowledge consumers, consumers with high knowledge about the target category would generate a larger number of product alternatives with distinct product and brand attributes, therefore, resulting in greater competitive effect on the evaluation of brand extensions. Therefore, a test of the H2 required:

\[(a - b) > (c - d),\] where:

- \(a =\) Pre-Competition Evaluation of Brand Extension for High-Knowledge Consumers
- \(b =\) Post Competition Evaluation of Brand Extension for High-Knowledge Consumers
- \(c =\) Pre-Competition Evaluation of Brand Extension for Low-Knowledge Consumers
- \(d =\) Post Competition Evaluation of Brand Extension for Low-Knowledge Consumers
Table 6

Category Knowledge Effects – Experiment 1-a

<table>
<thead>
<tr>
<th>Target Category Knowledge</th>
<th>Mean Brand Extension Evaluation Scores</th>
<th>Pre-Post Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Competition</td>
<td>Post-Competition</td>
</tr>
<tr>
<td>High Knowledge</td>
<td>6.94</td>
<td>6.21</td>
</tr>
<tr>
<td>Low Knowledge</td>
<td>6.35</td>
<td>5.50</td>
</tr>
</tbody>
</table>

H2 = (6.94 - 6.21) > (6.35 - 5.50)

A t-test was conducted to test H2 and the results indicate that there is no statistically significant difference between the two groups as hypothesized (t = -0.489), therefore, resulting in failure to support H2.

4.4.5.7 Category-Dominant Brand and Evaluation of Brand Extension (H3)

Hypothesis 3 posited that the competitive effects on the evaluation of brand extensions would be stronger in product categories with a dominant brand than for categories without a dominant brand. As indicated earlier, two separate measures were used to assess the effect of a category dominant brand on the evaluation of brand extensions. One measure was based on the market share and structure of the target category, whereas the other measure captured the brand-category association and assesses the “relative brand dominance.” The test of the hypothesis H3 involving the first measure of the brand dominance required that:
(a-b) > (a-c) where,

\[ a = \text{Pre-Competition Brand Extension Evaluation Score}, \]
\[ b = \text{Post-Competition (Dominant Brand) Brand Extension Evaluation Score} \]
\[ c = \text{Post-Competition (Non-Dominant Brand) Brand Extension Evaluation Score} \]

Table 7

<table>
<thead>
<tr>
<th>Category Dominant Brand Effects – Experiment 1-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Brand</td>
</tr>
<tr>
<td>Dominant Brand</td>
</tr>
<tr>
<td>Non-Dominant Brand</td>
</tr>
</tbody>
</table>

H3 = (6.18 − 5.50) > (6.18 − 5.44)

A t-test on the difference of the differences shows that the two means was not significantly different from one another (t = -0.0322), i.e., the two post-competition treatment conditions were not different from one another, therefore, resulting in a lack of support for H3 using market share-based measure of brand dominance.

In the next step, the second measure of brand dominance was used to test the H3. Given a lack of difference between the two post-competition scores, the data from the two conditions were merged. This was followed by a computation of dominant brand in a given category based on two questions. As indicated earlier, in the first question, the respondents were asked to name the strongest brand in the category. The next questions asked the respondents on a 9-point Likert-type scale, “Compared to the strongest brand you identified in the previous question, the (proposed extension) brand is a,” 1 = Very

\[ ^5 \text{Pre-tests had shown that respondents had difficulty understanding the word dominance; therefore, the term strongest was used instead.} \]
Weak Brand, and 9 = Very Strong Brand. The data obtained from the second question were divided into two parts for those rated the relative brand strength from 1 – 5 and those who rated it from 6 – 9. The respondents who rated the proposed brand extension from 1 – 5 were categorized as believing that the target category had a dominant brand, whereas those from 6 – 9 were categorized as in the non-dominant category. This test was conducted only on the post-competition scenario data because the comparison was not made between pre and post-competition scenarios, but instead on the perception of the respondents only from the post-competition scenario.

Those who responded that the proposed brand extension was weaker than the strongest brand rated the proposed brand extension lower (Mean \text{Dominant Brand} = 4.741) than the group that rated the proposed extension brand as stronger than the strongest brand they identified (Mean \text{Non-Dominant Brand} = 6.633). A comparison of the two groups showed that there was a significant difference between them (F_{1,321} = 76.391, p = 0.000).

Of the two measures that were used to test H3, the measure based on market share did not yield a significant difference between the two post competition groups. However, the measure based on respondents’ perception of a category-dominant brand showed a significant difference between the two groups, that is, those who perceived the target category had a dominant brand versus those who did not perceive as such. Therefore, the consumer perception-based measure of category dominance did lead to the conclusion that the presence of a category dominant brand has higher negative consequences on the evaluation of a brand extension than without one.
4.4.5.8 Discussion

The results of the experiment 1-a support the main hypothesis in this study (H1) that competition does have an adverse effect on the evaluation of high fit brand extensions regardless of the market structure of the target category. The dominance or non-dominance of a brand in a category was measured in two ways. The market share-based measure of the brand dominance in a target category did not produce any difference between the two post-competition groups. However, the brand dominance as perceived by the respondents did result in a significant difference between the two groups.

Marketers and consumers both categorize product-market information in order to facilitate decision-making, however, the two sides may not use common criteria to assess a category’s structure and competitiveness. This mismatch in how one perceives and assesses a product category may result in different outcomes. It is evident from the findings of the experiment 1-a that consumers do not perceive product category structure and engage in a brand evaluation/purchase decision based on the market share criteria often used by marketing managers. These results are consistent with previous findings in research on identifying product markets:

“Customers often have considerable knowledge of existing brands through personal or friends’ experiences and exposure to promotion. Their perceptions may not always correspond to what manufacturers may believe about their own or competitive products.” (Day et al 1979, p. 13)

A similar question was raised by Lehman and Winer (2005), that:

“After all, who really defines competition, the firm or the customer? It is the customer who determines what alternative products and services solve the problem at hand.” (p. 55)
As proposed in H2, the effect of the target category knowledge on the evaluation of brand extensions was not supported in experiment 1-a, as the respondents with a high or low knowledge of the target category did not differ from one another. One explanation for a lack of support for the hypothesis H2 may be that the respondents were provided with the target category structure and names of the major brands in the category. Such information may have influenced the perception of respondents' knowledge of the target category.

Given the preceding results, a replication of the experiment 1-a was undertaken for the following reasons:

1. In the two post-competition scenarios, the respondents were provided with the product market structure and brand information. It was deemed important to replicate the study without providing market structure and product information to the respondents. The provision of market structure and brand information in the questionnaire might have affected respondents' evaluation of the relative brand dominance. Findings from the replicated study supporting the results from the previous experiment would also provide additional support for the hypotheses.

2. The provision of the market structure information might have also influenced the respondents' levels of perceived knowledge of the target category. Therefore, a revised questionnaire without such information might yield more objective information. A recall-based measure will not only be objective, but also be a more conservative measure of target category knowledge rather than a self-reported knowledge scale as used in experiment 1-a.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
4.4.6  Experiment 1-b

A revised research instrument (Appendix B) to collect post-competition data was developed to overcome the limitations of experiment 1-a as described in the previous section. The revised questionnaire differed from the post-competition questionnaires used in experiment 1-a in a number of significant ways as outlined below in the independent variables section.

4.4.6.1  Independent Variables

4.4.6.1.1  Competition

In the experiment 1-a, the competition was cued by providing the respondents with a list of brands that the proposed extension would compete against in the target category. In the revised questionnaire, the competition was induced by asking the respondents to recall all the competing brands in the target category.

4.4.6.1.2  Brand Dominance

Unlike the experiment 1-a, the brand (non)dominance measure based on the market share of different brands in the target category was not used. Instead, the brand dominance measure based only on the respondents’ perception of dominance was used. As described earlier, the respondents were asked to identify whether the category had a dominant brand or not. Following this, the respondents were asked to compare the brand strength of the proposed extension with the dominant brand they had identified. Such a measure not
only defined brand dominance from a consumer’s perspective, but also measured the relative brand strength.

4.4.6.1.3 Target Category Knowledge

The target category knowledge in experiment 1-b was a recall-based measure rather than the self-reported measure as employed in the experiment 1-a. This served, (a) to test the effects of competition on the evaluation of brand extensions under recall conditions that better represents the market realities, and (b) to measure respondent knowledge of the target category in more objective manner that parallels the real-life purchase situations. This measure is consistent with previous research that, “experts have much greater awareness and knowledge about the alternatives models available in the market,” (Mitchell and Dacin 1996, p. 234). The average number of brands recalled was used as a cut-off point to classify the respondents in high versus low knowledge groups.

4.4.6.2 Dependent Variable

Similar to experiment 1-a, attitude and purchase intention toward the proposed brand extension were used as two measures on which the effects of the independent variables were tested. The two dependent variables were significantly correlated ($r = 0.777, p = 0.000$), therefore, the two were averaged to develop an aggregated dependent measure.
4.4.6.3 Data Collection

The experiment 1-b was a 2x6 between subjects study where data obtained from the two groups of respondents (pre-competition and post-competition) across six brand replicates was compared to retest the three hypotheses as outlined in section 4.4.4. The experiment 1-b retained the data collected in experiment 1-a for the pre-competition scenarios. The additional data in the experiment 1-b were collected only for the post-competition scenario. The revised questionnaire was administered to 66 undergraduate students enrolled in various business courses. Each respondent was randomly assigned to one of the two versions of the questionnaire, each with three proposed brand extensions, therefore, resulting in a total of 198 observations. The brands and the brand extensions used in the experiment 1-a were retained for experiment 1-b. The data collection process was completed in the same manner as employed for the experiment 1-a, including, the instructions to complete the questionnaire.

4.4.6.4 Data Analysis and Results

The data were analyzed using the univariate analysis of variance (ANOVA) based on the general linear models procedure on SPSS 11.5.

4.4.6.5 Competition and Evaluation of Brand Extensions (H1)

The results from analysis of variance showed that there was a significant treatment effect among the two experimental conditions ($F_{1,571} = 6.885, p = 0.009$). The means of the
two treatment conditions along with their standard deviations are shown in the Table 8 below.

Table 8

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Competition</td>
<td>6.18</td>
<td>2.11</td>
</tr>
<tr>
<td>Post-Competition (Recall Based)</td>
<td>5.69</td>
<td>2.13</td>
</tr>
</tbody>
</table>

The results indicated a significant difference in the evaluation of brand extensions when competition was cued.

At the same time, an ANOVA was run to examine the differences in the three post-competition scenarios on the evaluation of brand extensions. The results indicated (Table 9) that there was a main effect for the treatment, that is all four pre and post-competition scenarios were different from one another.

Table 9

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Competition</td>
<td>6.18</td>
<td>2.11</td>
</tr>
<tr>
<td>Post-Competition (Dominant Brand)</td>
<td>5.50</td>
<td>2.18</td>
</tr>
<tr>
<td>Post-Competition (Non-Dominant Brand)</td>
<td>5.44</td>
<td>2.02</td>
</tr>
<tr>
<td>Post-Competition (Recall Based)</td>
<td>5.69</td>
<td>2.13</td>
</tr>
</tbody>
</table>

A pair-wise comparison of the four scenarios indicated that the pre-competition scenario was significantly different from all three post-competition scenarios at ($p_{\text{Dominant Brand}} = 0.001; p_{\text{Non-Dominant Brand}} = 0.000; F_{1,179} = 9.350; p_{\text{Recall-Based}} = 0.009$).
However, none of the three post-competition scenarios were different from one another. This suggests that evaluation of brand extension under recall and recognition is not different from one another. Overall, once again, the H1 is supported.

4.4.6.6 Target Category Knowledge and Evaluation of Brand Extensions (H2)

For experiment 1-b, the data were divided into high versus low knowledge respondents based on the number of brands recalled from the target category. The respondents recalled an average of three brands from the target category. Therefore, the data were divided into two groups between those respondents who recalled three and less brands (low-knowledge group, n = 113) and those who recalled four and more brands (high-knowledge group, n = 63).

An ANOVA between the two groups indicated that the evaluation of brand extensions was significantly lower for the high-knowledge group (Mean High-Knowledge = 4.992) than for the low-knowledge group (Mean Low-Knowledge = 6.009), ($F_{1,184} = 111.768, p = 0.003$), thus, supporting H2.

4.4.6.7 Category-Dominant Brand and Evaluation of Brand Extension (H3)

Similar to the experiment 1-a, the data obtained from the post-competition scenario from experiment 1-b were divided into two subgroups. Those who responded that the proposed brand extension was weaker than the strongest brand in the category rated the proposed
brand extension lower (Mean \text{Dominant Brand} = 4.555) than the group that rated the proposed extension brand as stronger than the strongest brand they identified (Mean \text{Non-Dominant Brand} = 7.260). A comparison of the two groups, once again, showed that there was a significant difference between the two groups at (p = 0.000), thus, providing further support for H3.

4.4.6.8 Discussion

4.4.6.8.1 Competition and Brand Extension Evaluation

The two experiments described in the previous sections successfully demonstrated that evaluating brand extensions while ignoring the competition leads to an over estimation of an extension's potential for success. The combined findings from the experiments 1-a and b indicated that the evaluation of brand extensions was lower in the presence of competing brands. Moreover, this competitive effect was present under a variety of conditions. Experiment 1-a used two different post-competition scenarios in which the market share of various competing brands was varied. In each condition, the evaluation of brand extension was significantly lower after competition was introduced in the evaluation process. This suggests that the competitive interference was present regardless of the market structure and the market share of the competing brands for a given extension.

In experiment 1-b, the post competition scenario was changed to one in which the respondents were asked to recall the brands from the target category. This variation in
the questionnaire also led to a successful retest of the hypothesis H1. The effect of competition was so strong on the evaluation of extensions that even when the market structure and names of the competing brands were not provided the extension evaluation ratings were still lower significantly.

The findings from the previous two experiments also help explain the results of a study conducted by Smith and Park (1992) thus offering nomological validity of the findings. Smith and Park (1992) examined the role of brand extension effectiveness on market share and advertising effectiveness: They hypothesized that effects of brand extension would increase as the number of competitors in a given market increased. The results of the Smith and Park (1992) study did not support their hypothesis and were, as a matter of fact, in the opposite direction. Their failure to obtain the hypothesized relationship can be explained in terms of competitive effects as demonstrated by experiment 1-a & b, that competition adversely affects the evaluation of a brand extension.

The preceding discussion suggests that consumers hold strong category-brand associations in their minds that when a target category is cued, it automatically invokes the competing brands, therefore, resulting in competitive interference. From a marketing management point of view, these findings imply that the introduction of a brand extension, regardless of the strength of the parent brand and extensions fit with it, does not pose any short-term threat to the existing brands in the target category. Similarly, it can be also argued that a strong brand entering an established category cannot take its success for granted.
The results of the two experiments taken together also indicate that both recognition (experiment 1-a) and recall (experiment 1-b) based competition cues equally affect the extension evaluation. It is noteworthy that even though the evaluation ratings were substantially lower under each post-competition scenario, the two conditions did not differ from one another in terms of their influence on the evaluation process. It appears from the results that competition does matter in the evaluation of brand extension, but the manner in which competition is cued is inconsequential, therefore, pointing to the pervasive competitive effects.

The provision of brand names in experiment 1-a closely resembles the everyday purchase experience of consumers in which they are presented with competing brands in a shopping aisle. The tests under the two separate experimental conditions are similar with the commonly encountered purchase situations in real life, therefore, providing a stringent test in support of hypothesis H1. This also helps eliminate the rival hypothesis that the results in experiment 1-a might have been obtained due to the "recency" effect by providing the names of the competing brands to the respondents.

Businesses would normally consider extending a brand that is well regarded in the market and when the extension has a high fit with the parent brand. The literature on brand extension evaluation has repeatedly demonstrated that a high fit is essential to an extension's success in the market. In this research, the competitive effects were present even though only brand extensions with a high brand-category fit were included in the study. Given that fit is a key predictor of the success of a brand extension, Smith and
Park (1992) were surprised to find that there was no effect of fit on the hypothesized extension-market share relationship in their study.

"Because this variable [fit] has been the cornerstone of previous research on brand extensions, and is assumed to be pivotal in the success of the brand extension strategy." (Smith and Park 1992, p. 307)

The lack of the role played by fit in their research most likely can be attributed to the competitive effects, which they failed to account for in their research. Fit, though a necessary condition for extending a brand, cannot compensate for competitive effects present in a category as shown in the current research by the lower evaluation scores of the brand extensions that had high fit with their respective parent brands. Therefore, it is important for firms to look beyond parent brand-extension fit when deciding to extend a brand and develop their extension strategy based on the number and type of incumbent brands in the target category.

4.4.6.8.2 Target Category Knowledge and Evaluation of Brand Extensions

Experiments 1-a & b also tested the hypothesis H2, which proposed that the evaluation of brand extensions would be lower for consumers with high target category knowledge compared with those with low target category knowledge. Consistent with the past literature on consumer knowledge (McCarthy et al 2001; Smith and Park 1992), a self-reported measure of target category knowledge was employed in experiment 1-a. This measure resulted in a lack of support for the H2. It may be concluded that since the respondents were provided with the brand names, market structure and market shares of
the major brands in the target category, the self-reported measure failed to discriminate between high and low knowledge respondents as all respondents had access to significant amounts of information. To overcome this limitation a more stringent measure of target category knowledge was employed in the experiment 1-b that required the respondents to recall brands from the target category. Using the modified recall measure, the respondents were classified as either high or low in category knowledge.

The results of the experiment 1-b are in line with the prediction made in H2 that respondents with high target category knowledge were indeed more critical of the extended brand than those with low category knowledge, therefore, resulting in significantly lower evaluations for the brand extensions. The results obtained are consistent with the findings from previous research (Smith and Park 1992) that increased consumer knowledge of the product class reduces the effectiveness of the brand extensions. The findings from the experiments 1-a & b were not designed to directly test which measure of consumer knowledge is more appropriate, however, under the present context, a recall-based measure of category knowledge appears to be a more suitable measure.

As stated above, the implications of the findings appear to be rather straightforward. Just because a brand is well established and introduces an extension with a high fit does not guarantee its market success. However, the impact of target category knowledge on extension evaluation becomes clearer when the findings are considered in the presence of data on parent brand familiarity. The overall familiarity for the parent brand in both
experiments was very high, (Mean Parent Brand Familiarity = 7.99, S.D. = 1.274). Moreover, there is no difference (F1, 158 = 0.230, p = 0.632) in the levels of brand familiarity between respondents from high category knowledge (Mean Parent Brand Familiarity = 8.052, S.D. = 1.191) and low target category knowledge (Mean Parent Brand Familiarity = 7.951, S.D. = 1.323). The respondents with high and low target category knowledge were equally aware of the brands. This suggests that the target category knowledge has more impact on the evaluation of brand extensions than brand familiarity does. One would intuitively reason that a brand highly familiar to individuals would be resistant to competitive pressures. Contrary to such reasoning, the role of brand familiarity is further eroded by the fact that there is no difference on the evaluation of brand extensions (F1, 175 = 1.744, p = 0.188) between high parent brand familiarity (Mean Brand Extension Evaluation = 5.988, S.D. = 2.236) and low parent brand familiarity (Mean Brand Extension Evaluation = 5.574, S.D. = 1.936) respondent groups.

4.4.6.8.3 Brand-Category Dominance and Evaluation of Brand Extensions

Two measures of brand dominance were employed in experiment 1-a to examine the impact of a category dominant brand on the evaluation of brand extensions. One measure was based on the market share, and the other one was the perceived relative brand strength. The results from the experiment 1-a indicated that the provision of market structure to the respondents failed to show any significant effect on the evaluation of extensions. However, the relative strength of the extended brand vis-à-vis existing leading brand(s) in the target category had a significant effect on how brand extensions...
were evaluated. The experiment 1-b modified the post-competition scenario and relied solely on respondent judgments of relative brand strength. Similar to the findings from the experiment 1-a, the results of the experiment 1-b also supported the hypothesis that categories with dominant brands have a far greater adverse impact on the evaluation of brand extensions than categories without a dominant brand. This is because the dominant brands have stronger brand-category associations and they are recalled faster (Haugtvedt et al 1993; Herr et al 1996), are less prone to competitive interferences (Alba and Chattopadhyay 1985), and are recalled in a variety of product usage situations (Keller 1993).

The use of relative brand strength as a measure of a brand’s dominance in a category appears to be more appropriate than a measure based on market share alone because it captures the consumers’ perception of dominance rather than that of marketers’. As discussed earlier, the scope of product markets as defined by marketing managers and consumers may not lead to identical competitive sets as the two tend to have asymmetrical market knowledge and, more often than not, different objectives. Therefore, it is important for marketers to have customer-centric measure of category dominance. Such a customer-centric view is consistent with the prevailing marketing wisdom that the extent of a firm’s belief in the “marketing concept” is best demonstrated by its customer orientation (Jaworski and Kohli 1993).

The results of experiments 1-a & b indicate that for those respondents who perceived that the extended brand was stronger relative to the existing category dominant brand showed
lower competitive effects. The effect of competition was significant for those respondents who perceived that the existing category dominant brand was relatively stronger than the extended brand. This suggests that the relative brand strength as an indicator of category dominance is a better measure to assess competitive positioning. This construct is “dynamic” in that it compares the brand strength and category association of an existing brand with an extended brand and determines the extent of competitive effect existing brands will have on the extension. Such a definition of category dominance is more suitable than the traditional ones that solely rely on the category-brand association strength (Herr et al 1996) and do not account for competition, which ought to be a key consideration for a brand contemplating extending into an existing category.

It is also relevant to note here that the relative brand strength as an indicator of category dominance yielded stable results across two different experimental contexts as indicated by the mean values for the proposed brand extensions in Table 10 below.

<table>
<thead>
<tr>
<th>Target Category With</th>
<th>Experiment 1-a</th>
<th>Experiment 1-b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Brand</td>
<td>4.74</td>
<td>4.56</td>
</tr>
<tr>
<td>Non-Dominant Brand</td>
<td>6.63</td>
<td>7.26</td>
</tr>
</tbody>
</table>

The literature on attitude formation also recognizes the relative nature of human judgments and the decision-context within which the judgments are made (Lynch et al
1991), thus, further supporting the use of relative brand strength as an indicator of category dominance.

The current findings question the prevailing wisdom in the literature on brand extensions that as long as a parent brand is well established and has a high fit with its extension on some relevant dimension, the brand extension evaluations will be successfully received in the market and are predictable. The findings from the present research indicate that neither high brand familiarity nor fit, however high, are sufficient to ensure the high evaluations of the extension and its success in a competitive context.

4.4.6.8.4 Conclusion

Experiments 1-a & b tested three hypotheses related to the effect of competition, brand dominance and target category knowledge on the evaluation of brand extensions. These experiments demonstrate that the extension evaluation process involves considerations not only involving the parent brand, extension characteristics, and fit between the two, but also consumer and target category characteristics. Taken together, the findings from the two experiments add to the previous research findings and significantly enhance our understanding of the extension evaluation process.

The next experiment builds on the findings from the first two experiments and attempts to address the implication of the provision of category structure on the evaluation of brand extensions.
4.5 Experiment 2

The objective of the second experiment was to test hypothesis H4 as described below:

\[ \text{H4} = \text{The competitive effects on the evaluation of brand extensions will be higher when a product category structure is provided compared to when it is not provided.} \]

This hypothesis will measure how the provision of category structure may alter the evaluation of brand extensions in a competitive setting. As discussed earlier, the provision of category structure results in higher number of brands being recalled, therefore, leading to greater competitive effects.

4.5.1 Pre-Test

In order to test the hypothesis H4, a pre-test was conducted to identify major subcategories within each product category as perceived by the consumers. Thirty-two undergraduate marketing students participated in the pre-test. A total of six product categories used earlier, equally divided between subjects were used in the pre-test. Each respondent was tasked to identify subcategories from the three different product categories. Two versions of the questionnaires containing three product categories each were developed. The six product categories used in the pre-test were the ones in which the proposed brand extensions from the previous experiment would be introduced. These target categories with the proposed brand extensions are: TV (Dell TV), camcorders...
(Kodak camcorders), toothpaste (Listerine toothpaste), printers (Sony laser printers), ice cream (Starbucks ice cream), and toilet paper (Kleenex toilet paper).

The respondents were told that the study was being conducted to understand how consumers categorize and label various product categories in memory. An example of various subcategories in the product category cars was provided on the cover page of the questionnaire (Appendix C) to aid respondents understanding of the task. The respondents were given two minutes for each product category to come up with as many subcategories as they could. At the end of the allotted time, respondents were instructed to move to the next page containing another product category. The process was repeated for all three different product categories. In keeping with prior research, all the subcategories that were mentioned by 20% or more of the respondents were included in the design of manipulation (Nedungadi et al 2001). From the results of the pre-test it appears that the product categories were very familiar to the respondents, and they did not have any difficulty identifying major subcategories across different product categories. It is also noteworthy that subcategories were based on product benefits, product/brand attributes, brand prestige, and the usage context, therefore, indicating the depth and breadth of the subcategories identified by the respondents. The Table 11 on the next page lists product categories and the major subcategories identified by the respondents:
Table 11
Minor Product Subcategories – Experiment 2

<table>
<thead>
<tr>
<th>Product Categories</th>
<th>Major Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>Projection TVs</td>
</tr>
<tr>
<td></td>
<td>- Front</td>
</tr>
<tr>
<td></td>
<td>- Rear</td>
</tr>
<tr>
<td>Flat Panel TVs</td>
<td>- Plasma</td>
</tr>
<tr>
<td></td>
<td>- LCD</td>
</tr>
<tr>
<td>Screen Sizes (27&quot;, 32&quot;, 42&quot; etc)</td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td>B&amp;W/Color Printers</td>
</tr>
<tr>
<td></td>
<td>- Home/Business Printers</td>
</tr>
<tr>
<td></td>
<td>- OfficeJet</td>
</tr>
<tr>
<td></td>
<td>- InkJet</td>
</tr>
<tr>
<td></td>
<td>All in One/Multifunction</td>
</tr>
<tr>
<td></td>
<td>Photo Printers</td>
</tr>
<tr>
<td></td>
<td>Portable Printers</td>
</tr>
<tr>
<td>Ice Cream</td>
<td>Single Servings</td>
</tr>
<tr>
<td></td>
<td>- Drumsticks</td>
</tr>
<tr>
<td></td>
<td>- Bars</td>
</tr>
<tr>
<td>Family Size</td>
<td>- Ice Cream Tubs</td>
</tr>
<tr>
<td>Premium Brands</td>
<td></td>
</tr>
<tr>
<td>Store Brands</td>
<td></td>
</tr>
<tr>
<td>Camcorder</td>
<td>Camcorder Shapes</td>
</tr>
<tr>
<td></td>
<td>- Vertical</td>
</tr>
<tr>
<td></td>
<td>- Horizontal</td>
</tr>
<tr>
<td></td>
<td>- Combo</td>
</tr>
<tr>
<td>Picture/Memory (Recording) Format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- MPEG</td>
</tr>
<tr>
<td></td>
<td>- Digital 8</td>
</tr>
<tr>
<td></td>
<td>- DVD</td>
</tr>
<tr>
<td></td>
<td>- Memory Stick</td>
</tr>
<tr>
<td>Toothpaste</td>
<td>Tartar Control</td>
</tr>
<tr>
<td></td>
<td>Fluoride</td>
</tr>
<tr>
<td></td>
<td>Breath Freshening</td>
</tr>
<tr>
<td></td>
<td>Sensitive Teeth</td>
</tr>
<tr>
<td></td>
<td>Teeth Whitening</td>
</tr>
<tr>
<td></td>
<td>Children's Flavored Toothpaste</td>
</tr>
<tr>
<td>Toilet Paper</td>
<td>Premium Brands</td>
</tr>
<tr>
<td></td>
<td>Economy/Cheap Brands</td>
</tr>
<tr>
<td></td>
<td>Expensive Brands</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
These subcategories were later used in developing questionnaires to prime the category structure for the main study.

### 4.5.2 Main Study

#### 4.5.2.1 Research Design

The experiment was a 2x6 between subjects experiment with two conditions (category-structure-provided versus not provided) replicated across six product categories. Based on the sub-categories identified through the pre-test as outlined in the previous section, a treatment description was developed to be included in the questionnaire (see Appendix C) in order to induce the category-structure-provided treatment.

#### 4.5.2.2 Independent Variable

The independent variable in the present experiment was the type of treatment provided to the respondents, that is, whether or not the target category-structure was provided. Respondents in the target category-structure provided condition were given the names of different subcategories, whereas those in the no-structure-provided condition were not given any information on the different types of subcategories in the target.

#### 4.5.2.3 Dependent Variable
In keeping with the objective of this experiment, two dependent measures were used: (1) the brand extension attitude measured in category-structure-provided vs. not provided, and (2) purchase intent for the brand extensions under the two scenarios. To demonstrate the effect of the provision of target category structure on the evaluation of brand extensions, it was hypothesized that the evaluations of both dependent measures would be lower for the category structure-provided than for no category structure-provided scenario. An analysis of the two dependent variables indicated a substantial and significant correlation between the two ($r = 0.791, p = 0.000$). Therefore, the two dependent variables were combined and a new dependent measure was computed based on the average of the two variables.

### 4.5.2.4 Data Collection

This experiment required data from two scenarios: (1) where the category structure was not provided, and (2) the category structure was provided. For the target category structure provided scenario the questionnaire used in the experiment 1-b was modified to include a brief description on target category structure to prime the competition. For the no category-structure provided condition, the data already collected for the experiment 1-b was used wherein no category structure was provided and the respondents were simply asked to recall the brands that the proposed brand extension would be competing against. The data for the structure-provided scenario were collected in two waves using two versions of the questionnaire. Each version of the questionnaire contained three of the six proposed brand extensions. A total of 102 respondents enrolled in various
undergraduate marketing courses participated in the study completing 54 and 48 questionnaires of the version one and two respectively (Appendix C).

4.5.2.5 Data Analysis and Results

The data were analyzed using the univariate analysis of variance (ANOVA) based on the general linear models procedure on SPSS 11.5.

The hypothesis H4 posited that the provision of category structure would result in greater competitive effects, i.e., a reduced evaluation on the dependent measures, than not providing the category structure. The following table presents the mean ratings for the two different scenarios.

Table 12
Competitive Effects – With/Without Category Structure

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Competition – No Structure Provided</td>
<td>5.69</td>
<td>2.13</td>
</tr>
<tr>
<td>Post-Competition – Structure Provided</td>
<td>5.21</td>
<td>2.12</td>
</tr>
</tbody>
</table>

The results indicate, as proposed, lower evaluation scores for brand extensions in post-competition scenarios where the category structure was provided to the respondents. The evaluation of brand extensions when category structure was provided (Mean Structure Provided = 5.208) is significantly lower than when the category structure was not provided (Mean Structure Not Provided = 5.688), ($F_{1, 495} = 6.031; p = 0.014$), thus, supporting H4.
In addition to comparing the two post competition groups (with and without category structure) the pre-competition scenario was also included in the analysis for comparative purposes.

Table 13
Category Competitive Effects – Experiment 2

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Competition Scenario</td>
<td>6.18</td>
<td>2.11</td>
</tr>
<tr>
<td>Post-Competition – No Structure Provided</td>
<td>5.69</td>
<td>2.13</td>
</tr>
<tr>
<td>Post-Competition – Structure Provided</td>
<td>5.21</td>
<td>2.12</td>
</tr>
</tbody>
</table>

The evaluation of brand extensions for the post-competition scenario with structure-provided should not only be lower than the post competition no structure-provided, but also should be much lower than the pre-competition scenarios as well. The analysis of variance showed that there was a significant treatment effect among the three experimental conditions ($F_{2, 875} = 6.885, p = 0.000$). Both post-competition experimental scenarios with and without the category structure are significantly lower than the pre-competition scenario at $p = 0.000$ and $p = 0.009$ respectively. In addition to supporting H4, the results also indicated that competition has a much more negative effect on brand extension evaluation when target category structure is provided.

4.5.2.6 Discussion

The experiment # 2 was conducted to test the hypothesis that provision of category structure would result in higher competitive effects than not providing the target category structures. The results of the study support the hypothesized relationship.
Past research (Nedungadi 1990; Nedungadi et al 2001) showed that the provision of category structure results in recall of a larger number of brand names from a given category. Respondents in the Nedungadi et al (2001) recalled significantly higher number of brands (13.8) when the category structure was provided compared to when the structure was not provided (11.9 brands). The H4 was built on the notion that provision of category structure would result in higher brand recall, therefore, leading to greater competitive effects. However, the analysis from the current study revealed that there is no difference between the number of brands recalled when the structure was provided (Mean = 3.30, S.D. = 1.460) versus when it was not (Mean = 3.16, S.D. = 1.656), p = 0.333. The results, though not significant, are in the expected direction.

Given a wide range of product categories included in the study, it was decided to conduct a brand/category specific analysis. An ANOVA using the number of brands recalled as a dependent variable was run against different types of brands representing six different product categories and two types of structure treatment, i.e., structure provided vs. not provided. The average number of brands recalled for each brand/category is shown in Table 14 below.
Table 14
Competitive Effects – Mean Brand Ratings

<table>
<thead>
<tr>
<th>Product Category (Brand)</th>
<th>Category Structure</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provided</td>
<td>Not Provided</td>
<td></td>
</tr>
<tr>
<td>TV (Dell)</td>
<td>4.41</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>Camcorders (Kodak)</td>
<td>2.89</td>
<td>3.04</td>
<td></td>
</tr>
<tr>
<td>Mouthwash (Listerine)</td>
<td>3.43</td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>Laser Printer (Sony)</td>
<td>3.06</td>
<td>2.59</td>
<td></td>
</tr>
<tr>
<td>Ice Cream (Starbucks)</td>
<td>3.21</td>
<td>3.32</td>
<td></td>
</tr>
<tr>
<td>Toilet Paper (Kleenex)</td>
<td>2.64</td>
<td>2.10</td>
<td></td>
</tr>
</tbody>
</table>

The results of the ANOVA indicate that there was no interaction between brand/category type and type of structure treatment ($F_{5,471} = 0.745, p = 0.590$). Also, there was no treatment effect for the category structure ($F_{1,471} = 2.215, p = 0.137$), which indicates that the number of brands recalled from each category for structure treatment is not different. However, there is a main effect for brand/category type ($F_{5,471} = 16.985, p = 0.000$), which is not surprising given the fact that all six brands represent very different product categories with different number and type of subcategories and competitors in each.

One possible explanation for the lower evaluation of brand extensions in the structure provided condition is that the respondents might have recalled more and different types of brands, but did not mention them due to the task demands. Since the experiment was conducted during the regular class hours and each respondent was asked to complete three structure provided scenarios, it may be that respondents wanted to complete the task as fast as possible without spending the time to write all the brands they recalled.
The provision of category structure should have enhanced the individual knowledge of the target category. Therefore, further analysis was conducted to test the effects of consumer knowledge on the extension evaluation for structure-provided category only. This step was undertaken to see if the provision of category structure indeed resulted in higher-recall of brands even if the recalled brands were not listed in the questionnaire. The structure-provided data were divided into two groups based on the mean number of brands recalled (Mean Brands Recalled = 3.30). Those who recalled fewer than four brands were labeled low-knowledge and those who recalled more than four brands were termed high-knowledge respondents. The results of ANOVA conducted on the two groups showed that the low-knowledge respondents (Mean Low Knowledge = 5.30) did not differ from high-knowledge (Mean High Knowledge = 4.758) respondents, $F_{1,296} = 3.129$, $p = 0.078$ in their evaluation of brand extensions. The results suggest that even though there was no difference in terms of the number of brands recalled between the no-structure and structure-provided groups, the provision of target category structure accomplished its intended goal of enhancing the target category knowledge of the respondents.

In making purchase decision in competitive markets, consumers usually start with a relatively large number of brand alternatives, which are evaluated against some criteria ultimately resulting in a brand being chosen. In a memory-based purchase process, the brand alternatives that consumers recall are likely to be the ones that they have purchased in the past or are the most prominent brands that can meet a certain consumption goal(s). Given the limitations of human information processing capabilities, this means that consumers will only recall a very small portion of the large number of brands that may be
available to them. The provision of category structure serves as a reminder to consumers to access brands from product subcategories that would go unnoticed, therefore, resulting in recalling a larger number of competing brands.

Overall, the results of the experiment 2 suggest that the provision of category structure results in higher competitive effects on the evaluation of brand extensions. The implications of these findings for marketing managers are two fold:

1. The marketing communication strategies for brand extensions should be designed in such a way that the message does not in any way prime the competing brands from different categories that customers otherwise would ignore, thus, inadvertently increasing the competition for their brands

2. The brand extensions should be positioned carefully so that it does not draw indirect competition from various subcategories.

This means that brand positioning strategies should be carefully and simultaneously planned when a decision to extend and introduce a brand is made. This in turn means parent brand-extension fit does not provide sufficient justifications for a firm to go ahead and extend its brands unless the potential competition is considered for the success of an extension. The results of the experiment 2 provide additional support for the central thesis of this research that competition greatly affects the way brand extensions are evaluated.
It is the next logical step to try to understand how different types of categorizations affect brand extensions. The following experiment specifically attempts to further this understanding by examining the evaluation of an extension when it is positioned based on taxonomic and goal-driven categorization in relation to the competing brands in the target category.
4.6 Experiment 3

It can be argued that the categorization process of individuals can be guided to an extent by providing them with an appropriate brand positioning statements, that is, whether the proposed brand extension's end benefits (goal-driven categorization) or specific attributes (taxonomic categorization) are highlighted. The objective of the third experiment was to test hypothesis H5 as restated below.

\[ H5 = \text{The effect of competition will be greater on brand extensions that are categorized taxonomically than those that are categorized in a goal-driven manner.} \]

This hypothesis examined the effects of the type of categorization on the evaluation of brand extensions.

4.6.1 Pre-Test

A pre-test was conducted in order to select appropriate brand extensions and product categories for this experiment. The objective of the pre-test was to identify proposed brands extensions that at the super-ordinate level would have substitutes from different product categories to facilitate across-category comparison. As discussed earlier in chapter 2, goal-driven categories tend to be at the super-ordinate level and include product substitutes from across categories to meet a specific consumption goal. It is important to note here that goal-driven categories can also include objects that are
complementary to each other. For example, a goal-driven category “fast food lunch” may include product substitutes, such as, pizza and hamburgers and a cola drink which is complementary to pizza or hamburger. In the present study, the emphasis was to select only those brand extensions from product categories where product substitutes could be identified to facilitate and measure competitive effects.

To meet the pre-test objectives, a group of fifteen undergraduate marketing students was given the list of the six brand extensions that had been used in the previous experiments: These were, Dell TVs, Kodak Camcorders, Sony Laser Printers, Listerine Toothpaste, Kleenex Toilet Paper, and Starbucks Ice cream. For each brand extension the respondents were asked (Appendix D) the “core benefit(s)” of the product followed by product substitutes from different product categories that would also afford the same core benefit. The respondents had difficulty identifying substitutes for laser printers and toilet paper because they did not view different types of printers (laser, inkjet) from different product categories as substitutes to laser printers. In the case of toilet paper, the respondents could not think of any product available in the market that could be used as a substitute. Given this, the Sony laser printers and Kleenex toilet paper were dropped from experiment 3. From the list of brands in Table 4, two other proposed brand extensions Heinz frozen pizza and Close-Up chewing gum were included in the experiment. As indicated in Table 3, both Heinz frozen pizza and Close-Up chewing gum extensions have high fit with their respective parent brands.
Another pre-test on a sample of ten students was conducted in which they were asked to name the core benefits and substitutes for Heinz frozen pizza and Close-Up chewing gum. Both proposed brand extensions successfully elicited a number of product substitutes from various product categories. As indicated in Table 15, based on the pre-tests a list of core benefits and product substitutes was developed.

Table 15
Brand Extension Core Benefits – Experiment 3

<table>
<thead>
<tr>
<th>Brand Extension</th>
<th>Core Product Benefits</th>
<th>Product Substitutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell TVs</td>
<td>- Home Entertainment</td>
<td>- Stereo system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Computer</td>
</tr>
<tr>
<td>Listerine Toothpaste</td>
<td>- Dental Hygiene</td>
<td>- Mouthwash</td>
</tr>
<tr>
<td></td>
<td>- Teeth Whitening</td>
<td>- Teeth Whitening Strips</td>
</tr>
<tr>
<td></td>
<td>- Fresh Breath</td>
<td>- Breath Mints</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chewing Gum</td>
</tr>
<tr>
<td>Kodak Camcorders</td>
<td>- Memories</td>
<td>- Still cameras</td>
</tr>
<tr>
<td></td>
<td>- Hobby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Fun</td>
<td></td>
</tr>
<tr>
<td>Heinz Frozen Pizza</td>
<td>- Meal/Snack</td>
<td>- Hot Dogs</td>
</tr>
<tr>
<td></td>
<td>- Convenient Meal</td>
<td>- Canned Soup</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Frozen Meals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Processed Meat (chicken wings/strips)</td>
</tr>
<tr>
<td>Close-Up Chewing Gum</td>
<td>- Breath Freshening</td>
<td>- Breath Mints</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mouth Spray</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Oral Strips</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mouthwash</td>
</tr>
<tr>
<td>Starbucks Ice Cream</td>
<td>- Dessert</td>
<td>- Cakes</td>
</tr>
<tr>
<td></td>
<td>- Indulgence</td>
<td>- Yogurt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pudding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fruit Salad</td>
</tr>
</tbody>
</table>

Based on the core benefits and product substitutes identified above, two questionnaires (Appendix D) were developed with three proposed brand extensions in each that either provided a goal-deriven or a taxonomic context. For the goal-deriven questionnaires, a
competitive context along with the types of product from across the categories that a proposed brand extension would be competing against was provided. The taxonomic scenarios provided a statement indicating that the proposed brand extension would compete with similar products. Except for the competitive context that was either goal-derived or taxonomic, the questionnaires and scales were unchanged from the ones used in experiment 2.

4.6.2 Main Study

4.6.2.1 Research Design

This study was a 2x6 between subjects research design with two types of categorization (goal-derived versus taxonomic) and six brand replicates.

4.6.2.2 Independent Variables

The independent variables in this experiment were the two experimental treatments designed to induce either goal-derived or taxonomic categorization, that is, to provide an across category or within category competitive choice context. The within and across category comparisons were operationalized using positioning statements, i.e., that the extension would be positioned using concrete product specific attributes or a specific product benefit.
4.6.2.3 Dependent Variable

Two dependent measures were used for this experiment: (1) the brand extension attitude measured in a goal-derived versus taxonomic context, and (2) purchase intent for the brand extension in the two scenarios. It was hypothesized that the evaluations of both measures would drop significantly for the brand extensions in the taxonomic categories than in the goal-derived categories.

4.6.2.4 Data Collection

The data were collected from undergraduate marketing students enrolled in various business courses. A total of 57 students participated in the experiment with 28 and 29 subjects completing questionnaire version 1 and version 2, respectively. Each respondent completed three brand extensions for either the goal-derived or taxonomic conditions, thus resulting in a total of 171 responses. It took less than 10 minutes for each respondent to complete the questionnaire.

4.6.2.5 Data Analysis and Results

The data were analyzed using the univariate analysis of variance (ANOVA) based on the general linear models procedure on SPSS 11.5.
An analysis of the two dependent variables indicated a substantial and significant correlation between the two (r = 0.784, p = 0.001). Therefore, the two dependent variables were combined and a new dependent measure was computed based on the average of the two variables.

The results of the analysis of variance show that there was no main effect for the treatment, that is, there was no difference between goal-deriven and taxonomic categorization on the evaluation of brand extensions (F<sub>1,168</sub> = 0.450, p = 0.503), therefore, resulting in a lack of support for H5. The means for the two scenarios, as shown in Table 16 below, are nearly identical.

Table 16

<table>
<thead>
<tr>
<th>Experimental Treatments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxonomic Categorization</td>
<td>4.89</td>
<td>2.12</td>
</tr>
<tr>
<td>Goal-Deriven Categorization</td>
<td>5.10</td>
<td>1.10</td>
</tr>
</tbody>
</table>

A brand level analysis shows that there was no interaction between brand and treatment (F<sub>5,158</sub> = 1.698, p = 0.138), however, there was a main effect for brand (F<sub>5,158</sub> = 4.720, p = 0.000). This finding is not surprising as, once again, different brands represent different product categories at different levels of competition and perceived substitutes. Also, different brands have different, if not unique, brand associations, which are reflected in the way a brand is evaluated.
4.6.2.6 Discussion

Experiment 3 failed to support hypothesis H5 that categorizing an extension differently would result in different evaluations. This hypothesis was based on the reasoning that for a goal-driven categorization, consumers consider product alternatives from across categories in order to meet a consumption goal, resulting in a consideration set that comprises non-comparable alternatives. Under this condition, competitive effects should be lower compared to when an extension is categorized taxonomically wherein product alternatives are usually restricted to within category choices and product attributes are salient regardless of the context.

A qualitative analysis of the answers to the number and type of brands recalled indicates that in a goal-driven context, the respondents were able to recall products from a number of different categories whereas for the taxonomic categories, the alternatives were limited to a single category. However, regardless of the product category, a brand/category level analysis showed that the results were fairly consistent in not detecting any difference in competitive effects, except for snack category (Heinz frozen pizza) where extension evaluation ratings were significantly lower in the taxonomic context than in the goal-driven context (Mean Taxonomic = 4.063, S.D. = 2.097; Mean Goal-Deriven = 5.692, S.D. = 1.575), F 1,27 = 5.375, p = 0.028.

It is also noteworthy that for goal-driven context, even though the respondents listed product alternatives from different categories, the responses were not consistent across
respondents. For the taxonomic scenarios the respondents were very consistent in listing products that the extension would compete against. Given the nature of the goal-deriven categorization, this finding is not entirely surprising because this highlights the need to provide clearer context for decisions made in context-dependent environment where product substitutes may be hard to identify unless a context is explicitly mentioned. Experiment 3 did not specify and capture the context within which a particular consumption goal would be utilized which is evident from the way the respondents generated inconsistent alternatives from across categories. Day et al (1979) concluded that defining a market is a somewhat arbitrary process and selection of a product alternative might extend beyond a taxonomic category. Therefore, in future attempts to study whether or not goal-deriven/taxonomic categorization have different competitive effects, it would be helpful to incorporate the study of why consumers develop consideration sets consisting of products from across-categories (a goal-deriven process) for different reasons than they do so from within a category (a taxonomic process). An across-category process of consideration set formation is undertaken when consumers have a goal ambiguity or goal conflict (Ratneshwar et al 1996).

Another potential explanation for a lack of support for H5 might be the familiarity (or lack thereof) of the respondents with the consumption goals presented to them. Past research suggests that consumers engage in different decision-making processes depending on their familiarity with the consumption situations as familiarity guides consideration and selection of different product alternatives (Bettman and Sujan 1987; Warlop and Ratneshwar 1993). The present study did not account for the respondent
familiarity with various consumption goals presented to them, and this may have contributed to lack of significant findings.
5 Conclusion, Implications, Limitations and Future Research

This chapter presents conclusions drawn from the findings from the research and provides theoretical and managerial implications. It also includes a discussion of the limitations of the current research and identifies areas for future research.

5.1 Conclusion and Implications

Brand extension as a growth strategy is undertaken to minimize the risks in highly competitive markets and leverage existing brand equity. For more than a decade now, researchers have keenly investigated how brand extensions are evaluated in various contexts. Though the role of competition has been examined in a variety of consumer decision contexts, its impact on consumers' evaluation of brand extensions had been previously overlooked. Figure 1 in chapter 2 described the areas of research that had been covered by researchers in the past and identified the gaps that needed to be filled. This research addressed a series of issues on the role of competition on extension evaluation and the results provide additional understanding in better extending and introducing brand extensions. Specifically, this research addressed and contributed in the following areas:

1. A deeper understanding on the effect of competition on the extension evaluation process;

2. The moderating role of market structure on how brand extensions are evaluated in a competitive setting;
3. The competitive effects of a category-dominant brand on brand extensions;
4. The development of a refined measure to assess the impact of a category-
dominant brands;
5. The effects of competition under recall and recognition-based extension
evaluation situations;
6. The influence of target category knowledge on the extension evaluation and its
relationship with brand familiarity;
7. The effects of provision of target category structure on extension evaluation
process;
8. The role of taxonomic and goal-driven categorization on extension evaluation
and brand positioning; and
9. The relative importance of brand-category fit vis-à-vis target category knowledge
and its role in a competitive context.

Taken together, the results afford a refined understanding of the extension evaluation
process without which the estimates of potential success for a brand extension would
yield misleading results. These contributions are important from both theoretical and
managerial points of view as discussed in the following sections.

5.1.1 Competitive Effects and Extension Evaluation

This study started with a test of the central hypothesis that competition matters in the
evaluation of brand extensions. This was supported in different contexts in experiments
1-a & b and experiment 2. The competitive effects were present when the market structure for the target categories was varied by altering the market share of the competing brands in the target category in experiment 1-a. Similar competitive effects were also observed when the market structure was not provided to the respondents in experiment 1-b. This means the competitive interference during the brand extension evaluation process is more pervasive than originally estimated. However, the market share information of the competing brands has no impact on the evaluation process. The usage of different competition cueing also suggests that competitive effects are uniformly present when the competition is cued under both recall and recognition scenarios.

Both recall and recognition based formats were used to test the competitive effects. The use of recall based measure helps eliminate the rival hypothesis that the competitive effects were obtained through "recency" effect and not due to the competitive effects. Though the current research did not attempt to trace the process of consumer decision-making, a number of theoretical explanations are possible for obtaining the competitive effects as shown by the results.

Consumers engage in decision-making depending on their own needs, the product offerings available to them and various situational factors. Researchers in marketing have achieved a significant understanding of how consumers make purchase decision under various circumstances. The research on brand attitude formation has established that the brand evaluation is an interdependent process (Abe and Tanaka 1989; Woodside and Clokey 1974) where attitude toward one brand cannot be fully explained without
taking into consideration competing brands. The findings from the current study are consistent with the general theoretical conclusions drawn on brand attitude formation.

"The implication is that a marketer should bear it in mind that a consumer's evaluation of his brand is always linked to the evaluations of other brands." (Abe and Tanaka 1989, p. 442)

Similarly, Laroche et al (1994) summarized the findings of their research that:

"... the consumer's attitude toward a brand is not only a function of his/her cognitive evaluations of that particular brand, but also a function of his/her perceptions of the competing brands in the choice set." (p. 171)

The role of attitude and relative attitude has been widely seen as a key determinant in explaining brand attitude in a multi-brand choice scenario. The role of attitude and attitude strength has also recently been investigated and found to have a significant impact on the formation of consideration sets and brand choice (Priester et al 2004).

Another stream of research focusing on the alternative selection processes in a competitive setting has offered a number of explanations known as "similarity effect," “attraction effect,” and “subjective brand judgments.” These have been suggested as the key reasons for shifting brand preferences when a new brand is introduced into a competitive set and are based on different underlying assumptions. A similarity effect is present when alternatives in a choice set hurt each other's market share due to their perceived similarity (Aaker 1991b). This viewpoint is based on the assumption that a new brand entrant will take the largest market share from an existing brand that is most similar to it (Tversky 1972). An attraction effect as an explanation for choice states that the introduction of an asymmetrically dominated brand, i.e., inferior to one brand but not
to the others, can alter the similarity perception of the brands in a choice set (Huber et al 1982). In contrast with the similarity effect, the attraction effect posits that a new brand entrant will not always take away market share from the existing brands. In some cases the attraction effect may increase the attractiveness of an existing brand. Pan and Lehman (1993) suggest that a number of factors other than the choice probabilities on which the similarity and attraction effects models are based, are needed to account for the changed preferences. They reason that based on learning over time about a brand, consumers formulate subjective judgments about brands to compare them.

The three theoretical frameworks described above are based on certain assumptions and have specific limitations, such as, the number of brands to be considered, the number of attributes that can be compared at a given time, and the knowledge of choice probabilities associated with each alternative in the competitive set. Also, the similarity and attraction effect explanations do not take into consideration the nature and role of a brand name in describing the preferences. Therefore, these theoretical explanations, though important, may not be directly and fully applicable to the introduction of brand extensions. The similarity and attraction effects appear more suitable to examine preferences in the situations where an entirely new brand has been introduced in the choice set or a business decides to extent its product line.

The present research measured global brand attitude by asking respondents to compare the proposed brand extension with the competing brands in the target category. Therefore, it is not feasible to describe what specific cognitive, affective or inferential
processes were undertaken by the respondents to form their judgments. However, in the context of this research where respondents' relative brand attitudes were measured for different brand extensions, the most likely theoretical explanation for the competitive effects appears to be the role of relative attitude strength. Past research has also provided evidence that relative attitude strength affects consideration and choice of brands in a competitive situation (Priester et al 2004).

5.1.2 Target Category Knowledge and Extension Evaluation

Consumer knowledge has been measured in a number of different ways in the past ranging from self-reported measures to objectives tests (Alba and Hutchinson 1987). In experiment 1-a, a self-reported measure of knowledge did not show a moderating effect on brand extensions. This finding might have been caused by the format of the questionnaire used in the experiment, which provided names of the competing brands and the associated market share information, thus, in essence bringing all respondents to a similar level of knowledge. Subsequently, a recall-based measure of the target category knowledge was successfully employed in experiment 1-b which supported the hypothesized relationship that the higher the target category knowledge, the greater the competitive effects.

Product categories in memory are stored as schematic representation in individuals' memory (Keller 2003). It is well established in the marketing literature on consumer behavior that increased knowledge about a category leads to differentiated memory
representations (Dube and Schmitt 1999). Individuals with high knowledge tend to recall larger number of alternatives to meet a goal, recall more attributes per alternative, therefore, resulting in greater competitive effects.

5.1.3 Category Dominant Brand and Extension Evaluation

It was hypothesized that the presence of a category dominant brand will have higher competitive effects on brand extension evaluation than without one. Researchers in the past have defined the category dominance (1) in terms of market share a brand commands in a given category (Urban et al 1986), and (2) the strength of brand-category association measured using speed of recall and top-of-mind recall (Herr et al 1996). The market share based measure to assess brand-category dominance did not appear to have meaning for the respondents. The strength of brand-category association measure though very useful was inadequate for the purposes of the current research. This measure was appropriate to measure dominance for existing brands in a category. However, it could not be fruitfully used to assess brand-category dominance vis-à-vis a new category entrant. Therefore, in the current research a new measure of brand-category dominance was developed and used to better capture the competitive context.

Furthermore, since it cannot be predicted with certainty as to which measures of fit individuals will use to evaluate a brand extension, a measure of category dominance that captures the competitive context at varying levels of competition is more suitable. The competitive effects were present depending on the relative brand strength of the parent
brand vis-à-vis competing brands in the target category. The experiment 1a & b clearly demonstrated this phenomenon. This would suggest that a well-regarded brand that is perceived to be stronger than the existing leading brand(s) in the target category can successfully extend provided it has a good fit with the parent brand. On the other hand, an extension from a relatively weak parent brand vis-à-vis competing brands may not be favoured despite its strong fit with the category. These results temper the findings from the previous research that emphasizes the importance of fit as the sole determinant of an extension’s success in the market.

5.1.4 Provision of Category Structure and Extension Evaluation

The effects of the competitive intensity were stronger in experiment 2 when the target-category structure was provided versus when it was not. In both experiments 1-a and experiment 2, competitive information was provided to the respondents in different formats. However, there was no difference in experiment 1-a when the market share information was provided versus when it was not, but the competitive effects were stronger when the target category structure was offered in experiment 2. The provision of market shares did not add to consumers’ knowledge of product attributes or benefits that can be used to evaluate competing offerings, whereas the target category structure was based on usage context/product benefits/attributes that conveys meaningful information from a wide range of product alternatives to facilitate brand comparison. These findings are significant for marketing practitioners as they point to the value of the format and contents of the message in promoting a brand extension. In the earlier stages
of a new product introduction, marketing managers are often interested in having their product included in the consideration set by emphasizing the association between the brand extension and the members of the target category. In the short run this strategy may harm rather than benefit the extension by invoking competing brands.

Marketers also often engage in comparative advertising and provide market share information to indicate the wider acceptance of their offerings. However, the role of market share information no matter how objective it is, appears to have little relevance for the consumers in the given context. It appears that consumers and marketers do not use similar criteria to define product markets. It is consumers' perception of the competition that matters.

5.1.5 Type of Categorization and Extension Evaluation

This study examined competition not only at the brand category level but also at the super-ordinate level. As discussed earlier, there are different levels at which a product market can be defined, resulting in different levels of competition. It is well established in literature in categorization and consumer behavior that most of the competition occurs at the basic category level or taxonomic/nominal category level – the level used in this research (Alba and Hitchinson 1987; Mervis and Rosch 1981). However, consumers do not limit their choices to nominal categories. They may seek to meet a goal that would require consideration of product alternatives from across categories, therefore, requiring a competitive comparison at the super-ordinate level. Given the nature of the taxonomic
and goal-driven categories, the experiment 3 tested whether the competitive effects would be higher for taxonomic categories. The research did not support the hypothesized relationship due to several possible reasons as outlined in the previous chapter. However, this does not diminish the important differences between the two types of categorization and associated competitive effects in terms of product positioning.

5.1.6 Fit Measures and Extension Evaluation

In the previous research on extension evaluation, the potential success of an extension has been found to be dependent on the fit between a parent brand and its extensions. As discussed earlier, the measures of fit can range from context-independent concrete physical attributes of a product to highly context-dependent abstract brand associations. Which fit measures an individual will select to assess an extension's suitability are hard to predict \textit{a priori} as their choice is largely context dependent.

"... consumers' judgments of fit between established brand names and new brand extensions are determined by the association that are activated and elaborated upon in a given situation."

(Chakravarti et al 1990, p. 1)

The number and type of brand associations activated in a given context would to some extent depend on individuals' familiarity with the parent brand. In the experiment 2, brand extension evaluation did not differ between high and low brand familiarity respondents. Instead, it was the target category knowledge that had a greater impact on the effects of competition-cued evaluations of brand extensions. These findings indicate that a favorable brand extension evaluation is not limited to fit measures based on parent
brand familiarity alone, but will also be affected by the target category associations. That means, the heavy reliance on an extension's fit with the parent brand to assess its potential for success presents an overly simplistic picture and can result in misleading assessment of market opportunities. The criteria to judge an extension's potential success should simultaneously consider as its fit in the target category, as well as, its fit with the parent brand.

"A complex cluster of associations may exist between established brand name and an extension product category. Hence, it is difficult to specify a priori which of these is likely to be accessed and elaborated in a judgment situation." (Chakaravarti et al 1990, p. 7)

Consideration of the target category is even more important given the fact that the measures of fit will be used are context dependent.

5.2 Limitations and Future Research

No matter how well conceived a research effort is, there exist limitations in terms of both research process and resources. Identifying these limitations by no means makes them go away or improve the research outcome, however, it aids in interpreting the results and their implications. It is an important step for understanding what needs to be accomplished in future research efforts and how.

Without attempting to address the general limitations associated with using student samples, experimental designs, and cross-sectional research, this section will attempt to address limitations pertinent to this study only since the broader issues were addressed.
earlier in chapter 4. A number of limitations exist. First, competitors are not passive and markets are not static. Existing firms in a product category where brand extensions are introduced respond by adjusting their marketing strategies. The current research did not capture this competitive market dynamics and events that unfold over a period of time during and after a brand extension has been introduced. A longitudinal study in the form of a series of experiments can be conceived to address this shortcoming. However, it would be impossible to incorporate in the experiments the anticipated responses from the competing businesses.

Alternatively, it can be argued that instead of an experimental design, scanner or panel data be used to examine the effect of competition on the evaluation of brand extensions. However, such data will also contain the effects of numerous other variables, for example, marketing mix variables (price, promotion, distribution, etc.) and will make it difficult to isolate the effect of competition alone on brand extensions. Given the multitude of variables that affect a consumer’s choice at any given time, experimental research best facilitates the isolation of cause and effect in a controlled environment. Another shortcoming of the current research lies in the choice of fictitious brand extensions to be included in the experiment. The proponents of using hypothetical brand extension suggest that using hypothetical extensions reduces the respondents’ knowledge bias that might affect their responses. On the other hand, critics of the studies using hypothetical extensions argue that though using hypothetical brand extensions may result in seemingly higher internal validity, the findings of these studies are not generalizable.

In this research, a decision was made to go with the hypothetical brand extensions to
maintain high internal validity and choose brand extensions that were realistic and had been used in past research. To this end, the present research (1) included extensions of real brands, and (2) conducted extensive pre-tests before creating and selecting brand extensions for the research.

The current research measured attitude toward an extension vis-à-vis its competitors. Literature on attitude formation has amply demonstrated that positive attitude alone does not lead to a specific positive behavior. Even though, purchase intent was also captured in the study and given combined with the attitude measure, an experimental purchase situation cannot match the decision making process in real life. This means that even though consumers may hold favorable attitude toward a brand extension, they may not actually purchase it. Behavioral data overcomes such limitations, however, as indicated above scanner or panel data reflects the outcome many variables and isolating any one variable of interest may not be possible.

However, using intent to purchase along with the attitudinal measures provide the most comprehensive measure of a consumer's attitude toward a brand in a competitive setting.

"Similarly, purchase intention formation is found to be determined by attitudes toward both the focal brand and toward the close competitors of the focal brand with the consumer's choice set. The best structural model is found to be the model that incorporates both of these competitive effects." (Laroche et al 1994, p. 171)

This study employed a comprehensive dependent measure that has been shown to provide explain maximum variance.
Understanding consumer decision-making under different competitive situations can also be meaningfully investigated in the future. How consumers process competitive information will have useful implications for marketing managers to position and communicate their brand extensions.

In experiment 1, the role of target category knowledge was examined and found to have a significant effect on the extension evaluation process. A related issue to examine would be the role of customer loyalty and competitive effects. It has been argued that loyal customers tend to ignore and/or discredit information on the competing products.

"... even when a competitor brand claims to be superior (marginally), consumers committed to a target brand counterargue the superiority claims and tend to devalue the competitor brand by holding a less favorable attitude toward it." (Raju and Unnava 2002, p. 207-208)

Is all competition bad? A discussion on the attraction effect in the previous section indicated that under some circumstances the introduction of an asymmetrically dominated brand can enhance the attractiveness of an existing brand. Are there competitive situations where the evaluation of brand extensions actually enhances in the presence of competing brands? Based on the notion of relative brand strength applied in this research, it can be argued that there might exist situations in which the competitive effects may actually be good for an extended brand.

In experiment 2, a category structure was provided to test its effect on extension evaluation. However, some product categories are narrow compared to others, comprised only of a few sub-categories with a limited number of brands, whereas, other product
categories are rather broad, with multiple sub-categories. One could argue that for broad product categories, the provision of category structure should result in higher competitive effects as it contains large numbers of subcategories. On the other hand, a narrow category will not benefit from cueing sub-categories.

In a goal-driven choice context, the formation of consideration set is likely to be context dependent. The third experiment in this research failed to provide support for the hypothesized relationship. As discussed, this might have been due to the absence of context from the experimental treatments. Provision of consumption context should result in a more meaningful categorization of alternative. The examination of competitive effects when context is provided is even more relevant in the current markets as a number of hybrid products are being introduced that meet a number of different goals and may belong to several taxonomical categories.
References


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Appendix – A

Summary: Empirical Research on the Evaluation of Brand Extensions
# Table 1 – Summary of Empirical Research on the Evaluation of Brand Extension

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(S)</th>
<th>Study Title (Journal)</th>
<th>Bases Of Fit</th>
<th>Extension Evaluation Process</th>
<th>Major Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>Boush et al.</td>
<td>Affect Generalization To Similar And Dissimilar Brand Extensions (P&amp;M)</td>
<td>Product Feature Similarity (Product-Category Fit)</td>
<td>Affect Generalization moderated by product similarity</td>
<td>Brand affect generalizes to the extension given there is similarity. When similarity is low, high brand affect results in negative evaluations of extensions.</td>
</tr>
<tr>
<td>1990</td>
<td>Aaker And Keller</td>
<td>Consumer Evaluations Of Brand Extensions (JM)</td>
<td>Complementarity, Substitutability and Manufacturing Compatibility</td>
<td>Affect Generalization moderated by product similarity</td>
<td>Perception of “fit” between two product classes results in higher extension evaluation.</td>
</tr>
<tr>
<td>1990</td>
<td>Chakravarti et al</td>
<td>Product Category Perceptions, Elaborative Processing and Brand Extension Strategies (ACR)</td>
<td>Product Feature similarity (Product-Category Fit)</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>Judgments of fit are determined by the associations that are activated during the evaluation process.</td>
</tr>
<tr>
<td>1991</td>
<td>Boush And Loken</td>
<td>A Process-Tracing Study Of Brand Extension Evaluation (JMR)</td>
<td>Product Feature Similarity (Product-Category Fit)</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>Attitude toward brand exten. Were highly correlated with their ratings of brand extension typicality. Moderately typical extensions are evaluated in a piecemeal fashion. Extremely typical or atypical extensions are evaluated in a categorical fashion.</td>
</tr>
<tr>
<td>1991</td>
<td>Park, Milberg And Lawson</td>
<td>Evaluations Of Brand Extensions: The Role Of Product Feature Similarity And Brand Concept Consistency (JCR)</td>
<td>Feature Similarity And Brand Concept Consistency (Both product-category fit and Brand Concept/Image Fit)</td>
<td>Categorization – Product category attribute matching</td>
<td>High brand concept consistency and product feature similarity result in most favorable evaluations.</td>
</tr>
<tr>
<td>1992</td>
<td>Keller And Aaker</td>
<td>The Effects Of Sequential Introductions Of Brand Extensions (JMR)</td>
<td>Product Feature Similarity (Product-Category Fit)</td>
<td>Categorization – Product category attribute matching</td>
<td>Evaluation of the proposed extensions is different when there are intervening brand extensions compared to when there are not. The quality of the core brand and the success/failure of the intervening extensions affect how proposed extensions are evaluated.</td>
</tr>
<tr>
<td>1993</td>
<td>Loken And John</td>
<td>Diluting Brand Beliefs: When Do Brand Extensions Have A Negative Impact? (JM)</td>
<td>Product-Category fit and Typicality Measures</td>
<td>Categorization – Product category attribute matching</td>
<td>Unsuccessful extensions can dilute brand name by diminishing the favorable attribute beliefs associated with the core brand. Brand dilution occurs for some brands under some conditions only.</td>
</tr>
<tr>
<td>1993</td>
<td>Rangasway Burke And Olivia</td>
<td>Brand Equity And The Extendibility Of Brand Names (IJRM)</td>
<td>Product and Brand attributes, Their interaction and Category fit,</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>A brand preference model is developed to predict how far a brand can be extended. Brand names with higher consumer utility extend better.</td>
</tr>
<tr>
<td>Year</td>
<td>Author(s)</td>
<td>Study Title (Journal)</td>
<td>Bases of Fit</td>
<td>Extension Evaluation Process</td>
<td>Major Findings</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1993</td>
<td>Sunde And Brodie</td>
<td>Consumer Evaluations Of Brand Extensions: Further Empirical Results (JIRM)</td>
<td>Product-Category Fit</td>
<td>Affect transfer mediated by fit and brand quality.</td>
<td>Replication of Aaker and Keller (1990) research. Brand extensions succeed when the brand is (1) perceived to be of high quality, (2) fit is positive in terms of transferability and complementarity, and (3) is in the target category that is hard to make.</td>
</tr>
<tr>
<td>1994</td>
<td>Broniarczyk And Alba</td>
<td>The Importance Of Brand In Brand Extension (JMR)</td>
<td>Brand Specific Association/Inference Making</td>
<td>Affect Transfer moderated by Brand Specific Associations.</td>
<td>Brand specific associations can over ride brand affect and product-category similarity as a measure of brand extension evaluation.</td>
</tr>
<tr>
<td>1994</td>
<td>Dawar And Anderson</td>
<td>The Effects Of Order And Direction Of Multiple Brand Extensions (JBR)</td>
<td>Conceptual/Brand Consistency</td>
<td>Not directly examined but extensions were positively evaluated if they conceptually fit the parent brand.</td>
<td>The perceived fit can be manipulated by considering the “distance” and “direction” of extensions - without altering the product features and brand characteristics.</td>
</tr>
<tr>
<td>1994</td>
<td>Meyers-Levy, Louie, And Curren</td>
<td>How Does The Congruity Of Brand Names Affect Evaluations Of Brand Name Extensions? (JAP)</td>
<td>Schema Congruency</td>
<td>Schema congruency – Product Category matching; attribute elaboration.</td>
<td>Moderately incongruent brand extensions were evaluated more favorably than the congruent and extremely incongruent brand extensions resulting in an inverted U shaped manner.</td>
</tr>
<tr>
<td>1996</td>
<td>Dawar</td>
<td>Extensions Of Broad Brands: The Role Of Retrieval In Evaluations Of Fit (JCP)</td>
<td>Conceptual Coherence.</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>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.</td>
</tr>
<tr>
<td>1996</td>
<td>Graeff</td>
<td>Using Promotional Messages To Manage The Effects Of Brand And Self-Image On Brand Evaluations (JCM)</td>
<td>Product-category fit and brand concept consistency.</td>
<td>Affect transfer moderated by the brand and self-image primed through advertising contents.</td>
<td>When advertising encourages consumers to think about self-image, thoughts about using the product and its fit with the self-image are significant predictors of brand and ad attitudes...when advertising encourages consumers to think about only product quality, thoughts about using the product and its fit with the self-image have no effects on attitudes.</td>
</tr>
<tr>
<td>Year</td>
<td>Author(S)</td>
<td>Study Title (Journal)</td>
<td>Bases Of Fit</td>
<td>Extension Evaluation Process</td>
<td>Major Findings</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>-----------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>1996</td>
<td>Han And Schmitt</td>
<td>Product-Category Dynamics And Corporate Identity In Brand Extensions: A Comparison Of Hong Kong And U.S. Consumers (JIM)</td>
<td>Product Feature Similarity (Product-Category Fit)</td>
<td>Product-Category fit with firm and country characteristics.</td>
<td>Brand-extension perceived fit more important for US customers than from Hong Kong. Firm characteristics, such as size, more important for HK customers. This is explained by the collectivist nature of the HK society whereas US consumers are individualists and make their own fit judgments.</td>
</tr>
<tr>
<td>1996</td>
<td>Herr, Farquhar, And Fazio</td>
<td>Impact Of Dominance And Relatedness On Brand Extensions (JCP)</td>
<td>Category Relatedness/Affect Transfer</td>
<td>Affect transfer mediated by brand dominance and category relatedness.</td>
<td>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.</td>
</tr>
<tr>
<td>1996</td>
<td>Park, Jun, And Shocker</td>
<td>Composite Branding Alliances: An Investigation Of Extension And Feedback Effects (JMR)</td>
<td>Product-category fit</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>Combining two brands with complementary attributes, a composite brand has a attribute profile better than a direct brand extension. Similar results were not obtained when two brands were favorable but not complementary.</td>
</tr>
<tr>
<td>1997</td>
<td>Gaff</td>
<td>Consumption Situations And The Effects Of Brand Image On Consumers' Brand (P&amp;M)</td>
<td>Not Directly Examined</td>
<td>Not Directly Examined</td>
<td>Those consumers with self-images consistent with the brand image had favorable brand evaluations irrespective of the type of the consumption situation, but those consumers with self-images inconsistent with the brand image had significantly more favorable brand evaluations in the public consumption situations.</td>
</tr>
<tr>
<td>1997</td>
<td>Lane And Jacobson</td>
<td>The Reciprocal Impact Of Brand Leveraging: Feedback Effects From Brand Extension Evaluation To Brand Evaluation (ML)</td>
<td>Product Feature Similarity</td>
<td>Cognitive Processes</td>
<td>Negative feedback effects exist, more so among individuals with higher need for cognition.</td>
</tr>
<tr>
<td>1997</td>
<td>Milberg, Park, And McCarthy</td>
<td>Managing Negative Feedback Effects Associated With Brand Extensions: The Impact Of Alternative Branding Strategies (UCP)</td>
<td>Feature Similarity And Brand Concept Consistency</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>Negative feedback effects occur when (1) when brand-extension categories are dissimilar, and (2) extension does not fit the existing brand image. Sub-branding strategy mitigates these negative feedback effects.</td>
</tr>
<tr>
<td>1998</td>
<td>Gurhan-Canli And Maheswaran</td>
<td>The Effects Of Extensions On Brand Name Dilution And Enhancement (JMR)</td>
<td>Typicality of the information – Product-Category Consistency</td>
<td>Schema modification using either a Subtyping or a Bookkeeping model.</td>
<td>Schema Modification depends on the typicality of the information and motivation</td>
</tr>
<tr>
<td>1998</td>
<td>Han</td>
<td>Brand Extensions In A Competitive Context: Effects Of Competitive Targets And Product Attribute Typicality On Perceived Quality (AMSR)</td>
<td>Feature Similarity/Piecemeal Evaluation</td>
<td>Not directly examined</td>
<td>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.</td>
</tr>
<tr>
<td>Year</td>
<td>Author(S)</td>
<td>Study Title (Journal)</td>
<td>Bases Of Fit</td>
<td>Extension Evaluation Process</td>
<td>Major Findings</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1998</td>
<td>Pryor And Brodie</td>
<td>How Advertising Slogans Can Prime Evaluations Of Brand Extensions: Further Empirical Results (JP&amp;BM)</td>
<td>Product-category fit based on product feature similarity.</td>
<td>Categorization – Product-category Attribute Matching</td>
<td>Brand extension similarity is affected by advertising priming. Extensions that were primed were rated as more similar to the parent brand.</td>
</tr>
<tr>
<td>1998</td>
<td>Wanko, Bless, And Schwarz</td>
<td>Context Effects In Product Line Extensions: Context Is Not Destiny (JCP)</td>
<td>Brand extension name continuation.</td>
<td>Product-category fit resulting in cognitive or piecemeal evaluation.</td>
<td>All else equal, the continuation of a brand name does affect how a brand extension is evaluated.</td>
</tr>
<tr>
<td>1999</td>
<td>Buchanan, Simmons, And Bickart</td>
<td>Brand Equity Dilution: Retailer Display And Context Brand Effects (JMR)</td>
<td>Retail display affects evaluation of brand extensions.</td>
<td>Schema congruency</td>
<td>Retail display can affect a brand’s evaluation depending on the organization of the brands on the shelf and the relationship among the displayed brands.</td>
</tr>
<tr>
<td>2000</td>
<td>Barone, Miniard, And Romeo</td>
<td>The Impact Of Positive Mood On Brand Extension Evaluations (JCR)</td>
<td>Good mood enhances similarity.</td>
<td>Schema congruency – Product Category matching; attribute elaboration.</td>
<td>Positive mood enhances evaluations of brand extensions viewed as moderately similar as opposed to very similar or very dissimilar for core brands that are favorably evaluated.</td>
</tr>
<tr>
<td>2000</td>
<td>Lane</td>
<td>The Impact Of Ad Repetition And Ad Content On Consumer Perceptions Of Incongruent Extensions (JM)</td>
<td>Product-Category Attribute Fit.</td>
<td>Brand-Category Similarity.</td>
<td>Contrary to previous research that states that the initial perceptions of brand extension fit are the key to the successful evaluation of brand extensions, extension consistency is not a fixed property but is dynamic in nature. Extension consistency varies with the ad content and ad repetition.</td>
</tr>
</tbody>
</table>

"Repeated exposure to ad content influences what is elaborated, the amount of elaboration and valence of elaboration."
<table>
<thead>
<tr>
<th>Year</th>
<th>Author(S)</th>
<th>Study Title (Journal)</th>
<th>Bases Of Fit</th>
<th>Extension Evaluation Process</th>
<th>Major Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Ruyter And Wetzel</td>
<td>The Role Of Corporate Image And Extension Similarity In Service Brand Extensions (JEP)</td>
<td>Corporate image operationized through CI (corporate image) and ES (extension similarity).</td>
<td>Brand-Category Similarity. Not directly examined.</td>
<td>Corporate image that a firm is innovative &quot;late mover&quot; helps a firm establish credibility in terms of credibility and perceived quality of the service offerings.</td>
</tr>
<tr>
<td>2000</td>
<td>Sheinin</td>
<td>The Effects Of Experience With Brand Extensions On Parent Brand Knowledge (JBR)</td>
<td>Product-Category Attribute Fit</td>
<td>Affect and knowledge transfer by means of Schema congruency – Product Category matching; attribute elaboration.</td>
<td>Brand extensions affected parent brand beliefs as a function of experience with the brand extension and familiarity with the parent brand. Extensions influence knowledge of unfamiliar brands more familiar parent brands.</td>
</tr>
<tr>
<td>2001</td>
<td>Bhat And Reddy</td>
<td>The Impact Of Parent Brand Attribute Associations And Affect On Brand Extension Evaluation</td>
<td>Both Feature Similarity and Brand Image were tested with mixed results</td>
<td>Depending on symbolic/functional extension, the process of attitude transfer varied.</td>
<td>Direct transfer of affect from parent brand to extensions only for non-durable symbolic extensions. Parent brand attributes had no impact on the evaluation – only overall product quality as a brand attribute was important. No difference in attribute based evaluation for either durable or non-durable extension.</td>
</tr>
<tr>
<td>2001</td>
<td>Klink And Smith</td>
<td>Threats To The External Validity Of Brand Extension Research (JMR)</td>
<td>Hybrid – product attribute, brand image, usage situation, complementarity</td>
<td>Not examined directly.</td>
<td>The role of fit decreases when more information about an extension is provided. Effect of fit also decreases when consumer Innovativeness increases.</td>
</tr>
<tr>
<td>2001</td>
<td>Lye, Venkateshwarlu, And Barrett</td>
<td>Brand Extensions: Prestige Brand Effects (AMJ)</td>
<td>Product-Category Attribute Fit</td>
<td>Affect transfer mediated by brand-category fit and quality perception of the target category.</td>
<td>Brand types, prestige/functional, affect attitude formation. Perceived quality has more impact on functional brands than on prestige brands as the prestige brands assume quality.</td>
</tr>
<tr>
<td>2001</td>
<td>Martin and Stewart</td>
<td>The Differential Impact of Goal Congruency on Attitudes, Intentions and the Transfer of Brand Equity (JMR)</td>
<td>Goal Congruency of the parent brand and the extension.</td>
<td>Similarity-based attitude transfer mediated by goal congruency.</td>
<td>Perceived similarity is a multi-dimensional construct – The number and structure of similarity dimensions is subject to goal congruency.</td>
</tr>
<tr>
<td>2001</td>
<td>McCarthy, Heath, And Milberg</td>
<td>New Brands Versus Brand Extensions, Attitude Versus Choice: Experimental Evidence For Theory And Practice (ML)</td>
<td>Product-Category Attribute Fit</td>
<td>Affect transfer mediated by brand-category fit.</td>
<td>When consumers process product information, new brand can do as well or better than brand extensions. Attitudinal effect on choice must be included in the brand extension studies due to variations in the findings of lab studies on measuring attitudes.</td>
</tr>
<tr>
<td>Year</td>
<td>Author(S)</td>
<td>Study Title (Journal)</td>
<td>Bases Of Fit</td>
<td>Extension Evaluation Process</td>
<td>Major Findings</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2001</td>
<td>Swaminathan, Fox, And Reddy</td>
<td>The Impact Of Brand Extension Introduction On Choice (JM)</td>
<td>Product-Category feature similarity.</td>
<td>Not directly measured.</td>
<td>Positive feedback effect for successful brand extensions occur only among non-loyal and prior non-users of the brand. Negative feedback effect for unsuccessful brand extensions is found only among prior users of the parent brand.</td>
</tr>
<tr>
<td>2002</td>
<td>Maoz And Tybout</td>
<td>The Moderating Role Of Involvement And Differentiation In The Evaluations Of Brand Extensions (JCP)</td>
<td>Product-Category feature Similarity.</td>
<td>Heuristic process of attitude transfer when the extension was congruent and involvement was low.</td>
<td>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 bases of favorable evaluation regardless of the level of congruency.</td>
</tr>
<tr>
<td>2002</td>
<td>Zhang And Sood</td>
<td>“Deep” And “Surface” Cues: Brand Extension Evaluations By Children And Adults (JCR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Balachander And Ghose</td>
<td>Reciprocal Spillover Effects: A Strategic Benefit Of Brand Extensions (JM)</td>
<td>NA</td>
<td>NA</td>
<td>Advertising for an extension results in reciprocal positive spillover effects for the parent brand. No evidence for the forward spillover effects.</td>
</tr>
</tbody>
</table>

ACR = Advances In Consumer Research
AMSR = Academy Of Marketing Science Review
AMR = Australian Marketing Journal
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
JM = Journal Of Marketing
JMR = Journal Of Marketing Research
JP&BM = Journal Of Product & Brand Management
ML = Marketing Letters
P&M = Psychology & Marketing
Appendix – B

Experiment # 1-a: Pre-Test-1 Questionnaire
Instructions

Please rate your familiarity with the product categories mentioned in this questionnaire using the following scale:

Not at all Familiar       Very Familiar
                               1  2  3  4  5  6  7  8  9

In the column next to the product category name, please assign the number that best reflects your familiarity with it.

Please note, we are only interested in your familiarity with the product categories whether or not you have purchased a product in the past from a specific category.

Thank you for your participation!
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Category Familiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td></td>
</tr>
<tr>
<td>Ice Cream</td>
<td></td>
</tr>
<tr>
<td>Yogurt</td>
<td></td>
</tr>
<tr>
<td>Soup</td>
<td></td>
</tr>
<tr>
<td>Frozen Pizza</td>
<td></td>
</tr>
<tr>
<td>Beer</td>
<td></td>
</tr>
<tr>
<td>Bottled Water</td>
<td></td>
</tr>
<tr>
<td>Fruit Juice</td>
<td></td>
</tr>
<tr>
<td>Bath Soap</td>
<td></td>
</tr>
<tr>
<td>Shaving Cream</td>
<td></td>
</tr>
<tr>
<td>After Shave</td>
<td></td>
</tr>
<tr>
<td>Shampoo</td>
<td></td>
</tr>
<tr>
<td>Toothpaste</td>
<td></td>
</tr>
<tr>
<td>Toothbrush</td>
<td></td>
</tr>
<tr>
<td>Mouthwash</td>
<td></td>
</tr>
<tr>
<td>Deodorant/ Antiperspirant</td>
<td></td>
</tr>
<tr>
<td>Dish Soap</td>
<td></td>
</tr>
<tr>
<td>Laundry Detergent</td>
<td></td>
</tr>
<tr>
<td>Toilet Paper</td>
<td></td>
</tr>
<tr>
<td>Facial Tissues</td>
<td></td>
</tr>
<tr>
<td>Still Digital Camera</td>
<td></td>
</tr>
<tr>
<td>Camcorder</td>
<td></td>
</tr>
<tr>
<td>Color TV</td>
<td></td>
</tr>
<tr>
<td>VCR</td>
<td></td>
</tr>
<tr>
<td>DVD Player</td>
<td></td>
</tr>
<tr>
<td>CD Player</td>
<td></td>
</tr>
<tr>
<td>Product Category</td>
<td>Category Familiarity</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Laser Printer</td>
<td></td>
</tr>
<tr>
<td>Inkjet Printer</td>
<td></td>
</tr>
<tr>
<td>Notebook Computers</td>
<td></td>
</tr>
<tr>
<td>Overhead Projectors</td>
<td></td>
</tr>
<tr>
<td>PDA Organizers</td>
<td></td>
</tr>
<tr>
<td>Digital Wrist Watches</td>
<td></td>
</tr>
<tr>
<td>Athletic Shoes</td>
<td></td>
</tr>
<tr>
<td>Jeans</td>
<td></td>
</tr>
<tr>
<td>Cordless Telephones</td>
<td></td>
</tr>
<tr>
<td>Vacuum Cleaners</td>
<td></td>
</tr>
<tr>
<td>Expensive Pens</td>
<td></td>
</tr>
<tr>
<td>Disposable Ball Pens</td>
<td></td>
</tr>
<tr>
<td>Tennis Racket</td>
<td></td>
</tr>
<tr>
<td>Bicycles</td>
<td></td>
</tr>
<tr>
<td>Microwave Ovens</td>
<td></td>
</tr>
<tr>
<td>Refrigerator</td>
<td></td>
</tr>
<tr>
<td>Cooking Range</td>
<td></td>
</tr>
<tr>
<td>Lawn Mowers</td>
<td></td>
</tr>
<tr>
<td>Breakfast Cereal</td>
<td></td>
</tr>
<tr>
<td>Jam/Jellies</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
</tr>
<tr>
<td>Whip Cream</td>
<td></td>
</tr>
<tr>
<td>Frozen Vegetables</td>
<td></td>
</tr>
<tr>
<td>Electric Shavers</td>
<td></td>
</tr>
<tr>
<td>Electric Toothbrush</td>
<td></td>
</tr>
<tr>
<td>Teeth Whitener</td>
<td></td>
</tr>
<tr>
<td>Chewing Gum</td>
<td></td>
</tr>
<tr>
<td>Product Category</td>
<td>Category Familiarity</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Hair Dryer</td>
<td></td>
</tr>
<tr>
<td>Chocolate Bars</td>
<td></td>
</tr>
<tr>
<td>Car Radio/Stereo</td>
<td></td>
</tr>
<tr>
<td>Hand-held Calculators</td>
<td></td>
</tr>
<tr>
<td>Peanut Butter</td>
<td></td>
</tr>
<tr>
<td>Chocolate Chip Cookies</td>
<td></td>
</tr>
<tr>
<td>Potato Chips</td>
<td></td>
</tr>
<tr>
<td>Razors</td>
<td></td>
</tr>
<tr>
<td>Garbage Bags</td>
<td></td>
</tr>
<tr>
<td>Paper Towel</td>
<td></td>
</tr>
<tr>
<td>Alkaline Batteries</td>
<td></td>
</tr>
</tbody>
</table>
Experiment 1-a: Pre-Test-2 Questionnaire

Category Competitiveness, Dominant Brand, Dominant Brand Market Share
Instructions

In this survey we are interested in assessing the competitiveness of some product categories. Please read each question carefully and try to answer as completely and accurately as possible.

We are also interested in measuring the estimated market share of all the major brands from a category. In order to answer questions on market share, please provide your best estimate.

The following definition of a category-dominant brand will be useful in answering some of the questions.

*A category dominant brand is a brand by which the entire product category is known. This brand is the typical brand of the category. For example, the category-dominant brand in the athletic shoes category would be Nike.*

**Please Note** – A category dominant brand does not necessarily mean that it is the brand that you frequently purchase or is your favorite brand. It can be any brand that you believe dominates the category.

Thank you for your participation!
**Scenario #1**

1. Please consider the toothpaste category and list all the major brands (list as many as you can) along with an estimate of their respective market shares totaling 100%:

<table>
<thead>
<tr>
<th>Major Brands</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
<tr>
<td>__________</td>
<td>________%</td>
</tr>
</tbody>
</table>

100%

2. What is the dominant brand in this category?

__________________________

3. In your opinion, how competitive is the toothpaste category?

Not at all Competitiveness

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

The data were collected on all twenty product categories as listed in Table-2 using similar questionnaire where only the category name was changed.
Experiment 1: Pre-Test-3 Questionnaire

Brand Extension Fit
Instructions

The purpose of this survey is to obtain your reactions to some proposed product offerings by well-known companies. A number of companies are currently planning to expand a range of products that they offer by introducing new products under their brand names. Before these products are introduced, the companies would like to know how consumers react to them.

**Brand Extension:** A brand extension is the usage of an existing brand name to introduce product in a different product category. For example, an extension of the brand name Pepsi would be if Pepsi were to introduce Pepsi brand potato chips. On the following pages you have been provided with some brand names and hypothetical brand extensions for which some questions have been added.

Thank you for your participation!
Scenario #1

Consider the brand name *Dell* and please answer the following questions:

1. How familiar are you with the *Dell* brand name?

<table>
<thead>
<tr>
<th>Never Heard of</th>
<th>Very Aware of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

2. Overall, in terms of quality, *Dell* products are:

<table>
<thead>
<tr>
<th>Low Quality Products</th>
<th>High Quality Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

*Dell* brand is known for its computers and computing products. In order to capitalize on its existing brand name, the management at *Dell* has decided to introduce *Dell* brand TVs. Please answer the following questions about the *Dell* brand TVs.

3. How much sense does it make for *Dell* to make TVs?

<table>
<thead>
<tr>
<th>No Sense At All</th>
<th>A Lot of Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

4. How much do you like or dislike the idea of *Dell* TVs?

<table>
<thead>
<tr>
<th>I Dislike it</th>
<th>I like it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

---

7 Fit ratings were obtained for all hypothesized brand extensions as shown in Table-3 using the same questionnaire by changing the brand name and company description.
Experiment 1-a: Pre-competition Questionnaires

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Instructions

Welcome to the product survey. The purpose of this survey is to obtain your reactions to some proposed product offerings by well-known companies. A number of companies are currently planning to expand a range of products that they offer by introducing new products under their brand names. Before these products are introduced, the companies would like to know how consumers react to them.

This questionnaire has three sections. Please read each question carefully and answer it to the best of your ability.

Thank you for your participation!
Scenario # 1

Consider the brand name *Dell* and please answer the following questions:

1. How familiar are you with the *Dell* brand name?

   
   Never Heard of  
   1  2  3  4  5  6  7  Very Aware of  
   8  9

2. Overall, in terms of quality, *Dell* products are:

   
   Low Quality Products  
   1  2  3  4  5  6  7  High Quality Products  
   8  9

3. How much do you like or dislike *Dell* brand?

   
   I Dislike it  
   1  2  3  4  5  6  7  I like it  
   8  9

*Dell* brand is known for its computers and computing products. In order to capitalize on its existing brand name, the management at *Dell* has decided to introduce *Dell* brand TVs. Please answer the following questions about the *Dell* brand LCD TVs.

4. How much *sense* does it make for *Dell* to make TVs?

   
   No Sense At All  
   1  2  3  4  5  6  7  A Lot of Sense  
   8  9

5. How much do you like or dislike the idea of *Dell* TVs?

   
   I Dislike it  
   1  2  3  4  5  6  7  I like it  
   8  9

6. Assuming that you were in the market for TVs, how likely is it that you would purchase *Dell* brand LCD TVs?

   
   Not At All Likely  
   1  2  3  4  5  6  7  Very Likely  
   8  9

7. How knowledgeable are you about the TVs product category?

   
   Not Knowledgeable At All  
   1  2  3  4  5  6  7  Very Knowledgeable  
   8  9

---

* The respondents were given a booklet comprising of the six brand scenarios that were identical except for the brand name and company descriptions.
Experiment 1-a: Post Competition – Dominant Brand Scenarios
Instructions

Welcome to the product survey. The purpose of this survey is to obtain your reactions to some proposed product offerings by well-known companies. A number of companies are currently planning to expand a range of products that they offer by introducing new products under their brand names. Before these products are introduced, the companies would like to know how consumers react to them.

This questionnaire has three sections. Please read each question carefully and answer it to the best of your ability.

Thank you for your participation!
Scenario #1 – Dell TVs

Consider the brand name Dell and please answer the following questions:

1. How familiar are you with the Dell brand name?
   
   Never Heard of 1 2 3 4 5 6 7 8 9

2. Overall, in terms of quality, Dell products are:

   Low Quality Products 1 2 3 4 5 6 7 8 9

3. How much do you like or dislike Dell brand?

   I Dislike it 1 2 3 4 5 6 7 8 9

Dell brand is known for computers and computing products. In order to capitalize on its existing brand name, the management at Dell has decided to introduce Dell brand TV. Please answer the following questions about the Dell TV.

4. How much sense does it make for Dell to make TVs?

   No Sense At All 1 2 3 4 5 6 7 8 9

5. In your opinion, how competitive is the TV product category?

   Not at All Competitive 1 2 3 4 5 6 7 8 9

The management at Dell in order to devise effective marketing strategies for its new TVs is analyzing the competitors' market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports on the TV market. According to the Consumer Reports, the following (on the next page) are the major brands of TVs and their associated market shares for the year 2003.

---

9 Six questionnaires were developed using identical questions but changing the brand names, company information and market share data. Market share information for each scenario is presented separately following this questionnaire.

10 Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Table 1 - TV Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sony</td>
<td>22.9%</td>
</tr>
<tr>
<td>2. Panasonic</td>
<td>16.8%</td>
</tr>
<tr>
<td>3. Toshiba</td>
<td>13.6%</td>
</tr>
<tr>
<td>4. JVC</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Hitachi</td>
<td>10.3%</td>
</tr>
<tr>
<td>6. RCA</td>
<td>9.1%</td>
</tr>
<tr>
<td>7. Samsung</td>
<td>7.3%</td>
</tr>
<tr>
<td>Others</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Sony is the leading and dominant brand with a commanding presence in the TV market.

Please answer the following questions about the *Dell* brand TV by keeping in mind the information provided in the table above:

6. Compared to the existing brands in the TV category, how much do you like or dislike the idea of *Dell* brand TV?

<table>
<thead>
<tr>
<th>I Dislike it</th>
<th>I Like it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

7. Assuming you were in the market for a TV, how likely is it that you would purchase *Dell* brand TV?

<table>
<thead>
<tr>
<th>Not At All Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

8. In your opinion, which is the strongest brand of TV?

9. Compared to the brand you identified in the previous question, the *Dell* brand is a:

<table>
<thead>
<tr>
<th>Very Weak Brand</th>
<th>Very Strong Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

10. How knowledgeable are you about the TV product category?

<table>
<thead>
<tr>
<th>Not Knowledgeable At All</th>
<th>Very Knowledgeable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>
Scenario # 2 Kleenex Toilet Paper

The management at Kleenex in order to devise effective marketing strategies for its new toilet paper is analyzing the competitors' market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports on the toilet paper market. According to the Consumer Reports, the following are the major brands of toilet paper and their associated market shares for the year 2003.

Table 1 -Toilet Paper Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cottonelle</td>
<td>29.9%</td>
</tr>
<tr>
<td>2. Charmin</td>
<td>20.8%</td>
</tr>
<tr>
<td>3. Royale</td>
<td>19.6%</td>
</tr>
<tr>
<td>4. Scott's</td>
<td>16.9%</td>
</tr>
<tr>
<td>5. No Name</td>
<td>12.8%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Cottonelle is the leading and dominant brand with a commanding presence in the toilet paper market.

---

11 Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Scenario # 3 Starbucks Ice Cream

The management at Starbucks in order to devise effective marketing strategies for its new ice cream is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports\(^\text{12}\) on the ice cream market. According to the Consumer Reports, the following are the major brands of ice cream and their associated market shares for the year 2003.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Haagen-Dazs</td>
<td>19.9%</td>
</tr>
<tr>
<td>2. Breyers</td>
<td>13.8%</td>
</tr>
<tr>
<td>3. Baskin-Robbins</td>
<td>11.6%</td>
</tr>
<tr>
<td>4. President’s Choice</td>
<td>10.9%</td>
</tr>
<tr>
<td>5. Ben &amp; Jerry’s</td>
<td>9.3%</td>
</tr>
<tr>
<td>6. Nestle</td>
<td>8.1%</td>
</tr>
<tr>
<td>7. No Name</td>
<td>6.3%</td>
</tr>
<tr>
<td>Others (local brands)</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Haagen-Dazs is the leading and dominant brand with a commanding presence in the ice cream market.

\(^{12}\)Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Scenario # 4 Sony Laser Printer

The management at Sony in order to devise effective marketing strategies for its new laser printers is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the *Consumer Reports* on the laser printer market. According to the *Consumer Reports*, the following are the major brands of laser printers and their associated market shares for the year 2003.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hewlett-Packard (HP)</td>
<td>24.9%</td>
</tr>
<tr>
<td>2. Canon</td>
<td>17.8%</td>
</tr>
<tr>
<td>3. Lexmark</td>
<td>15.6%</td>
</tr>
<tr>
<td>4. Brother</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Epson</td>
<td>9.3%</td>
</tr>
<tr>
<td>6. Samsung</td>
<td>8.1%</td>
</tr>
<tr>
<td>7. Xerox</td>
<td>7.3%</td>
</tr>
<tr>
<td>Others</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Hewlett-Packard (HP) is the leading and dominant brand with a commanding presence in the laser printer market.

---

13 Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Scenario # 5 Kodak Camcorder

The management at Kodak in order to devise effective marketing strategies for its new camcorders is analyzing the competitors' market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports on the camcorder market. According to the Consumer Reports, the following are the major brands of camcorders and their associated market shares for the year 2003.

Table 1 - Camcorders Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sony</td>
<td>22.9%</td>
</tr>
<tr>
<td>2. Panasonic</td>
<td>16.8%</td>
</tr>
<tr>
<td>3. Canon</td>
<td>13.6%</td>
</tr>
<tr>
<td>4. JVC</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Hitachi</td>
<td>10.3%</td>
</tr>
<tr>
<td>6. RCA</td>
<td>9.1%</td>
</tr>
<tr>
<td>7. Samsung</td>
<td>7.3%</td>
</tr>
<tr>
<td>Others</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Sony is the leading and dominant brand with a commanding presence in the camcorder market.

---

14 Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Scenario # 6 Listerine Toothpaste

The management at Listerine in order to devise effective marketing strategies for its new toothpaste is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports\textsuperscript{15} on the toothpaste market. According to the Consumer Reports, the following are the major brands of toothpaste and their associated market shares for the year 2003.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Colgate</td>
<td>31.9%</td>
</tr>
<tr>
<td>2. Crest</td>
<td>19.8%</td>
</tr>
<tr>
<td>3. Oral-B</td>
<td>12.6%</td>
</tr>
<tr>
<td>4. Aquafresh</td>
<td>10.9%</td>
</tr>
<tr>
<td>5. Close-up</td>
<td>6.3%</td>
</tr>
<tr>
<td>6. Sensodyne</td>
<td>3.1%</td>
</tr>
<tr>
<td>7. Rambrandt</td>
<td>2.3%</td>
</tr>
<tr>
<td>Others</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that Colgate is the leading and dominant brand with a commanding presence in the toothpaste market.

\textsuperscript{15} Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Experiment 1-a: Post Competition – Non-Dominant Brand Scenarios
Instructions

Welcome to the product survey. The purpose of this survey is to obtain your reactions to some proposed product offerings by well-known companies. A number of companies are currently planning to expand a range of products that they offer by introducing new products under their brand names. Before these products are introduced, the companies would like to know how consumers react to them.

This questionnaire has three sections. Please read each question carefully and answer it to the best of your ability.

Thank you for your participation!
Scenario #1 Dell TV

Consider the brand name Dell and please answer the following questions:

1. How familiar are you with the Dell brand name?

<table>
<thead>
<tr>
<th>Never Heard of</th>
<th>Very Aware of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

2. Overall, in terms of quality, Dell products are:

<table>
<thead>
<tr>
<th>Low Quality Products</th>
<th>High Quality Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

3. How much do you like or dislike Dell brand?

<table>
<thead>
<tr>
<th>I Dislike it</th>
<th>I like it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

*Dell* brand is known for computers and computing products. In order to capitalize on its existing brand name, the management at Dell has decided to introduce Dell brand TV. Please answer the following questions about the Dell TV.

4. How much sense does it make for Dell to make TVs?

<table>
<thead>
<tr>
<th>No Sense At All</th>
<th>A Lot of Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

5. In your opinion, how competitive is the TV product category?

<table>
<thead>
<tr>
<th>Not at All Competitive</th>
<th>Very Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

The management at Dell in order to devise effective marketing strategies for its new TVs is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the *Consumer Reports* on the TV market. According to the *Consumer Reports*, the following are the major brands of TVs and their associated market shares for the year 2003.

---

16 Six questionnaires were developed using identical questions but changing the brand names, company information and market share data. Market share information for each scenario is presented separately following this questionnaire.

17 *Consumer Reports* is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Table 1 - TV Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sony</td>
<td>18.9%</td>
</tr>
<tr>
<td>2. Panasonic</td>
<td>16.8%</td>
</tr>
<tr>
<td>3. Toshiba</td>
<td>13.6%</td>
</tr>
<tr>
<td>4. JVC</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Hitachi</td>
<td>10.3%</td>
</tr>
<tr>
<td>6. RCA</td>
<td>9.1%</td>
</tr>
<tr>
<td>7. Samsung</td>
<td>8.3%</td>
</tr>
<tr>
<td>Others</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that all brands of TVs are equally competitive with more or less similar market shares. There is no leading and dominant brand in the TV market.

Please answer the following questions about the *Dell* brand TV by keeping in mind the information provided in the table above:

6. Compared to the existing brands in the TV category, how much do you like or dislike the idea of *Dell* brand TV

   I Dislike it  I Like it
   1 2 3 4 5 6 7 8 9

7. Assuming you were in the market for a TV, how likely is it that you would purchase *Dell* brand TV?

   Not At All Likely  Very Likely
   1 2 3 4 5 6 7 8 9

8. In your opinion, which is the strongest brand of TV?


9. Compared to the brand you identified in the previous question, the *Dell* brand is a:

   Very Weak Brand  Very Strong Brand
   1 2 3 4 5 6 7 8 9

10. How knowledgeable are you about the TV product category?

    Not Knowledgeable At All  Very Knowledgeable
    1 2 3 4 5 6 7 8 9

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Scenario #2 Kleenex Toilet Paper

The management at Kleenex in order to devise effective marketing strategies for its new toilet paper is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports\textsuperscript{18} on the toilet paper market. According to the Consumer Reports, the following are the major brands of toilet paper and their associated market shares for the year 2003.

Table 1 — Toilet Paper Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cottonelle</td>
<td>21.9%</td>
</tr>
<tr>
<td>2. Charmin</td>
<td>20.8%</td>
</tr>
<tr>
<td>3. Royale</td>
<td>19.6%</td>
</tr>
<tr>
<td>4. Scott’s</td>
<td>17.9%</td>
</tr>
<tr>
<td>5. No Name</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

From the above table it is clear that all brands of toilet papers are equally competitive with more or less similar market shares. There is no leading and dominant brand in the toilet paper market.

\textsuperscript{18} Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
**Scenario #3 Starbucks Ice Cream**

The management at Starbucks in order to devise effective marketing strategies for its new ice cream is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the *Consumer Reports*\(^{19}\) on the ice cream market. According to the *Consumer Reports*, the following are the major brands of ice cream and their associated market shares for the year 2003.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Haagen-Dazs</td>
<td>14.9%</td>
</tr>
<tr>
<td>2. Breyers</td>
<td>13.8%</td>
</tr>
<tr>
<td>3. Baskin-Robbins</td>
<td>11.6%</td>
</tr>
<tr>
<td>4. President’s Choice</td>
<td>10.9%</td>
</tr>
<tr>
<td>5. Ben &amp; Jerry’s</td>
<td>9.3%</td>
</tr>
<tr>
<td>6. Nestle</td>
<td>8.1%</td>
</tr>
<tr>
<td>7. No Name</td>
<td>7.3%</td>
</tr>
<tr>
<td>Others (local brands)</td>
<td>24.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that all brands of ice cream equally competitive with more or less similar market shares. There is no leading and dominant brand in the ice cream market.

---

\(^{19}\) Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
**Scenario #4 Kodak Camcorder**

The management at Kodak in order to devise effective marketing strategies for its new camcorders is analyzing the competitors' market share information obtained from various sources. Among other sources, the management has received market share information from the *Consumer Reports* on the camcorder market. According to the *Consumer Reports*, the following are the major brands of camcorders and their associated market shares for the year 2003.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sony</td>
<td>18.9%</td>
</tr>
<tr>
<td>2. Panasonic</td>
<td>16.8%</td>
</tr>
<tr>
<td>3. Canon</td>
<td>14.6%</td>
</tr>
<tr>
<td>4. JVC</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Hitachi</td>
<td>10.3%</td>
</tr>
<tr>
<td>6. RCA</td>
<td>9.1%</td>
</tr>
<tr>
<td>7. Samsung</td>
<td>8.3%</td>
</tr>
<tr>
<td>Others</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that all brands of camcorders are equally competitive with more or less similar market shares. There is no leading and dominant brand in the camcorder market.

---

20 *Consumer Reports* is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Scenario # 5 Listerine Toothpaste

The management at Listerine in order to devise effective marketing strategies for its new toothpaste is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports\(^1\) on the toothpaste market. According to the Consumer Reports, the following are the major brands of toothpaste and their associated market shares for the year 2003.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|}
\hline
Brand Name & Market Share \\
\hline
1. Colgate & 20.9\% \\
2. Crest & 19.8\% \\
3. Oral-B & 17.6\% \\
4. Aquafresh & 15.9\% \\
5. Close-up & 12.3\% \\
6. Sensodyne & 3.1\% \\
7. Rambrandt & 2.3\% \\
Others & 8.1\% \\
\hline
\end{tabular}
\caption{Toothpaste Market Share}
\end{table}

From the above table it is clear that all brands of toothpaste are equally competitive with more or less similar market shares. There is no leading and dominant brand in the toothpaste market.

\(^{1}\) Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
The management at Sony in order to devise effective marketing strategies for its new laser printers is analyzing the competitors’ market share information obtained from various sources. Among other sources, the management has received market share information from the Consumer Reports on the laser printer market. According to the Consumer Reports, the following are the major brands of laser printers and their associated market shares for the year 2003.

Table 1 - Laser printers Market Share

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hewlett-Packard (HP)</td>
<td>18.9%</td>
</tr>
<tr>
<td>2. Canon</td>
<td>17.8%</td>
</tr>
<tr>
<td>3. Lexmark</td>
<td>15.6%</td>
</tr>
<tr>
<td>4. Brother</td>
<td>12.9%</td>
</tr>
<tr>
<td>5. Epson</td>
<td>10.3%</td>
</tr>
<tr>
<td>6. Samsung</td>
<td>9.1%</td>
</tr>
<tr>
<td>7. Xerox</td>
<td>7.3%</td>
</tr>
<tr>
<td>Others</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

From the above table it is clear that all brands of laser printer are equally competitive with more or less similar market shares. There is no leading and dominant brand in the laser printer market.

---

22 Consumer Reports is a non-profit, independent organization that provides highly credible and detailed product information on a large number of consumer product categories.
Experiment # 1-b: Post -Competition – Recall-Based
**Scenario # 1**

Consider the brand name *Dell* and please answer the following questions:

1. How familiar are you with the *Dell* brand name?

<table>
<thead>
<tr>
<th>Never Heard of</th>
<th>Very Aware of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

2. Overall, in terms of quality, *Dell* products are:

<table>
<thead>
<tr>
<th>Low Quality Products</th>
<th>High Quality Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

3. How much do you like or dislike *Dell* brand?

<table>
<thead>
<tr>
<th>I Dislike it</th>
<th>I like it</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

*Dell* brand is known for computers and computing products. In order to capitalize on its existing brand name, the management at *Dell* has decided to introduce *Dell* brand TV. Please answer the following questions about the *Dell* TV.

4. How much sense does it make for *Dell* to make TVs?

<table>
<thead>
<tr>
<th>No Sense At All</th>
<th>A Lot of Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

5. In your opinion, how competitive is the TV product category?

<table>
<thead>
<tr>
<th>Not at All Competitive</th>
<th>Very Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9</td>
</tr>
</tbody>
</table>

6. Please list all major brands of TVs that you can recall (list as many as you can).

   1. ________________________  
   2. ________________________  
   3. ________________________  
   4. ________________________  
   5. ________________________  
   6. ________________________

---

23 The respondents were given a booklet comprising of the six brand scenarios that were identical except for the brand name and company descriptions.
7. Compared to the existing brands in the TV category, how much do you like or dislike the idea of Dell brand TV?

I Dislike it                                           I Like it
   1  2  3  4  5  6  7  8  9

8. Assuming you were in the market for a TV, how likely is it that you would purchase a Dell brand TV?

Not At All Likely                                           Very Likely
   1  2  3  4  5  6  7  8  9

9. What is the strongest brand in the TV category?


10. Compared to the strongest brand you identified in the previous question, the Dell brand is a:

Very Weak Brand                                           Very Strong Brand
   1  2  3  4  5  6  7  8  9

11. How knowledgeable are you about the TV product category?

Not Knowledgeable At All                                           Very Knowledgeable
   1  2  3  4  5  6  7  8  9

12. What is your favorite brand of TV?


Appendix – C

Experiment 2 – Pre-Test: Identification of Subcategories
Instructions

Very often as consumers, when we think of a product category, we tend to think of a specific group, or sub-categories within the product category. For example, the product category car has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc, within it. Similarly, the toothpaste product category has a number of sub-categories that are based on the type of product benefits, such as, tartar control, fluoride, breath freshening, teeth whitening, children’s flavored paste, and sensitive teeth treatment, among others.

Please identify major groupings or sub-categories within the product categories listed on the following pages.

Thank you for your participation!
Scenario # 1

Please List (as many as you can identify) the sub-categories. You have two minutes to list all the sub-categories. The researcher will announce when two minutes are over. Please DO NOT move to next category unless you are told to do so.

Product Category (Ice Cream)

24 The data were collected for six brand scenarios that were identical except for category name.
Experiment 2: Sub-Categories Structure Provided
Consider the brand name *Dell* and please answer the following questions:

1. How familiar are you with the *Dell* brand name?

   Never Heard of  
   1  2  3  4  5  6  7  8  9  
   Very Aware of

2. Overall, in terms of quality, *Dell* products are:

   Low Quality Products  
   1  2  3  4  5  6  7  8  9  
   High Quality Products

3. How much do you like or dislike *Dell* brand?

   I Dislike it  
   1  2  3  4  5  6  7  8  9  
   I like it

*Dell* brand is known for computers and computing products. In order to capitalize on its existing brand name, the management at *Dell* has decided to introduce *Dell* brand TV. Please answer the following questions about the *Dell* TV.

4. How much sense does it make for *Dell* to make TVs?

   No Sense At All  
   1  2  3  4  5  6  7  8  9  
   A Lot of Sense

5. In your opinion, how competitive is the TV product category?

   Not at All Competitive  
   1  2  3  4  5  6  7  8  9  
   Very Competitive

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the TV product category has a number of sub-categories that are based on the screen size (27", 32" etc.), as well as, screen type and picture projection, such as, Direct View (Tube) TV, Flat Panel (LCD, Plasma) TVs, Rear Projection TVs, and Front Projection TVs.

---

25 Six questionnaires were developed using identical questions but changing the brand names, company information and category structure information. The description of subcategories for each scenario is presented separately following this questionnaire.

---

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
6. Please list all major brands of TVs that you can recall (list as many as you can).

1. ____________________  4. ____________________
2. ____________________  5. ____________________
3. ____________________  6. ____________________

7. Compared to the existing brands in the TV category, how much do you like or dislike the idea of Dell brand TV?

I Dislike it  I Like it
1  2  3  4  5  6  7  8  9

8. Assuming you were in the market for a TV, how likely is it that you would purchase a Dell brand TV?

Not At All Likely  Very Likely
1  2  3  4  5  6  7  8  9

9. What is the strongest brand in the TV category?

__________________

10. Compared to the strongest brand you identified in the previous question, the Dell brand is:

Very Weak Brand  Very Strong Brand
1  2  3  4  5  6  7  8  9

11. How knowledgeable are you about the TV product category?

Not Knowledgeable At All  Very Knowledgeable
1  2  3  4  5  6  7  8  9

12. What is your favorite brand of TV?

__________________
Scenario # 2 Kleenex Toilet Paper

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the toilet paper product category has a number of sub-categories within it, such as, premium versus economy brands or cheap versus expensive brands.

13. Please list all major brands of toilet paper that you can recall (list as many as you can).

1. 
2. 
3. 
4. 
5. 
6. 
Scenario # 3 Starbucks Ice Cream

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the ice cream product class has a number of sub-categories, such as, single serving bars and drum sticks or tubs. Ice cream brands are also subcategorized as premium versus value brands or national brands versus store brands.

1. Please list all major brands of ice creams that you can recall (list as many as you can beyond the space provided below).

   1. ______________________
   2. ______________________
   3. ______________________
   4. ______________________
   5. ______________________
   6. ______________________
Scenario # 4 Kodak Camcorders

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the camcorder product class has a number of sub-categories that are based on the product size and shape, such as, vertical, horizontal, compact, combo camcorders. At the same time, the camcorder sub-categories can also be defined based on the picture format, for example, Mini Digital Video Cassette, MPEG/Micro MV, Digital 8, Min DVD-R & DVD RAM or Memory Stick.

1. Please list all major brands of camcorders that you can recall (list as many as you can beyond the space provided below).

1.__________________________ 4.__________________________
2.__________________________ 5.__________________________
3.__________________________ 6.__________________________
Scenario # 5 Listerine Toothpaste

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the toothpaste product category has a number of sub-categories that are based on the type of product benefits, such as, tartar control, fluoride, breath freshening, teeth whitening, children’s flavored paste, and sensitive teeth treatment, among others.

1. Please list all major brands of toothpaste that you can recall (list as many as you can).

   1. ____________________  4. ____________________
   2. ____________________  5. ____________________
   3. ____________________  6. ____________________
Scenario # 6 Sony Printers

Very often as consumers, when we think of a product class, we tend to think of a specific group, or categories with the product class. For example, car product class has sub-categories luxury, economy, family, compact, subcompact, imported cars, etc. Similarly, the Laser Printers product category has a number of sub-categories that are based on the type of product benefits, such as, B&W and color laser printers (personal and business use), officejet or inkjet printers, multifunction all-in-one (printer, fax, copier, and printer in one), photo printers and portable printers, among others

1. Please list all major brands of Laser Printers that you can recall (list as many as you can).

   1. ____________________
   2. ____________________
   3. ____________________
   4. ____________________
   5. ____________________
   6. ____________________
Appendix - D

Experiment 3 - Pre-Test
Instructions

Through this survey we want to identify the purpose and benefits within which some products consumed, as well as, alternative means of meeting a certain need that a product may fulfill. For example, a car may be used as a mode of transportation, to express one's social status or life-style. Similarly, the benefits of owning a car may include flexibility, convenience and personalized transportation. Various ways in which one could substitute for a car would include renting a car, taking a bus/train, riding a bike or flying. The purposes and context of usages vary greatly from product to product wherein one need may be fulfilled by a few or a large number of product alternatives.

Please do not hesitate to refer to the above example when completing the questionnaire.

Thank you for your participation!
Scenario # 1

1. Please list the reasons or benefits (as many as you can think of) for which someone uses a TV?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

2. What are some of the product or service alternatives that you can think of that would meet the needs that you think a TV fulfills? Please list as many as you can.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

26 The same scenario was used to elicit product benefit/goal-fulfillment for eight different products by changing the name of the product in each scenario.
Experiment 3 - Goal-Deriven Scenarios
Instructions

Welcome to the product survey. The purpose of this survey is to obtain your reactions to some proposed product offerings by well-known companies. A number of companies are currently planning to expand a range of products that they offer by introducing new products under their brand names (this strategy is called brand extensions). Before these products are introduced, the companies would like to know how consumers react to them.

This questionnaire has three sections. Please read each question carefully and answer it to the best of your ability.

Thank you for your participation!
Scenario # 1 Close-Up Chewing Gum

Consider the brand name Close-Up and please answer the following questions:

5. How familiar are you with the Close-Up brand name?

Never Heard of                      Very Aware of
1  2  3  4  5  6  7  8  9

6. Overall, in terms of quality, Close-Up products are:

Low Quality Products            High Quality Products
1  2  3  4  5  6  7  8  9

7. How much do you like or dislike Close-Up brand?

I Dislike it                              I like it
1  2  3  4  5  6  7  8  9

Close-Up is a toothpaste brand known for its breath freshening qualities. In order to capitalize on its existing brand name, the management at Close-Up has decided to introduce Close-Up brand chewing gum. Please answer the following questions about the Close-Up chewing gum.

8. How much sense does it make for Close-Up to make Chewing gum?

No Sense At All                      A Lot of Sense
1  2  3  4  5  6  7  8  9

9. In your opinion, how competitive is the chewing gum product category?

Not at All Competitive           Very Competitive
1  2  3  4  5  6  7  8  9

The management at Close-Up has decided to position itself as a leading brand of chewing gum that offers breath freshening benefits. Given this positioning, Close-Up will be competing against not only the other brands of chewing gum, but also with many other product alternatives that provide similar benefits, such as, breath mints, mouth spray, oral strips, and even mouthwash.

---

[27] Data were collected on six product categories using similar questionnaires. Different product benefits/goal-fulfillment for each product was used as shown separately after this questionnaire.
Scenario #2 Heinz Frozen Pizza

The management at Heinz has decided to position its frozen pizza as a convenient alternative to cooking at home. In this manner, Heinz frozen pizza will not only compete with other brands of frozen pizzas, but will also compete with other ready-to-eat meal alternatives, such as, frozen lasagna, soup meals, hot dogs, frozen burgers, and chicken strips, among others.

1. Given the above positioning strategy, please list all the major brands of competitors that Heinz Frozen pizza will face in the market (list as many as you can).

1. ____________________  
2. ____________________  
3. ____________________  
4. ____________________  
5. ____________________  
6. ____________________
Scenario # 3 Starbucks Ice Cream

The management at Starbucks has decided to position its ice cream as a premium brand of dessert. In this manner, Starbucks will not only compete with other brands of ice creams, but will also compete with various dessert alternatives, such as, cakes, yogurt, puddings, and fruit salads, among others.

1. Given the above positioning strategy, please list all the major brands of competitors that Starbucks ice cream will face in the market (list as many as you can).

   1. ___________________
   2. ___________________
   3. ___________________
   4. ___________________
   5. ___________________
   6. ___________________
Scenario # 4 Listerine Toothpaste

The management at Listerine has decided to position its toothpaste based on certain benefits that the Listerine toothpaste will offer. For example, Listerine toothpaste will be positioned as a leading brand that provides breath freshening and teeth whitening benefits.

1. Given the above positioning strategy, please list all the major competitors that Listerine toothpaste will face in the market (list as many as you can).

   1. __________________
   2. __________________
   3. __________________
   4. __________________
   5. __________________
   6. __________________
Scenario # 5 Dell TV

The management at Dell has decided to position its TVs based on the benefits that owning a Dell TV will provide. For example, Dell will emphasize the picture quality and position its TVs as a source of home entertainment.

1. Given the positioning strategy above, please list all the major competitors that Dell TVs will face in the market (list as many as you can).

1. ______________________  
2. ______________________  
3. ______________________  
4. ______________________  
5. ______________________  
6. ______________________
Scenario # 6 Kodak Camcorders

The management at Kodak has decided to position its Camcorders based on certain product benefits they will offer. For example, Kodak Camcorders will be positioned as a means to create and preserve memories, for photography as a hobby, and something fun.

1. Given the positioning strategy above, please list all the major competitors that Kodak Camcorders will face in the market (list as many as you can).

1. ________________  
2. ________________  
3. ________________  
4. ________________  
5. ________________  
6. ________________