RELYING ON BRAND EQUITY: INSIGHTS FROM CONSUMER EVALUATION PROCESSES

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(ABSTRACT)

This dissertation questioned whether the brand's equity can influence consumer evaluations, explored the formation of beliefs about brand extensions, and assessed the relative extension evaluation effects of brand information. A series of three experiments explored: consumers' schema activation process; the effects of brand equity on consumers' beliefs and judgments; and consumers' extension inference processes. The results indicate that consumers use brand knowledge as a frame of reference to understand the brand extension. If consumers are not familiar with the brand, they use other knowledge about the product category or specific exemplars to understand and evaluate the extension.

The brand name does not appear to be a major influence on consumers' evaluations of category extensions. Consumers' inferred beliefs have the greatest relative influence on evaluations and are based on the conjunction of their brand and new product category knowledge.

The brand name does not appear to carry the extension far. When the new product differs substantially from consumers' brand expectations, firms cannot rely on the brand name to sustain the same meaning that it had in the past. Marketing synergies or efficiencies alone will not produce a successful extension. Firms must be aware of how the brand and new product category interact in the consumer's mind.

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TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Research Problem

The divestment, acquisition, and leveraged buy-out rage of the 1980s, and the recession of the early 1990s has led to an increased focus on getting more out of a brand's equity. Some of these efforts have led firms to extend into untraditional product categories for their brand, presumably to achieve cost efficiencies and/or marketing synergies. However, little is known about the impact of these nontraditional brand extensions on consumer evaluation. This dissertation seeks to explore the degree to which managers can rely on brand equity to favorably influence consumers' evaluations of brand extensions, particularly when the new product departs from consumers' expectations for the brand.

In the past decade, firms have acquired such well known brand names as Kraft, Miller, and Pillsbury. Additionally, established brands have been extended into new product categories. For example, Dole introduced a line of frozen fruit bars, Coors introduced a sparkling water product, the Zenith name was placed on laptop computers, and Coca-Cola introduced Cherry Coke. Brands have been acquired and extended because firms have realized that the brand name represents an asset that can be capitalized on. Brand names are valuable to the firm because the brand name provides some utility to consumers beyond what the product itself provides. Thus, the firm's brand equity is derived from the equity the brand provides consumers (Leuthesser 1988).

The focus of this dissertation is on brand extension, which is the use of brand equity to introduce new products. Previous research has

suggested a general rule for brand extensions: in order to gain a favorable extension evaluation by consumers, the brand must be extended into new product categories which are congruent with consumers' knowledge and expectations for that brand (Aaker 1990; Farquhar 1989).

So, brand extension may be a poor strategy when the brand is extended into untraditional product categories for the brand. Yet, firms have often extended into such product categories to achieve cost efficiencies and/or marketing synergies (Aaker and Keller 1990; Gamble 1966). Ultimately the success of such nontraditional brand extensions rests with the final consumer. So, an important problem is whether the brand name favorably influences consumer evaluations when it is extended into nontraditional product categories. Further, if the brand does not influence extension evaluations, then what other information does the consumer draw on? This dissertation examines this substantive problem.

Examining how consumers evaluate extensions, particularly when the brand is extended into nontraditional product categories, will assist firms to better use their brands. Developing an understanding of the information consumers use to form their evaluations will aid firms in identifying what selling points they might emphasize to help ensure the successful introduction of brand extensions.

Overview of the Brand Extension Literature

The limited, existing research on brand extension has focused on the effects of this strategy on consumers. This research has found that affect, utilities, and specific beliefs associated with the existing brand may transfer to the extension. Additionally, the congruity or degree of compatibility consumers perceive between the new product and their expectations for products bearing the brand name can moderate this transfer. Thus, the brand name can influence consumers' perceptions, evaluations, and choice of the extension. However, the research on

extension effects provides little guidance on using the brand name to influence consumer evaluations of extensions into nontraditional product categories. Previous research has not explored the influence of the brand on extension evaluation relative to the influence of consumers' prior knowledge about the new product category and their inferences about the extension.

Several cognitive processing models which share common stages and features have been proposed to account for and explain brand extension effects (Boush and Loken 1991; Bridges 1989; Hartman, Price, and Duncan 1990). The consumer is exposed to and is assumed to attend to a brand name linked with a product new to the brand. The evaluation process consists of an attempt by the consumer to fit the new product with brand expectations derived from her or his brand schema. The brand schema is a structure in memory containing the consumer's prior knowledge of the brand. Previous models have assumed the brand schema is activated and forms the basis of the evaluative processing of brand extensions.

The proposed processing models assume that prior knowledge forms the basis of comprehension and that the new product information is compared against this knowledge. If the new product information is judged to be highly congruent with the brand schema, then evaluation simply consists of the affect transferred from the parent brand. If the extension information is judged to be less than highly congruent, then the brand extension is evaluated in some sort of piecemeal, or attribute-by-attribute fashion. However, the nature of the processes involved and the effect of brand equity on evaluation under such conditions have not been well-defined nor explained.

In summary, previous research on brand extension has focused on extension effects. The brand name has been found to influence consumer judgments of the extension. Several brand extension processing models

have been proposed to explain these effects. However, the processes and effects of using the brand name on untraditional product categories remains unexplored. In order to better understand the effects of brand extension on consumers' evaluations, and to develop specific prescriptions for the use of brand extension as a strategy, we need to know how consumers evaluate extensions. Therefore, a model of consumers' processing of brand extensions is developed in this dissertation.

Overview of the Conceptual Model

The proposed model of evaluation process for brand name extension is summarized below. The development and detailed explanation of the model are contained in Chapter II.

Extension evaluation consists of four stages. First, the consumer is exposed and attends to the brand extension. Second, the extension is initially categorized as an example of the brand such that the consumer activates her or his brand schema. This brand schema serves as a frame of reference for subsequent processes and judgments. This dissertation tests the assumption that consumers' activate and use the brand schema in the evaluation process.

Third, the consumer attempts to confirm the appropriateness of the extension as an example of the brand. Whether the brand schema is easily considered appropriate for understanding the new product or whether additional effort is necessary to understand the extension, depends on the perceived congruity between the new product and prior knowledge about the brand. To further understand the extension as an example of the brand, consumers may form inferences. This dissertation tests whether consumers are more likely to form extension inferences when perceived congruity is moderate. The conjunction of prior knowledge of the brand and of the new product are posited to form the

basis of the inferences made. This dissertation examines whether the extension inferences formed by consumers are conjunctive.

Fourth, the consumer forms an evaluation of the brand extension. If the consumer easily accepts the extension to be an appropriate example of the brand, extension evaluation primarily consists of the affect associated with the brand in memory. If the brand schema is not easily considered appropriate, the consumer will evaluate the extension in a piecemeal manner primarily based on the information retrieved and inferred. In this case the brand name becomes just another attribute integrated into the evaluation, and thus influences the evaluation less than the extension inferences formed by the consumer. The posited relative effects of the brand on extension evaluation are tested in this dissertation.

Overview of the Research Methodology

Three laboratory experiments were used to examine the hypothesized processes and effects. The activation and use of the brand schema as a frame of reference was tested in experiment 1. The hypothesized presence of inferences and the relative effects of brand affect on evaluation were tested in experiment 2. Finally, the conjunctive nature of the extension inferences was tested in experiment 3.

Experiment 1

The purpose of the first experiment was to determine whether consumers' brand schemata are activated and subsequently serve as a source of comparison in the brand extension comprehension process. A concurrent verbalization task and priming manipulation was used to determine the efficacy of the hypothesized processes. A 3 X (2) mixed design was used in this experiment. Schema primed was the first, between-subjects factor and had three levels: brand primed, new product

category primed, and no prime. The second, within-subjects factor was a brand replicate.

This experimental design permitted an empirical test of the activation process. Given no explicit prime, the model posited that the brand name on the extension should act as a cue, priming or activating the consumer's brand schema. This process should be similar to when the brand is explicitly primed prior to exposure to the extension, and dissimilar to when the new product category is explicitly primed.

Tests of the activation process were based on the coded protocols of the subjects' verbal evaluations of the two brand extensions. To gain insight into the context of the subjects' thoughts, a self-coding procedure was used in which the subjects listened to and helped code their own taped responses. Analyses consisted of specific contrasts between the coded responses in the priming conditions.

Experiment 2

The purpose of the second experiment was to examine the prevalence of brand extension inferences across different conditions of perceived congruity, and to test the relative effects of brand affect on evaluation. The primary method used was adapted from the stereotyping literature wherein correlations serve as the dependent variables.

A 2 X (4) mixed design was employed in this experiment. The between-subjects, independent variable was perceived congruity and was manipulated using brand/new product combinations developed in pretests. Extreme congruity and moderate congruity were the two levels of this variable. The second, within-subjects variable was a brand replicate.

The manipulation provided a basis for comparing the amount of extension inferences formed, and the influence of brand affect compared to the new product information and extension inferences at different levels of congruity. Multivariate analysis of variance was used to

empirically test the hypothesized differences in inferences. Differences between correlations of the subjects' brand affect, affect towards the new product category, affect towards the extension inferences they formed, and evaluation of the brand extension were used to test the hypothesized relative effects of brand affect.

Experiment 3

The purpose of the third experiment was to examine whether consumers form conjunctive inferences when evaluating moderately congruent brand extensions. A concurrent verbalization task was used in which subjects evaluated extensions of fictitious brands. The content of their verbal responses was coded and analyzed to test the hypothesized nature of their inferences.

The design for this experiment included only a single factor consisting of a brand replicate with two brands. The dependent variables consisted of the subjects' responses coded into conjunctive, brand-based, and product-based inferences. The hypothesized preponderance of conjunctive inferences was tested using a repeated measures analysis of variance and specific contrasts across brand replicates.

Overview of Contribution

Brand extension is a widely-practiced new product strategy. To provide insights about brand extension and to provide guidance for its use, this dissertation proposes and tests a model of consumers' brand extension evaluation processes. Understanding how consumers evaluate extensions, particularly when the brand is extended into nontraditional product categories is an important substantive problem for both managers and researchers of brand extension strategies.

Substantively, this dissertation focuses on the consumer's

perspective of brand extension. An understanding of how consumers evaluate brand extensions is necessary so that firms can more effectively utilize this strategy.

Conceptually, the model of brand extension evaluation extends and subsumes previous models. Specifically, this dissertation expands upon and empirically examines the processes operating when consumers perceive the extension to be less than highly congruent with their expectations for the existing brand.

An inference process quite different from those discussed elsewhere in consumer research is suggested and empirically examined--conjunctive inferences. Conjunctive inferences are not simply brand-based, nor product-based, but represent the conjunction of brand and product knowledge. There are many other situations in which consumers may use these types of inferences to understand two disparate but linked concepts, e.g., a spokesperson and a product, a country of origin and a product, or two brand names on a co-marketed product. Thus, this inference process should be of interest to consumer researchers.

Finally, this dissertation may assist managers in making decisions on whether the brand name should be extended into nontraditional product categories. The managerial recommendations based on this dissertation focus on this question.

Overview of the Remaining Chapters

The next chapter reviews and summarizes the brand extension literature. The basic research questions are developed in this chapter. Conceptual models from both the consumer behavior and psychology literature are reviewed to examine these questions. A model of brand extension evaluation is proposed and research propositions based on the model are offered in this chapter.

The third chapter specifies testable hypotheses and reviews the

research strategy used to examine them. The next three chapters contain the results of the three experiments. Experiment 1 is discussed in the fourth chapter. The methodology used in this experiment, hypothesis test results, and discussion of the findings are presented in this chapter. Similarly, the methodology, results, and discussion of findings for experiment 2 are contained in the fifth chapter, and for experiment 3 in the sixth chapter.

The seventh and final chapter contains a general discussion of the overall results of the experiments. Conclusions are drawn and limitations are noted in this chapter. Finally, future research directions are discussed.

Chapter Summary

This chapter provided a brief overview of the dissertation. The importance of determining whether brand names favorably influence consumer evaluations when extended into nontraditional product categories was discussed. Then, a brief overview of the previous brand extension literature was presented. A summary of the conceptual model developed to overcome the limitations of previous research was reviewed. The hypothesized relationships tested in this dissertation were noted, and the methodology used to test these was briefly presented. Next, the general contributions of the research were summarized. Lastly, overviews of the remaining chapters were presented.

CHAPTER II

REVIEW AND CONCEPTUAL DEVELOPMENT

Chapter Overview

In trying to get more out of their brand's equity, firms have extended into untraditional product categories for their brand. These extensions have presumably led to cost efficiencies and/or marketing synergies for the firm. However, little is known about what influence these nontraditional brand extensions have on consumers. Therefore, this dissertation seeks to explore the degree to which managers can rely on brand equity to favorably influence consumers' evaluations of brand extensions, particularly when the extension is into untraditional product categories for the brand.

The objectives of this chapter are to: (1) critically review the brand extension literature, (2) based on the review develop research questions, (3) identify and review models from consumer behavior and psychology that bear on these questions, and (4) develop a theoretical framework or model to explore these questions.

Literature pertaining to the research problem is reviewed in this chapter. In the first section, brand equity is defined and its management described. The second section focuses on brand extensions, and provides definitions and examples. Brand extension effects are reviewed and summarized in the third section. This review leads to a recapitulation of the basic research objectives and formulation of research questions in the next section. In the fifth section, conceptual models pertinent to brand extension evaluation processes are reviewed. Models from both the consumer behavior and psychology literature are assessed. The proposed conceptualization is articulated

in the sixth section of this chapter. A model and research propositions are forwarded and the contribution of the conceptualization is discussed in this section. Finally, the last section summarizes the chapter.

Review of the Literature

Brand Equity

Recently, marketing researchers have shown interest in defining, estimating, and managing the equity that existing brands possess in the marketplace. Several definitions of brand equity as viewed from the firm's perspective have been offered, e.g., see Farquhar (1989), Leuthesser (1988), Simon and Sullivan (1989), and Thompson (1988). There is general agreement that brand equity represents the added value which a brand name itself provides a product (Shocker and Weitz 1988; Simon and Sullivan 1989). As such, brand equity is a residual asset resulting from a favorable brand image. This image results from past brand marketing efforts (Rangaswamy, Burke, and Oliva 1990).

Brand equity is an important resource that firms can acquire, develop, and/or manage. For example, Phillip Morris acquired Kraft and Murjani gained the license to use the Coca-Cola brand name on clothing. Brand equity development consists of strategic activities that focus on enhancement of the value of the perceived image of the brand (Park, Jaworski, and MacInnis 1986). Examples include expanding the brand's usefulness across usage situations, or its function to more specific consumer needs. Finally, firms can manage or use the equity of a brand name by extending it into a new product category.

Brand Extension

Firms can use several alternative branding strategies, most of which include some type of brand extension. For example, firms can use individual brand names for each product, a company name with all

individually branded products, a single brand name for all product offerings, or separate brand names for different product lines (Kotler and Armstrong 1989). The latter two involve brand extension strategies. In fact, brand extension is a common way in which firms strategically use brand equity to introduce new products. Such strategies comprise more than 75% of recent new product introductions (Fannin 1987; Ogiba 1988). Brand extension may be a good way to reduce the new product failure rate and the financial risks of introducing new products.

Brand extension from the firm's perspective has been defined as borrowing on the equity in a brand name by extending it to new or modified products (Farquhar 1989). Examples of brand extensions introduced in recent years include Cherry Coke, Jell-O Pudding Pops, M & M peanut butter flavored candy, Ivory shampoo, Coors sparkling water, Hills Brothers hot chocolate mix, Zenith laptop computers, Sony multidisc CD player, and Black and Decker kitchen appliances.

There are two types of brand extension strategies: category extensions and line extensions. Category extensions involve extending the existing brand name to a product in a product category that is new to the brand/firm (Tauber 1981).[1] As such category extensions represent the strategic leverage of brand equity to new products or markets (Tauber 1988). Category extensions are also called franchise extensions (Hartman, Price, and Duncan 1990; Tauber 1981). The category extensions mentioned above include Jell-o Pudding Pops, Ivory shampoo, Coors sparkling water, Hills Brothers hot chocolate mix, and Black and Decker kitchen appliances.

Line extensions involve extending the existing brand name to a modified product within one of the brand's/firm's existing product

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[1] Product category is used here and throughout this discussion to mean the set of products which serve general customer needs and are functionally coherent. This is synonymous with what many term a product class (Kotler 1991; Park and Zaltman 1987).

categories (Tauber 1981). The purpose of this strategy is to penetrate the brand's present product category by market segmentation or product differentiation using modifications such as new flavors, new ingredients, different forms, or different applications (Tauber 1981). The line extensions mentioned above include Cherry Coke, M & M peanut butter flavored candy, and Sony multidisc CD player.

Firms rely on the existing brand name to reduce the cost, and consequently, reduce the risk of new product introduction (Gamble 1966). Using a known brand name can reduce the cost of creating consumer or channel awareness of the brand. In addition, using the same brand name on a line of products can produce promotional synergies and communications efficiency (Aaker and Keller 1990).

Brand extension strategies may ease the short-term risks to the product manager associated with introducing new products. Again, using a known brand name on such products can reduce the front costs necessary for product introduction. Thus, given an unsuccessful introduction, the loss associated with introduction costs is less.[2]

Many firms have extended their brands further into diverse product categories, trying to take advantage of promotional synergies and cost efficiencies. However, the market determines the success of any brand extension. Research about the effects of brand extension on consumers is reviewed below.

Brand Extension Effects

Research concerning the effects of brand extensions has explored consumer purchase, perceptions/evaluations, and choice of the extension that result from using the existing brand name on the new product. Early research focused on the simple transfer of meaning of family

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[2] Carl McDaniel is credited for this idea.

branding strategies.

Transfer of Meaning

The concept of meaning transfer originated from semantic generalization theory. Semantic generalization is a specific form of stimulus generalization. Semantic generalization assumes that consumers perceive and establish memory for a stimulus such as a parent brand (Thompson 1988). Then given subsequent exposure to a new product similar in brand name, but dissimilar in physical attributes, contact is established with the memory traces of the original stimulus or parent brand (Thompson 1988). The meaning in memory associated with the brand name transfers to the new product bearing this name. Semantic generalization is a behavioral phenomenon of meaning transfer that results from conditioning (Thompson 1988).

Meaning in this sense is the set of brand associations the consumer has stored in memory. Thus, meaning is essentially the same as brand image. Meaning may include specific beliefs, evaluation, and expectations of the product (Bridges 1989). Beliefs are more specific and are relative to specific attributes of the product. Evaluation is the overall attitude or affect towards the product and perhaps determined through some linear combination of the beliefs and their valences (Fishbein and Ajzen 1975). Expectations include consumers' anticipations that a branded product will have certain attributes, functions, utilities, or uses.

Transfer of semantic meanings and beliefs. Kerby (1967) worked within the semantic generalization paradigm, and used semantic differential items to measure a large number of meanings. He found little evidence of generalization for several brands of major appliances. Roman (1969) also operationalized meaning using a large

number of semantic differential items and found some evidence that generalization of meaning does occur across product categories. However, Roman (1969) used only one stimulus brand--"Cedar"--and two product categories--deodorizer and bleach--to make her conclusions. Summarizing, when meaning was operationalized as a large number of specific semantic associations, the transfer across product categories was not always found.

Specific beliefs also may transfer from the parent brand to the extension. For example, using qualitative data, Aaker and Keller (1990) found that consumers transfer specific beliefs from the brand, and/or use them to make inferences about the extension. For example, the most associated benefit/attribute of the brand "Crest" with their respondents was "cavity fighter." This specific belief apparently transferred to the extension, as their respondents most often mentioned "prevents cavities" when presented with "Crest chewing gum." Similarly, their respondents most often mentioned "expensive" when exposed to the brand "Vuarnet," and inferred the same attribute in "Vuarnet wallets."

Transfer of affect. Again, meaning has other dimensions which may generalize, e.g., affect, defined as overall attitude or evaluation (Thompson 1988). Thompson (1988) used affect as the operational dimension of meaning, and found that meaning transferred from the parent brand to the extension. Although not explicitly ascribed to a semantic generalization explanation, others have found affect to transfer from the parent brand to the extension. For example, MacInnis and Nakamoto (1990) operationalized brand affect as an overall evaluation or attitude, and found that it had a direct positive effect on the evaluation of the extension.

Transfer of utility. Rangaswamy, Burke, and Oliva (1990) explored

the results of brand extension in a consumer choice context using conjoint analysis. They examined transfer of utility, not an intermediate process such as attitude. They examined the relative consumer utility of the brand name vs. the new product category vs. the interaction between the brand and new category, across several types of products. They found that utility will transfer from the brand to the extension. Their findings indicate that highly valued brand names will have the greatest utility to the consumer when extended to product categories where brands significantly influence consumer choice.

Summarizing the effects of using an established brand name on a new product: affect has been found to transfer from the brand to the extension; specific beliefs have been found to transfer or to have been inferred; and utilities also have been found to transfer. Although the brand name has been found to influence consumers' perceptions and evaluations of the extension, we do not know what the strength of these effects are relative to the other information provided in an extension context. Only Rangaswamy, Burke, and Oliva (1990) examined the effects of the brand name relative to other factors. However, their stated purpose was to explore the outcomes of extension strategies. Thus, their empirically-based analysis lacked a strong conceptual explanation. Additionally, their findings were limited to a choice context, rather than an evaluation or judgment context.

Moderating Influence of Perceived Fit

Several studies have found that affect or overall attitude will transfer from the parent to the extension only to the extent that the two product categories are judged to fit or judged as similar (Aaker and Keller 1990; Singh 1988; Thompson 1988; University of Minnesota Consumer Behavior Seminar (UMCBS) 1987). In general, perceived fit or similarity is the consumer's judgment of the extent to which the extension fits

with prior knowledge of the parent brand (MacInnis and Nakamoto 1990). According to these findings, perceived similarity between the parent brand and new product categories moderates the transfer of affect from parent brand to the extension.

Aaker and Keller (1990) operationalized similarity as the extent to which consumers viewed the product categories as substitutes or complements. UMCBS (1987) used a simple global similarity judgment in their study. Thompson (1988) used relatedness and similarity judgments to operationalize similarity. Finally, Singh (1988) operationalized similarity both as category image match at an abstract level, and category attribute match at a concrete level.

MacInnis and Nakamoto (1990) suggested that consumers will judge attributes that are important in one product category to be as important in a related category. They felt that this would affect the value of inferred attributes, or those specific beliefs associated with the parent brand that the consumer presumes are present in the extension. Thus, MacInnis and Nakamoto (1990) hypothesized that consumers will likely value inferred extension attributes more when the brand's established product category and the new product category are similar. Their findings supported this hypothesis. This conceptualization of fit and each of these findings are limited to the extent that the brand has a presence in only a single product category.

From a categorization perspective, fit has been viewed as the typicality of the extension to the brand knowledge category (Boush and Loken 1991; John and Loken 1990). The brand knowledge category is a structure in memory which contains all the products/associations relevant to the brand (Boush and Loken 1991). Typicality is the consumer's mediating judgment that the extension shares many characteristics with the other products marketed under the brand name.

Thus, typicality and perceived fit are similar if not synonymous concepts. Consumers' evaluations of brand extensions have been found to be correlated with (Boush and Loken 1991) or mediated by (MacInnis and Nakamoto 1990) their typicality judgments.

Summarizing, perceived fit or similarity between prior brand knowledge and the new product has been found to moderate the transfer of affect from the parent brand to the extension.

Summary of Brand Extension Effects

Past empirical research has found that affect, utilities, and specific beliefs associated with the parent brand may transfer to the extension. Additionally, the perceived fit or similarity between the consumer's brand knowledge and the new product information may moderate this transfer. Thus, brand extension strategies are subject to a general rule: firms should extend their brands into products that are consistent with consumers' knowledge of the brand. However, firms often extend their brands to new products because of production or marketing synergies or efficiencies. Yet, these new products may be less than consistent with consumers' knowledge of the brand.

Additionally, although the effects of using a known brand name on a new product have been explored, these findings are limited in several ways. The relative influence of brand equity on consumers' evaluation of the extension remains unexplored. Although we know that the brand name may influence the evaluation of the extension through affect transfer, we do not know what the effects of the brand are relative to other factors. We do not know the effect of the information about the new product itself, or the effect of consumers' prior knowledge about the new product category. The effect of the brand name on the new product has generally been explored only in reference to some type of overall evaluation or affect. However, the brand name also may

influence more concrete inferences made about the product, beyond simple affect transfer (Aaker and Keller 1990). The influences of information beyond the brand that consumers perceive, retrieve, or infer, and the mechanisms involved in such processes have not been examined.

Research Questions

The empirical research reviewed above, has not adequately explored the research problem posed. To understand how much managers can rely on their brands' equity to favorably influence consumers' evaluations of extensions, we need to know how consumers evaluate extensions. Thus, this dissertation will explore the following research questions:

> 1. How do consumers evaluate brand extensions (category extensions)? Specifically, how do consumers process the brand and new product information in making an evaluative judgment of the extension, particularly when the new product is less than highly congruent with the consumer's brand knowledge?
>
> 2. What is the relative effect of the equity of the brand on the evaluation of the extension? What is the effect of brand equity relative to the new product information perceived, retrieved, or inferred by the consumer on the consumer's evaluation of the extension?

To explore these research questions, a consumer perspective of the phenomenon will be developed, existing models and theories of brand extension evaluation as well as those found in social cognition will be reviewed, a conceptual model of brand extension evaluation based upon and expanding upon those reviewed will be developed, and specific research hypotheses based upon the model and the research questions above will be proposed.

Conceptual Models of Brand Extension Evaluation

There is growing interest in going beyond the simple effects of extension strategies and those variables that specifically moderate the effects of extensions. Both behavioral processes based on semantic

generalization and cognitive processes based on categorization theory and the social cognition/stereotype literature have been offered to explain extension evaluation. Yet, little empirical research exists concerning such evaluative processes (see Boush and Loken 1991).

As in other cases of consumer research a cognitive perspective that assumes an active, thinking consumer may be appropriate in this case. In fact semantic generalization as espoused by Thompson (1988) does account for memory and information processing factors, yet the mechanism itself is simply behavioral oriented. By understanding the cognitive processes involved in brand extension evaluations, researchers hope to gain insight into why prior knowledge and evaluations of brands influence the specific beliefs and evaluations of their extensions. Thus, explication of the processes involved in extension evaluation is central to the primary research question posed, and also may provide some insight into the relative effects of brand equity on consumers' evaluations of extensions. Three brand extension processing models and their social cognition roots are reviewed below to gain insight into the evaluation processes.

Since a brand's equity is derived from the meaning and demand consumers have for a brand, the following section introduces a consumer perspective of brand equity useful in examining consumers' responses to extension strategies.

Consumers' Perspective of Brand Equity and Extension

Brand equity from the consumer's perspective is the meaning or information that a brand name adds beyond the physical attributes of the

product (Farquhar 1989).[3] Thus, similar to the managerial definition, brand equity simply represents added value. As such brand equity is the utility that the brand name itself adds to the product, represented as the consumer's brand-specific knowledge held in memory. This knowledge is the brand's set of associations, the strength of these associations, and their ability to influence the consumer's judgments and evaluations (Leuthesser 1988). Thus, brand equity rests in the consumer's mind. It is brand equity as such, from which derives the value of the brand name to the firm (Leuthesser 1988).

From the consumer's perspective, brand equity as brand-specific knowledge allows the consumer to adapt to uncertainty in the environment. Brand names provide cues to the nature and meaning of products, thereby allowing the consumer to make judgments and choices while still preserving cognitive economy, and facilitating ease of judgment in new product situations.

From a consumer's perspective, brand extensions simply amount to encountering a known brand on a product that differs in some way from those encountered in the past with that particular brand name. Having prior knowledge of brand names in such new or altered purchase settings may serve to reduce consumer uncertainty, increase decision flexibility, and curtail the need for additional information search (Narayana and Duncan 1980).

From an information processing perspective, brand extension in the

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[3] When brand equity is viewed as the meaning the brand name brings to the branded product, equity takes on a different connotation than as usually used in asset and financial management. Brand meanings may include both positive and negative associations, each of which adds up to some overall positive or negative feelings toward the brand. Equity in the financial sense is usually positive in nature, i.e., it represents a positive asset, and with respect to the brand name a positively valued asset. However, existing brand names may not only vary as to how much equity or value they provide to the products with which they are linked, but as to whether the brand may actually be negatively valued by certain segments or by the marketplace as a whole. Thus, viewing brand equity as brand meaning to the consumer infers that brands with negative associations or that are negatively valued overall by the market represents costs or burdens when used to introduce new products. Brands may often have such negative associations which the development of the brand may dilute over time through marketing communications and brand extension strategies. This idea is similar to Park, Jaworski, and MacInnis's (1986) elaboration stage in managing the image of the brand.

simplest case is merely a known brand linked with new product information. New product information by definition is "new," i.e., newly linked with the brand. Thus, the new product information is new to the extent that the consumer has few, if any, specific associations explicitly linking the brand name and the new product. New products or innovations are often characterized according to how "new" the specific attribute(s) or product category is to the consumer (Engel, Blackwell, Miniard 1986). Thus, new product information may or may not be truly new, but simply new to the brand. Regardless, the new product information is simply the information presented along with the brand name such as the information from a newly linked product category.

Processing Model of Franchise Extension Evaluation

Hartman, Price, and Duncan (1990) proposed a specific model of consumers' evaluations of franchise extensions, based on categorization theory (see Figure 1). The term franchise extension simply refers to category extensions. This model presumes that consumers' will attend to a category extension upon exposure, encoding the extension at a perceptual level, which leads to access of prior knowledge in memory. The model assumes knowledge is stored in memory in a categorical form or structure.[4] Objects within a knowledge category or category level share features or attributes. Hartman, Price, and Duncan (1990) suggested that the two knowledge categories involved in the franchise extension evaluation process are the brand category and the new product category. This model proposes that given exposure to a category extension, consumers engage in initial processing, judging whether the accessed knowledge about the new product matches or fits with the characteristics of the brand knowledge category. Match in this case

[4] Category means a hierarchical knowledge structure in memory in this discussion. It is not the same as a "product category" discussed above. In order to avoid confusion, the term "knowledge category" will be used to refer to the former.

Attend to Extension

↓

Perceptual Encoding

↓

Access Memory

↓

Initial Processing

High Match	Moderate Match	Low Match
Low Motivation for Processing Further	High Motivation for Processing Further	Low Motivation for Processing Further
Classify Member	Classify Member or Non-member	Classify Non-member

↓

Extended Processing

Form Impression/ Extension Evaluation	Form Impression/ Extension Evaluation	Form Impression/ Extension Evaluation

Figure 1: Processing Model of Franchise Extension Evaluation (Hartman, Price, and Duncan 1990)

means the structures of the brand and new product knowledge categories share one or more dimensions (Hartman, Price, and Duncan 1990).

According to Hartman, Price, and Duncan (1990) perceptions that there is a match in the cognitive structures in the initial processing stage yields three possible routes to evaluation. If the consumer perceives the new product knowledge category to be a low match with the brand knowledge category accessed, then the consumer becomes disinterested in processing the information. Information processing of the brand extension stops and a negative evaluation is formed. The consumer does not classify the extension as a member of the brand knowledge category. Hartman, Price and Duncan (1990) used the term "non-member." The consumer focuses on differences between what is known about the brand and what is known about the brand extension in forming an evaluation, and in fact may exaggerate these differences. Given a high perceived match between the new product knowledge accessed and the brand knowledge category, the consumer shortcuts further information processing and automatically transfers the affect or evaluation stored with the brand knowledge category to the extension. Finally, initial processing resulting in a moderate perceived match, motivates the consumer to resolve the mild discrepancies. In this situation the consumer will engage in extended or more elaborative information processing to determine the classification of the extension.

Hartman, Price, and Duncan (1990) suggested that individual differences and situation characteristics such as personal relevance or involvement may moderate the process. They proposed that the relationship between perceived match and motivation for further processing may vary to the extent that the consumer perceives the extension is relevant to some goal. Thus, extended processing may result given high involvement though perceived match is low or high.

Brand Category Processing Model

Boush and Loken (1991) both suggested and tested a process by which consumers evaluate category extensions (see Figure 2). This model views the brand name as a label for a knowledge category to which an attitude or affect is associated/tagged in long-term memory. They proposed that branded products as exemplars of the brand knowledge category may vary in how well they represent or do not represent the category. They termed this typicality.

Boush and Loken (1991) proposed that given exposure to a category extension, consumers will form an evaluation based upon whether they like the parent brand, and whether the extension is similar to the brand's existing products, i.e., is typical.[5] They described this process as category verification, whereby consumers verify whether the extension is an acceptable member of the brand knowledge category.

Consumers quickly judge extremely atypical or dissimilar extensions to be a poor fit with the existing brand knowledge category. Consumers do not evaluate those extensions in a piecemeal fashion using some weighted combination of attributes. Very atypical extensions should result in less positive evaluations because they are less likely to share in the brand's positive affect. Consumers categorize extremely typical or similar extensions into the brand knowledge category. In this case the affect associated with the brand transfers to the extension, and consumers do not engage in piecemeal evaluative processes. Finally, consumers do not easily judge the fit of moderately typical or similar category extensions and a second slower stage consisting of piecemeal processing yields an evaluation.

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[5] Boush and Loken (1990) used the terms typicality and similarity in a loose fashion, treating them as equivalent. They described typicality as a function of the degree that the extension shares characteristics with the brand prototype, i.e., those brand characteristics most salient. As such, typicality can be affected both by the saliency of the characteristics/features of the extension product category, and by the variance of the products that form the brand knowledge category which influences those characteristics prototypical of the brand. They also describe similarity as how alike the extension is to the brand prototype.

Exposure to Brand Name Cues Brand Knowledge Category

↓

Typicality of New Product (as Member of Brand Knowledge Category)

Very Typical	Moderately (A)typical	Very Atypical

↓

1st Stage of Evaluation (Category Verification)

Judged Quickly as a Good Fit	Category Membership or Nonmembership is not Obvious	Judged Quickly as Poor Fit With Existing Brand Image

↓

2nd Stage of Evaluation

Evaluated Based on Affect Elicited With Brand	Evaluated in Piecemeal Fashion	Evaluated Less Positively as Instance of Brand (Assumes Positive Affect Associated With Brand)

Figure 2: Brand Category Processing Model (Boush and Loken 1991)

Boush and Loken (1991) used response times or latencies, and cognitive response data to test this model. They found that piecemeal evaluative processes were operating in the moderate condition such that evaluations were slower and their subjects evoked more attribute-related cognitions. Additionally, they found categorization evaluative processes operating in the extremely typical or atypical conditions such that evaluations were faster and their subjects evoked less attribute-related cognitions.

Schema Unification Model of Brand Extensions

Bridges (1989) also proposed a model of brand extension evaluation (see Figure 3). This model is also based on categorization principles, and assumes the existence of a structure in memory, termed a brand schema. The brand schema consists of the consumer's brand associations, beliefs, and expectations. The key to the process that Bridges espoused is that in processing the brand extension, the consumer attempts to unify the brand schema activated in memory, to make sense of the incoming new product information in light of the brand associations activated from memory. The transfer of associations and affect from the brand to the extension requires the new product to be consistent with consumer expectations for the brand, i.e., consistent with the brand schema. A brand schema is cohesive if the individual can understand the connections among the products that bear the brand name. In this context, the consumer preserves cohesiveness if she or he judges the new product to fit with the brand schema.

Bridges (1989) proposed that when the consumer considers a brand extension, either category-based or piecemeal processing is stimulated. Which process the consumer engages depends on whether she or he easily judges the new product as an obvious fit with the brand schema. Categorization occurs when the consumer perceives the new product to

New Product Bearing Familiar Name

↓

Process of Identifying Explanatory Link

Categorization	**Piecemeal Processing**	**Non-categorization**
New Product Clearly Consistent With Brand Schema	Product Fit Unclear	New Product Clearly is not Consistent With Brand Schema
Evaluation Occurs Quickly, and Consists of Brand Affect Spontaneously Evoked and Transferred to Extension	Evaluation Occurs More Slowly, by Piecemeal Processes, Based on Degree of Perceived Fit, Inferences, and Attributes of New Product	Evaluation Occurs Quickly
Judgment Rationalization Statements Supporting Relationship Between Brand and New Product		Judgment Rationalization Statements Nullifying Relationship Between Brand and New Product

Figure 3: Schema Unification Model (Bridges 1989)

clearly fit with brand expectations. Non-categorization occurs when the consumer perceives the new product to clearly not fit with brand expectations. In either case, the consumer spontaneously evokes affect and inferences held for the category. The brand affect and inferences thus transfer to the extension.[6]

When an extension is categorized, i.e., easily judged to be either in the category or not, judgment rationalization follows evaluation. Bridges (1989) explained the judgment rationalization process as one of producing rationalizing statements and associations supporting the relationship between the parent brand and its extension. These rationalizing statements consist of explanatory links connecting the products under the brand name and summarizing their relationship. Judgment rationalization consists of the production of statements nullifying the relationship between the brand and new product in the case of non-categorization. Such statements consist of the denial of explanatory links given non-categorization.

Should the consumer perceive the link to reflect a fitting and proper relationship between the brand and the new product, she or he will produce additional inferences and associations to bolster the link. For example, the explanatory link for the products marketed under the Arm & Hammer brand may be "use of baking soda." Thus, given an Arm & Hammer deodorant, inferences bolstering this link may be "baking soda deodorizes" and "baking soda is dry." When there is a lack of obvious fit, categorization does not occur, and evaluation proceeds in a piecemeal fashion. In such cases consumers construct an evaluation based on the degree of perceived fit, and information presented, retrieved, or inferred about the extension. With piecemeal processing,

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[6] Although Bridges (1990) was not explicit about the process of noncategorization, the affect and inferences spontaneously evoked should only transfer under categorization. She did not specify how the consumer forms an evaluation under noncategorization.

the consumer needs an explanatory link to unify the brand schema.

Insights From Social Cognition

The three models just reviewed have their roots in categorization and social cognition models. Evaluation of people is similar in many ways to the evaluation of products. Thus, a brief review of the social cognition foundation of the brand extension processing models may provide insight into and provide an alternate perspective of the extension evaluation process.

Social cognition models were developed to account for the processes people use to form affective and cognitive impressions of others given exposure to specific behaviors or attributes. Person perception/evaluation and evaluation of non-social objects such as products may involve somewhat different processes due to the nature of the task (cf. Chattopadhyay and Alba 1988; Feldman 1988; Lingle, Altom, and Medin 1984, for different views of the processing of objects and persons). However, there should be some important similarities to the processes and outcomes.

Evaluations/attitudinal judgments are simply one type of impression (Fiske and Taylor 1984, p. 335). Evaluation is an important part of the impression formation process, perhaps the main part. The definition of impression has included other components. For example, Hamilton, Katz, and Leirer (1980) defined impressions as the perceiver's organized cognitive representation of the target person. Target refers to the person perceived. They included in this definition beliefs about the target, the cognitive structure or implicit personality theory formed by such beliefs, and an evaluative or affective component. Thus, impression formation may be a greater whole of which evaluation is an important part or result.

Products as well as people are complex combinations of attributes,

traits, features, and observed behaviors or actions. Labels summarize these complex meanings and relationships both for people and for products. For example, people can be described as "hard working" or "emotional," or as an "artist" or "doctor." Similarly, products can be described as "high quality" or "high performance," or as a "Nike" or "Reebok." Whether referring to person or product, these labels cue specific associations and expectations in memory. Thus, the processes and outcomes of person perception should share some similarities with the evaluations of brand extensions.

Continuum model of person perception. In the brand extension context, the known brand name can be considered a schema label. The continuum model of person perception is thus relevant to this situation (Fiske and Neuberg 1990; Fiske and Pavelchak 1986). However, the brand extension evaluation context differs slightly both in the general phenomenon of interest and in the stimulus information encountered. The consumer is exposed to both an explicit knowledge category label, in this case the brand name, and other limited, attribute information. The continuum model assumes that no explicit label is provided. Rather, this model focuses on which knowledge category the perceiver accesses given attributes and behaviors that may trigger many different social knowledge categories. Thus, the continuum model explains a situation in which no particular knowledge category is explicitly cued.

The evaluation of extensions requires the consumer to recall and infer attribute information from memory. The phenomenon modeled by the continuum model consists of stimulus information greater in volume and depth such that the individual need retrieve no additional data to form an evaluation. Thus, the limited attribute information provided by a brand extension is also an important difference from the context in which the continuum model has been applied.

The continuum model allows for both category-based and/or piecemeal/attribute-based processes in forming impressions. According to the model, each are the end point on a processing continuum (see Figure 4). Thus some, and likely most, impression formation processes may operate which are neither wholly category-based, nor wholly piecemeal. Referring to Figure 4, the processing continuum is from confirmatory categorization to recategorization to piecemeal integration. These concepts are discussed below.

The ease with which the perceiver can interpret target attributes as fitting an available social-category determines where on the continuum impression formation processes lie (Fiske and Neuberg 1990). Category-based impression formation is the default process in this model. Perceivers attempt category-based impression formation before they use more attribute-based processes. If these category-based processes are successful, the perceiver forms an impression and does not need or use attribute-based processes. Thus, the process is described as consisting of initial categorization, and judgment of fit with the initial category resulting in confirmation, recategorization, or piecemeal processing. Some empirical support of this continuum has been reported in the person perception context (Fiske and Neuberg 1989; Fiske and Neuberg 1990).

According to Fiske and Neuberg (1990), initial categorization is extremely rapid and perceptual. Perceivers initially categorize other persons immediately given information which cues a social category. Once such a knowledge category is cued, cognitions, affect, and behavioral tendencies relevant to that category become accessible, although the perceiver will not necessarily act on them.

Following initial categorization, the perceiver will allocate attention to other information necessary to form an impression,

Encounter Target (Person)

↓

Initial Categorization (Immediate and Perceptual)

↓

Attention Allocation
(To Target Attributes to Judge Fit/Confirm Initial Categorization)

Stimulus Information is Consistent With the Current Category or is Nondiagnostic Such That Target is Easily Categorizable

Stimulus Information is Inconsistent With the Current Category Such That Target is not Easily Categorizable With Respect to the Current Category

Target is Categorizable With Respect to Other Categories or Exemplars

Target is not Easily Categorizable, Neither in Terms of the Current nor Other Categories, nor Exemplars

Confirmation Categorization

Target is Assimilated into Current Category

Recategorization

Access New Category, Subcategory, or Exemplar

Piecemeal Integration

Target is not Assimilated

↓

Impression/Evaluation

Category-based Affect, Cognitions, Behavioral Tendencies

Category-based Affect, Cognitions, Behavioral Tendencies

Piecemeal-based Affect, Cognitions, Behavioral Tendencies

Figure 4: Continuum Model of Impression Formation (Fiske and Neuberg 1990)

attempting to judge whether or not the target person fits the knowledge category initially activated. If this additional information such as behaviors or attributes is consistent or easily adaptable to the activated knowledge category, then the perceiver's affects, cognitions, and behavioral tendencies toward the target person are likely based on the initial category.

If the perceiver is unable to fit the target person's attributes to the initial category, then the perceiver will attempt to recategorize the target. Recategorization involves the attempt to find a different social category that the perceiver can interpret as sufficiently organizing the information about the target. As such, recategorization may entail accessing a subcategory, allowing the perceiver to retain many of the features of the initial category while including some exceptional features. Recategorization also may involve accessing a specific exemplar, e.g., "reminds me of Barbara Bush." Accessing exemplars is consistent with findings that have indicated that individuals more frequently rely on low-level categories and sub-categories rather than more abstract, global categories, to make judgments. Finally, recategorization may involve accessing an entirely new knowledge category or changing the present category. If the perceiver can successfully recategorize the target, then affect, cognitions, behavioral tendencies toward the target are likely to be those relevant to the new category.

Fiske and Neuberg (1990) described the process of recategorization as neither purely category-based nor entirely lacking in initial category influence. Recategorization is attribute-oriented to the extent that the new category is determined largely by particular attributes of the target person.

According to this model, if the perceiver is unable to either

confirm the initial categorization or to recategorize the target, then she or he must form an impression by integrating the available information in some piecemeal, attribute-by-attribute fashion. Thus, individuals use piecemeal impression formation processes only when "all else fails," i.e., when category-based processes fail. At this stage, the category label at most counts as just another attribute, such that the perceiver's responses contain few if any category-based generalizations. Fiske and Neuberg (1990) did not explicitly state how individuals form piecemeal-based impressions, other than positing some sort of anchor-and-adjustment process.

Summarizing the continuum model, perceivers categorize targets on a perceptual level upon exposure to behavioral or attribute information. The particular social knowledge category accessed depends upon the dominance of cues. Several factors determine cue dominance, including: temporal primacy in terms of the cue first perceived, physical manifestation in terms of the visual cues present, contextual novelty in terms of the uniqueness of the cue, relative accessibility of the cued knowledge categories in memory, and/or relationship of the cued knowledge categories to the perceiver's mood (Fiske and Neuberg 1990).

The perceiver confirms or adjusts this initial categorization based upon the target information attended to. Should the perceiver judge the information about the target as fitting expectations associated with the category, her or his impressions and attitudes toward the target person are based upon those associated with the category. Thus, the perceiver stereotypes the target person and her or his attitudes/affect toward the person are based on the stereotype. Should the perceiver judge the information as not fitting the category initially evoked, then she or he will recategorize the target based on the exceptions or inconsistencies with the initial category, into a sub-

category, an exemplar, or a new category. Given successful recategorization, the perceiver's impressions and attitudes are based on the new category membership and upon the particular attributes of the target on which the recategorization was based. If the perceiver cannot confirm the initial category and cannot recategorize the target, then the perceiver forms an impression in a piecemeal fashion based on the attribute information presented.

Piecemeal processes. Although the piecemeal integration processes are not well defined in the continuum model, Fiske in her previous work (1982), reviewed two types of piecemeal models found in the person perception literature: a retrieval-based model and an on-line model. Under the former, affect towards a target person will depend upon memory for attribute and behavior associations cued when attempting to evaluate the target person. The perceiver abstracts and combines the evaluative component of each of the attributes recalled such that the evaluation reflects all the pieces retrieved. Such a model is consistent with multiattribute models of attitudes and information integration (cf. Anderson 1974; Fishbein and Ajzen 1975).

The on-line model presupposes that evaluation is a primary component of perception. The perceiver assesses each piece of information as she or he perceives it, i.e., assessment is made on-line. The perceiver adds each of these evaluations into a cumulative summary which she or he retrieves on demand. Thus, individuals accumulate affective reactions gradually, and modify or change these evaluations with each piece of new information perceived. This model differs from the retrieval-based model as recall of specific data is irrelevant. Rather the perceiver computes the affective judgment using the affective summary retrieved adjusted for the affect generated at perception of the stimulus. This is analogous to the anchor and adjustment heuristic or

process (Einhorn and Hogarth 1985; Tversky and Kahneman 1974).

Fiske (1982) suggested that both models are flawed as a literal representation of the processes involved, contending that the mental algebra necessary would strain processing capacity. However, while each of these models may not accurately model the processes involved, they may sufficiently predict the outcomes of piecemeal integration in the brand extension context. It is reasonable that consumers may base their evaluations upon associations cued and retrieved from memory, and/or retrieved affect associated with the brand name moderated by an evaluation of the new product.

Summary of Processing Models Reviewed

Three similar processing models of brand extension evaluation were proposed and an additional social cognition model reviewed. The Hartman, Price, and Duncan (1990) model concentrated on initial processing through the classification of the extension as a member or example of the brand knowledge category. The Boush and Loken (1991) model focused on the two stages of evaluation, category-based or piecemeal. This model also highlighted the general processes involved, including the use of knowledge categories rather than attributes in forming an evaluation. Bridges (1989) concentrated on the assessment of fit and its role in the process. The Fiske and Neuberg (1990) model focused mainly on the potential category-based processes involved, integrating these with piecemeal conceptions.

The three extension evaluation models share three important features. First, consumers' prior knowledge about a brand was treated as an existing structure in memory. Second, consumers activate this prior knowledge to provide a frame of reference against which they implicitly compare the new product. The use of brand knowledge as a frame of reference is consistent with consumers' general use of prior

knowledge and memory structures to make sense of new or unexpected stimuli (Bettman and Sujan 1987). Third, the degree to which the new product fits with prior knowledge of the brand, determines in part whether consumers make the evaluation in a category-based or piecemeal fashion.[7] Extreme perceived fit results in category-based processing and evaluation. The evaluation of the brand extension is equivalent to the overall evaluation or affect stored with the parent brand. This is compatible with the empirical studies supporting affect transfer and the moderating effects of perceived fit as reviewed above. Moderate fit results in piecemeal processing and evaluation.

None of the three extension evaluation models completely explained the process which results when the new product is less than highly congruent with brand knowledge. The Hartman, Price, and Duncan (1990) model did not explicate the nature of piecemeal evaluation processes. Boush and Loken (1991) suggested that the consumer is likely to judge whether she or he can use the attributes associated with the brand to form an evaluation. However, they did not submit how consumers can use these attributes to form such an evaluation. Bridges (1990) proposed that piecemeal processing consists of an attempt to unify the brand schema, i.e., categorize the extension as an example of the brand by finding an explanatory link based on the information presented, retrieved, or inferred. However, it is not clear whether successful categorization results in affect transferral, or that the process of attempting to find an explanatory link itself leads to the formation of an evaluation. The nature of piecemeal processing needs to be explored to understand fully how far the manager can rely on the brand name to influence extension evaluations.

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[7] Although each model uses a different term for fit, e.g., match, typicality, consistency, or similarity, they all are roughly the same concept and have the same meaning.

Although the continuum model differs in some respects from the three extension models, these aspects of the model can be viewed as important alternatives and additions to the extension evaluation process. The continuum model provided some explanation of why consumers may evoke brand schemata as opposed to alternative knowledge structures. One of the factors influencing which knowledge category consumers access and use as a reference is temporal order of the labels. The brand extension stimulus most often consists of "Brand X product." Thus, both the way in which we use language and the order of perception of the stimulus would seem to indicate that the brand schema is the knowledge structure accessed.

Additionally, the model provides an alternate explanation of the effects of moderate consistency between the new product and prior brand knowledge. The Fiske model proposed that recategorization is most likely when the target information is moderately consistent with the category activated. The extension evaluation models suggest that moderate consistency results in piecemeal processes.

These models as a whole represent a good point of departure towards answering the research questions posited. However, a model is needed which details the processes involved when the new product is less than congruent with brand knowledge, and from which the relative effects of the brand, new product, and inferred attributes can be derived. A model of brand extension evaluation is developed below which integrates the models reviewed, augmenting the concepts to gain insight into the research problem at hand.

Proposed Model of Evaluation Process for Brand Name Extension

The proposed model of brand extension evaluation reflects a cognitive based, information processing perspective. This model will build upon those reviewed above, offering refinements and expanding upon

the processes that remain unexplained.

The phenomenon explained is consumers' evaluation process for brand name extensions. Consistent with present models, the proposed process consists of an attempt by the consumer to fit new product information with brand expectations derived from her or his prior knowledge of the brand. Top-down or structure driven evaluations should predominate because of the tendency to preserve economy of cognitive effort (Fiske 1982). The purported purpose of such cognitive structures is to give meaning to the environment and to enable adaptation to new situations encountered (Fiske and Taylor 1984).

This model assumes that consumer motivation to evaluate the brand extension exists, i.e., that an explicit goal of brand extension evaluation exists.[8] Given such an explicit goal and exposure to the brand extension, the consumer allocates attention in the form of processing capacity. When no motivation exists for the consumer to evaluate the brand extension at exposure, processes different from those delineated below may result.[9] Additionally, more complex stimulus information such as multiple attributes of the extension or comparative statements about the extension and competitor's products may influence both how the extension is processed and the evaluation itself (cf. Aaker and Keller 1990; Walker, Swasy, and Rethans 1986). Limiting the model to the simple case of explicit motivation to evaluate is an appropriate starting point from which more complex processing behavior can be later

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[8] Interest in or involvement with the brand name or the new product category may lead to a brand extension evaluation goal. However, interest or involvement does not necessarily result in such an explicit goal. Including interest or involvement in the model may lead to more complex processes. For example, brand schema activation could also activate an explicit evaluation goal which was not present prior to exposure.

[9] The process proposed may differ slightly if the consumer's motivation to process the information or to form an evaluation is not high, i.e., no explicit goal exists. For example, Lee (1990) proposed that when a consumer judges a product as inconsistent with the category evoked, she or he will more likely still use the current category as a reference point even if motivation is low. Recategorization or piecemeal evaluation processes that require additional cognitive effort and time are more likely used if motivation is high.

derived.

Evaluation is a type of judgment of the product. More simply, extension evaluation is the consumer's attitude towards the brand extension. Attitude is the consumer's affect-laden reaction--positive or negative, and with some degree of intensity--to the stimulus (Fiske and Taylor 1984; Peter and Olson 1987). Affect is the traces of subjective feelings or emotional responses to stimuli (Cohen 1990). Feelings that have a less specific target are moods (Fiske and Taylor 1984). Consumers may base their evaluative judgments on cognitions or beliefs, and/or affective responses; each with a positive or negative valence and varying in degrees of intensity.[10] In fact, evaluations of extensions are not likely to be wholly affectively or cognitively derived, but rather some combination of both.

The general processing stages correspond to the stages of processing marketing stimulus information suggested by McGuire (1976) and others (cf. Engel, Blackwell, and Miniard 1986; Peter and Olson 1987). The process consists of exposure, schema activation, schema confirmation, and extension evaluation (see Figure 5). In the exposure stage, the consumer is exposed to and directs attention to the brand extension. The brand name acts as a cue, guiding perception so that the consumer activates a brand schema from memory in the second, schema activation stage. The consumer then attempts to comprehend the branded new product in the schema confirmation stage. In this stage the consumer compares the new product information and cued memory associations to this information with brand expectations originating in the brand schema. This process results in the evaluation stage

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[10] This view of evaluative judgments as attitudes derived from cognitions or affect may imply that affect is simply another "piece of information." However affect is purported to include an arousal or motivational component which goes beyond mere information (Cohen 1990). The definition offered here does not preclude such a component, but rather arousal is not thought to be particularly important in the use of affect described in this model.

•EXPOSURE (ATTENTION)

↓

•SCHEMA ACTIVATION (PERCEPTION)

↓

•SCHEMA CONFIRMATION (COMPREHENSION)

Perceived Highly Congruent	Perceived Moderately Congruent
Brand Schema Confirmed	Development of Understanding
	Cognitive Effort and Inferential Processing
	Brand Schema (Dis)confirmed

↓

•EXTENSION EVALUATION (EVALUATION)

Assimilation and + Affect Transfer From Brand Schema	Piecemeal Integration

Figure 5: Evaluation Process for Brand Name Extension

consisting of assimilation or piecemeal processing effects. Each of these stages and corresponding empirical evidence will be discussed in detail below. Additionally, general research propositions will be derived from each stage of the model.

Exposure

The exposure stage simply consists of the consumer being exposed to and allocating attention towards the stimulus. The stimulus information in this case consists of a brand name which is recognizable and known to the consumer, and linked with a new product. The brand name is known to the extent that the brand has some meaning to the consumer in the form of associations in memory. The degree to which the brand name is known depends on brand familiarity. Brand familiarity is the number and quality of the experiences that the consumer has previously had with the brand and its products (Alba and Hutchinson 1987). With brand familiarity, comes richer and more complex cognitive structures--or expertise, thus enabling distinct if not increased processing performance (Alba and Hutchinson 1987).[11] Thus, familiarity is an antecedent of expertise.

This model further assumes that the consumer has some degree of affect associated with the brand.[12] Consumers may derive their brand affect from past experiences with the brand, or base it on marketing stimuli such as advertisements. Thus, the model presupposes the

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[11] On the surface, this definition of expertise appears to differ from that proposed by Alba and Hutchinson (1987). They defined expertise as the ability to perform product-related tasks successfully. However, by ability they simply refer to the cognitive structures and processes which allow such performance. Defining expertise in terms of richer and more complex structures is not without other precedence (cf. Sujan 1985). In general terms, familiarity leads to more complex structures or expertise, which may or may not allow the consumer to perform product-related tasks successfully. The latter performance is simply the use of expertise, rather than expertise itself.

[12] The rest of this discussion assumes positive brand affect. In normal circumstances, it is reasonable to assume that targeted consumers view the extended brand positively, otherwise the firm would not use that particular brand name for the extension. However, it may be possible that the targeted market views a less well developed brand name moderately negatively. Firms may use such brands to introduce new products in order to better develop the positive aspects of the brand name, e.g., brand-concept elaboration per Park, Jaworski, and MacInnis (1986). The model presented may also operate under such conditions, such that the affective responses proposed are simply reversed.

existence of brand meaning and affect in the consumer's mind, i.e., brand equity.

The extension consists of a product that is "new" to the brand. New to the brand means that the consumer has not previously been exposed to the brand linked with the extension product.[13] When the product is truly new and not just new to the brand, the brand and brand meanings may have a greater effect on consumer evaluations. In such a situation the brand name is the consumer's only meaningful cue. Therefore, a shortcut process should occur and the consumer simply bases her or his extension evaluation on brand affect. Aaker and Keller (1990) in their category extension study used extensions into products that are new to the firm/brand, but not new to the marketplace. Thus, the consumer had some knowledge of the product as cued by the new product information. The same was true for the studies completed by Boush and Loken (1991), Thompson (1988), UMCBS (1987), and MacInnis and Nakamoto (1990). However, the latter used categories on which their student subjects may have varied in familiarity and expertise--architectural drafting pencils, grandfather clocks, eyeglass frames, and espresso machines.

Schema Activation

Given that the consumer has been exposed to and has attended to the extension stimulus information, the consumer will engage in a process whereby the extension cues and activates the brand schema. Consistent with Fiske and Neuberg (1990), this initial activation is at a perceptual level, rather than at deeper semantic levels. This process consists of the consumer perceiving the extension stimulus as an example of the brand. The brand name acts as a cue or label such the consumer

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[13] New to the brand does not necessarily mean that the consumer would not expect that the brand would have such an extension. In fact, it has been found that consumers may report that they are aware of expected extensions that they actually have not been exposed to--so-called "spurious awareness" of "phantom products" (Farquhar, Herr, and Fazio 1990).

activates a brand schema. The brand schema is a structure in long-term consumer memory consisting of interrelated meanings associated with the brand name. These meanings include cognitive beliefs at various levels of abstraction and affect--both degree and valence. These associations form expectations of what attributes the brand may have, the value of these attributes, the product categories the consumer may find the brand's products in, and the affect or valenced response associated with the brand.

Alternate knowledge structures could be cued and activated. However, the consumer is more likely to activate the knowledge structure based on brand expectations and cued by the brand name itself. The consumer is also more likely to use the brand schema as the source of comparison than alternative structures such as the new product knowledge category. Brand schema activation and use as a frame are more likely because of the temporal cue order, and diagnosticity of the brand knowledge once accessed (Feldman and Lynch 1988; Fiske and Neuberg 1990). There is no empirical evidence that the consumer activates the brand schema. However, in a social context there has been evidence indicating that when a schema label is presented as a single cue of an individual and a judgment is requested, that the perceiver uses the label to ascribe schema-based traits and attributes to the individual (Fiske and Neuberg 1990). This assumption remains to be tested in the present context.

The theorized schema activation process is summarized in the following proposition:

P1: Given exposure to a brand extension to be evaluated, consumers will activate the schema associated with the brand name, as opposed to alternative knowledge structures.

Schema Confirmation

Once the consumer has activated the brand schema and perceived the extension as "Brand X product," the consumer attempts to confirm that the extension is an example of the brand. The consumer confirms the brand schema if she or he accepts the brand extension as a good exemplar of the parent brand. Similarly, the consumer disconfirms the brand schema if she or he does not accept the brand extension as a good exemplar of the parent brand.

According to McGuire (1976), the consumer must go beyond mere perception of the stimulus information to evaluate it, integrating the information into the current meaning system or knowledge structures. Thus, schema confirmation processes involve comprehension: validation of the initial perception of the brand extension and development of a further understanding of the new product as an example of the brand, each of which enables an evaluation. Validation of the initial perception entails judging whether the new product is congruent with expectations for such brand exemplars.[14] Thus, perceived congruity is the judgment of whether the new product is compatible with the brand schema, i.e., the expectations the consumer has for products bearing the brand name. In this way the brand schema serves as a standard of comparison against the new product information. If the consumer comprehends the brand extension as a good example of the parent brand, then she or he confirms the brand schema. Conversely, if the consumer comprehends the brand extension as a poor example of the parent brand, then she or he disconfirms the brand schema.

No evidence exists which indicates that the schema confirmation process is necessary for evaluation. However, there is some evidence that consumers engage in this process. Aaker and Keller (1990) found

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[14] Exemplars are simply known examples of the schema (Sujan 1985).

that consumers consider fit when considering an extension, as evidenced by their judgmental cognitive responses. Yet, there is no evidence that congruity judgments occur prior to evaluation. In fact Aaker and Keller (1990) raised the question of whether perceived fit contributes to evaluation, or whether evaluation contributes to perceived fit.

The following theoretical propositions summarize the posited confirmation process and its relationship to the evaluation of the brand extension:

P2: The activated brand schema and the expectations which constitute it will form a frame of reference against which the new product is compared.

P3: The process of confirmation or disconfirmation of the schema is a necessary condition for evaluation of the extension.

Perceived congruity is similar to fit, match, typicality, consistency, and congruity as proposed by others (cf. Aaker and Keller 1990; Bridges 1989; Boush and Loken 1991; MacInnis and Nakamoto 1990; Mandler 1982; UMCBS 1987). However, perceived congruity is a more broadly defined concept. The major difference between these other concepts and perceived congruity is that the former have been defined as how well the single product category associated with the brand fits with the new product category. This is a more limited view than taken here. Also, each of these other concepts have been defined relative to the process by which consumers make these judgments--attribute matching, holistic matching, rule-based, etc. However, perceived congruity is not limited to the manner in which consumers make this judgment.

Perceived congruity is the compatibility of meaning between the new product and activated brand schema. Consumers may base their congruity judgments on prototypical features, overall or holistic similarity, or on some rule or conceptual base (Cohen and Basu 1987). The idea of overall attribute similarity as a basis of forming congruity

judgments is inconsistent with the nature of cognition and the models assumed herein. Consumers purportedly use higher level cognitive structures to reduce cognitive effort. Yet, accessing and comparing across all or many attributes involves a high degree of effort. A more consistent view holds that such consumers base congruity judgments on some type of holistic comparison, comparison of key prototypical attributes, or governing rule. For example, Weyer and Srull (1986) stated that when perceivers require information relevant to a judgment, the header is searched. The header contains the label and a set of features that are strongly associated with it. The perceiver searches the header for features sufficient to make the judgment before considering the content of the knowledge structure itself. An alternate perspective posited by Bridges (1989) involved explanatory rules, defined as some type of governing bond or tie holding the schema together.

The consumer will easily confirm the brand schema if the new product obviously meets evoked expectations and the consumer can understand it without changing the brand schema. The consumer will easily disconfirm the brand schema if the new product does not meet evoked expectations. Thus, the congruity judgment process will determine if the consumer confirms the brand schema.

Theoretical propositions based on these relationships include:

P4: If the new product is perceived to be congruent with the brand schema, then the brand schema will be easily and quickly confirmed.

P5: If the new product is perceived to be extremely incongruent with the brand schema, then the brand schema will be easily and quickly disconfirmed.

If the evidence retrieved is mixed or inconclusive so that a congruity judgment is difficult, then the consumer will allot both greater cognitive effort and capacity to gain a further understanding of

the extension as an exemplar of the brand. There is no direct evidence that moderate congruity leads to an increase in cognitive effort and capacity. However, in the person perception literature, mixed evidence of category membership has resulted in increased attention to attributes (Fiske and Neuberg 1990). This differs somewhat from the present situation in which there is no external stimulus attribute information to attend to. Detailed attribute information used to assess congruity is held in memory. Therefore, in the brand extension evaluation context increased attention to attribute information translates to increased cognitive activity to access more information and cognitive capacity to process such information.[15]

Brand extensions represent concept conjunctions, i.e., the pairing of two concepts. Hampton (1987) suggested that when concepts are combined, several attribute incompatibilities may result which require resolution so the conjunction can remain logical. He also stated that interpreting noun-noun conjunctions may require considerable cognitive effort to relate the two concepts in a consistent way. This discussion is analogous to the brand extension context where more effort is required when the noun-noun or brand-new product pair are less than extremely congruent.

The following proposition summarizes this link between mixed evidence and increased cognitive effort and capacity:

P6: Moderate perceived congruity between the new product and the brand will result in increased cognitive effort and capacity devoted to understanding the extension as an exemplar of the brand.

The additional effort towards understanding the product consists of accessing deeper brand and new product associations in memory.

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[15] The increased cognitive effort and the elaboration that comes with it may actually result in better long-term memory for the brand extension and its attributes. Thus, an extension that is perceived moderately congruent with the brand, but is ultimately evaluated favorably, may be the most successful strategic use of the brand name on a new product.

Relatively effortful cognitions may be required at this stage, e.g., inferences based upon the product being an example of the brand. These inferences represent effortful beliefs consisting of conjunctions between brand and new product associations. Consumers generate these inferences to understand the brand and new product relationship. Hampton (1988) argued that attributes may be inferred and not inherited in order to form a coherent and sensible understanding of the conjunction. Thus, consumers may infer extension attributes to enable comprehension. Such inferences serve an elaborative function, enabling comprehension through the completion of the partial configuration of the extension (Alba and Hutchinson 1987; MacInnis and Nakamoto 1990; Olson 1978). Greater effort will not necessarily result in schema confirmation. The associations retrieved and the inferences formed may serve to indicate that the extension is a poor example of the brand. Regardless of the confirmation outcome, mixed evidence requires more time and effort to understand the brand extension as an exemplar of the parent brand. Thus:

P7: If the new product is perceived to be moderately congruent with the brand schema, then the brand schema will not be easily nor quickly (dis)confirmed.

Inference Processes

Given the paucity of cues in this context, one would expect consumers to rely on an inferential process to resolve the perceived incongruities between the brand and the new product. Inference refers to the meaning generated by the consumer that goes beyond the information contained in the stimulus (Dick, Chakravarti, and Biehal 1988; Gardial and Biehal 1987). These constructed meanings may consist of specific beliefs about attributes or more abstract beliefs such as a

desired benefit.[16] Inferences also may consist of a specific value or level assigned to the belief, e.g., "high" or "low" quality.

Inferences in this context are deductive. They represent conclusions about specific properties of the extension based on general knowledge of the brand and new product (Hastie 1983). These inferential beliefs represent points of agreement or similarity between the extension and the brand prototype. In essence then, inferences fill in the configuration or meaning of the extension, such that it can make sense (or not make sense) as an example of the brand. Such inferences are required when the new product is moderately congruent with expectations for the brand. In fact, MacInnis and Nakamoto (1990) in analyzing their empirical findings proposed that when perceived congruity is high consumers do not need to search for brand-specific attributes to confirm the schema, i.e., they do not need to make inferences.

The following proposition summarizes the relationship between mixed evidence and inferences which consumers form to understand the extension as an exemplar of the brand:

P8: Moderate perceived congruity between the new product and the brand will result in an increase in the amount of inferential processing and inferences formed, compared to low or high perceived congruity.

Review of the literature. There has been a large amount of research concerning consumers' inferences and inferential processes (e.g., see Chattopadhyay and Alba 1988; Dick, Chakravarti, and Biehal 1988; Ford and Smith 1987; Gardial and Biehal 1987; Gardial and Schumann 1990; Huber and McCann 1982; Johnson and Levin 1985; Lim, Olshavsky, and Kim 1988; Meyer 1981; Olson 1978; Simmons and Leonard 1990; Sujan and

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[16] Gardial and Biehal (1987) call more concrete, specific beliefs "low level" inferences and more abstract beliefs "high level" inferences.

Dekleva 1987). However, this empirical work and these conceptualizations are not easily applied to the present context. This body of work has primarily concentrated on inferences made in judgment or choice tasks where stimulus information was incomplete. This incomplete information has consisted of partially described alternatives which are noncomparable in the number of attribute values provided. Thus, the inferences consisted mainly of attribute values, rather than inferred beliefs themselves.[17] However, the latter may be important in the present context where stimulus information is limited. Generally, inferred values of attributes have been found to influence product evaluations (Huber and McCann 1982; Johnson and Levin 1985).

One of the main focuses of this body of research has been to compare same-brand vs. other-brand driven inferences. The former refers to partial brand information provided to consumers for which they are making inferences. The latter refers to information provided or known about the general product category which is the basis for consumers' inferences. Consumers may make same-brand inferences on the basis of evaluative consistency or correlation (Gardial and Biehal 1987; Simmons and Leonard 1990). Evaluatively consistent inferences are attributes which consumers assume to be similar in evaluative implications to known attributes or an overall evaluation of the brand. Consumers base probabilistic inferences on the expected correlation between known and inferred brand attributes. Consumers make other-brand inferences on the basis of the average-value of the attribute in similar products (Simmons and Leonard 1990). In general, given both same-brand and other-brand information, consumers have been found to use same-brand processes to form inferences (Ford and Smith 1987; Simmons and Leonard 1990).

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[17] Attribute values are the degree and valence of the attributes or beliefs. For example, quality of the product may be very high or moderately low. Attributes are the specific characteristics of the product or brand such as price, quality, color, shape, flavor, etc.

Comparison of same-brand vs. other-brand inferential processes requires tasks that provide both brand and product category information. This comparison is similar to brand extension evaluation. However, the experimental procedures used have provided much more information in the stimuli than assumed present in the model at hand. In the extension evaluation context, the stimulus does not contain several pieces of information. The brand extension information includes neither the brand's prototypical attributes, nor the value of these attributes. Additionally, the stimulus environment excludes the average values or prototypical attributes of the new product category. Thus, consumers must retrieve all of this information from memory.

Those conceptualizations related to schema-based inferences have implicitly or explicitly assumed that consumers form the inferences after they have accepted/confirmed the product as a proper exemplar of the schema(cf. Alba and Hutchinson 1987; Olson 1978). Such inferences are termed distributional knowledge inferences. Other-brand processes are similar in that the product category also forms a knowledge structure from which consumers may use typical or average values to fill in informational gaps (Gardial and Biehal 1987). This differs substantially from the present context in which consumers form inferences to judge if and to what degree they can view the extension as a good or poor exemplar of the schema.[18]

In summary, findings from the consumer inference literature are relevant to an understanding of the schema confirmation process when the new product is moderately congruent. Consumers ofttimes infer the missing values of attributes and use these when making product

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[18] This is not to say that consumers do not make brand extension inferences after it has been (not) accepted and (not) assimilated into the brand schema. In fact, Bridges (1989) suggested that consumers may generate inferences as support or nullifying arguments to bolster the linkage or disassociation between the brand extension and the brand schema. However, consumers make such inferences after the schema (dis)confirmation and evaluation process, and these inferences will not play a part in evaluation.

evaluations. Both brand information (same-brand) and product category information (other-brand) may form the bases of these inferences. However, these findings are limited in generalizability to brand extensions because the inferences studied have consisted of attribute values rather than the existence of an attribute. Additionally, the stimulus information that forms the bases of these inferences in the extension situation is more limited, and thus must be retrieved from memory.

Proposed inference processes. The important part of the confirmation process that remains to be conceptualized is the inference processes involved when the extension does not easily fit expectations from the brand schema. The confirmation process under such conditions consists of drawing inferences about the extension as an exemplar of the parent brand, i.e., what meaning(s) does the brand bring to the product. Consumers make such inferences simply in an attempt to make sense of the new product, given the prototypical meanings associated with the brand. The stimulus information acts as memory cues selectively influencing the inference inputs searched and retrieved (Dick, Chakravarti, and Biehal 1988). Thus, inferential beliefs about the brand extension can be viewed as directed at the commonality between the brand and the new product, i.e., the conjunction of the meanings associated with each.

The conjunction of the brand and new product concepts will not possess all the attributes of either constituent (Hampton 1987). Additionally, Hampton (1987) found that not all conjunction attributes are simply inherited from or based on the constituents. Thus, these brand extension inferences go beyond the simple attributes associated with the brand or the new product category. Additionally, Hampton (1987) reported that more attributes are inherited from the qualifier position in a conjunctive phrase. The brand name is in the qualifier

position in a brand extension. Therefore, the brand name should be the dominant concept and serve as the base frame of reference from which consumers derive inferences.

Each brand/new product combination could produce different inferences. For example, the brand "Sony" usually linked to electronics products, may produce different inferences given various extensions. In extending Sony to refrigerators, consumers may infer high quality, space-age design, high-tech, digital readout, solenoid controls, and black color. If extending to computers, consumers may infer portability, high quality, black color, small size, and light weight. Finally, Sony electric guitars might produce inferences such as high sound quality, quality of workmanship, black color, small size, etc. Thus, what consumers infer about the brand extension depends upon both the brand and new product information. It is the conjunction of these associations that form the basis for inferential beliefs, i.e., not simply <u>all</u> the prototypical characteristics of the Sony brand schema, but those that are relevant to the product, either positively or negatively. These inferences are "conjunctive."

Summarizing this relationship:

P9: Brand extension inferences made prior to evaluation will consist of the conjunction between the brand and new product and will not be primarily brand nor new product category based.

The process so described appears similar to proceeding through the list of most accessible, and likely prototypical brand characteristics and features, and determining whether each applies to the extension product. Thus, the accessibility of the associations cued by the brand and new product should influence the inference process (Dick, Chakravarti, and Biehal 1988). In fact consumers may make inferences more easily if the brand schema is more abstract and/or more

extrinsically derived such that the prototypical features apply across a larger range of products/attributes. A brand schema is more abstract if the prototypical associations cued by the brand name are not beliefs concerning specific attributes or features such as ingredients, physical features, or components, but rather beliefs concerning more general traits such as quality, value, benefits, usage situations, etc.[19] Similarly, a brand schema is more extrinsically derived if the core or prototypical beliefs associated with the brand are composed of non-physical attributes that are external to the product or brand (Bridges 1989).

It may be easier for a consumer to find the conjunction between the brand and new product the more the brand schema and/or the new product associations are abstract in nature, ceteris paribus. Conversely, it may be more difficult if the prototypical associations in memory cued by each are more specific or concrete. Sujan and Dekleva (1987) suggested that in situations where there is a mixture of multiple cues, i.e., varying levels of specificity, that the inferences generated would depend upon the most specific cue present. This suggests that inferences generated in the schema confirmation process are not simply brand-based, but also must account for the associations cued by the new product. The following proposition recounts the relationship between abstraction of associations and ease of brand extension inference formation:

P10: Abstraction of the associations easily accessible or prototypical of the brand and of the new product will moderate how easily inferences are formed.

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[19] A brand schema is more likely abstract if the products under the brand name to which the consumer has been exposed through experience, advertising, or word-of-mouth are numerous and varied. This is similar to Boush and Loken's (1990) concept of brand breadth, defined as the variability among product types represented by the brand name. Thus, brands which represent a variety of products and product categories are "broad," while those which represent single products in a single product category are "narrow."

In summary, the importance of inferences and inferential processes to this conceptualization of extension phenomena are many and varied. Since the stimulus information is limited, moderate congruity requires inference making to fill-in the configuration of the extension as an exemplar. Thus, inference processes are posited to be the key to evaluation given moderate perceived congruity. Brand-based inferences have been found to predominate in evaluation formation. However, in the brand extension evaluation context the convergence of prior knowledge of the brand and of the new product are posited to form the basis of the inferences made. The qualitative nature of the brand and extension knowledge retrieved from memory may determine both the ease with which consumers make inferences and the nature of such inferences.

Extension Evaluation

The schema confirmation process should result in an evaluation of the brand extension. The ease with which the brand schema is confirmed and extension accepted as an exemplar, will moderate the brand extension evaluation. If the consumer easily validates the extension's relationship with the brand, then evaluation consists of assimilation effects.

Assimilation Effects

A definition of assimilation and its effects can be derived from two psychological perspectives. Assimilation in the cognitive development literature has come to mean comprehending objects with respect to an available and favored way of thinking about things, i.e., in terms of a schema (Flavell 1985, pg. 5). Thus, in the brand extension context, the consumer interprets the extension product as a good example of the brand. Assimilation is thus adapting the environmental stimuli or extension to internal memory structures or

brand schemata (Flavell 1985, pg. 5). Assimilation should require little adaptation or change of the brand schema to accommodate the new information.

Assimilation has been defined in social judgment theory as a shift in judgment toward an anchor or reference point (Petty and Cacioppo 1981, pg. 99). In the brand extension evaluation context the brand schema and the affect associated with it serves as a frame against which the consumer compares the new product. Given schema confirmation, the consumer shifts the evaluation of the extension in the direction of and based on the affect associated with the brand. Thus, the process of assimilation is one of adapting the extension to expectations cued by the brand, resulting in an assimilation effect such that the consumer bases her or his evaluation of the extension on previous affect associated with the brand.[20] The implied causal order is comprehension leading to evaluation.

Extreme perceived congruity should result in schema confirmation, assimilation of the extension into the brand schema, and evaluation based on the affect associated with the brand. Again, brand affect has been found to influence the evaluation of the extension. However, this evidence has been limited to the extent that the new product is perceived by the consumer as typical of the brand (Boush and Loken 1991), or to the extent that the consumer views the new product category and product category associated with the brand as similar (Aaker and Keller 1990; Singh 1988; Thompson 1988; UMCBS 1987). The latter context differs slightly from the present model, and the Boush and Loken findings are limited to perceived congruity as typicality.

Similarly, affect associated with a stereotype or person-schema

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[20] The process of assimilation could result in the consumer perceiving the brand extension as more similar to the other products marketed under the parent brand name than it really is (Petty and Cacioppo 1981, pg. 99).

has been found to influence evaluations of an individual to the extent that she or he is perceived to fit the stereotype (Fiske and Pavelchak 1986; Fiske and Neuberg 1990). Finally, MacInnis and Nakamoto (1990) found no support for the interaction effect on evaluation between perceived similarity of the brand and extension product categories and brand affect. Thus, only indirect, mixed evidence exists which supports the assimilation process and effects for brand extensions.

The effect of simple and successful brand schema confirmation on the evaluation of the brand extension expressed as a proposition follows:

P11: If the brand schema is easily confirmed, assimilation effects will result.

Piecemeal Integration

If the brand schema is not easily (dis)confirmed, then the consumer requires additional cognitive effort and capacity to gain an adequate understanding of the product. Evaluation given such conditions consists of piecemeal integration of the new product information and the brand extension inferences formed. This may ultimately result in brand schema confirmation, such that the consumer accepts the extension product as an example of brand. This is simply a matter of accommodating the brand schema somewhat to fit the new product and information inferred.[21] Accommodation refers to a relatively effortful process resulting in a necessary modification to the brand schema so that the consumer may understand and accept the brand extension as an exemplar. Similarly, piecemeal integration also may result in brand schema disconfirmation, such that the consumer does not accept the extension product as a good example of the brand.

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[21] Assimilation/accommodation are not nominal and mutually exclusive processes, but rather may vary in the amount of each required in any given processing situation (Flavell 1985, pg. 5-6).

Integration refers to the use of some combination of the information to form an evaluation. For example, Fishbein and Ajzen (1975) have suggested a multiattribute additive model of attitude or evaluation formation, while Anderson (1974) has suggested a similar approach termed information integration. Tversky and Kahneman (1974) suggested an anchor and adjustment process whereby the evaluation consists of the adjustment of an initial value based on subsequent beliefs.

Note that these models are not necessarily meant to represent what actually happens in the integration process (Fiske 1982). Rather, such models are important because they represent evaluation as a combination of information or attributes rather than simple assimilation or contrast effects based on overall affect evoked.[22] Regardless of the actual computation process, what pieces of information consumers use to compute an evaluation will depend upon the congruity of the new product with the brand schema. In fact if the consumer judges the new product to be moderately congruent with the brand schema, then affect and cognitions associated with the brand schema may still enter the computation of an evaluation (cf. Fiske and Neuberg 1990).

Boush and Loken (1991) reported the only direct evidence of the piecemeal process proposed. They found that those subjects who perceived the extension to be moderately typical as opposed to extremely (a)typical were more likely to elicit piecemeal, attribute-related cognitive responses when evaluating the extension. Additionally, they found that generally those subjects who perceived the extension to be moderately typical took more time to make an evaluation than those who perceived the extension to be extremely (a)typical. Boush and Loken

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[22] In fact Fiske (1982) argued that piecemeal approaches are not reasonable given the assumptions which guide our knowledge of human cognition. For example, she argued that such processes would strain cognitive resources and capacity, and are relatively inefficient.

(1991) linked longer processing time with the slower, piecemeal processes in this situation. This evidence supports the idea that given moderate congruity, piecemeal evaluation processes will operate.

Moderate perceived congruity should result in the confirmation or disconfirmation of the brand schema, depending on the associations and inferences made. Regardless, piecemeal effects will result, i.e., the evaluation of the extension will consist of integration of the information retrieved and inferred. The following theoretical proposition summarizes this relationship:

P12: If the brand schema is not easily (dis)confirmed, piecemeal effects will result.

Summary of Extension Evaluation Effects

This model proposes that perceived congruity moderates the brand schema confirmation process. The confirmation process itself results in an evaluation of the brand extension. Thus, when the consumer easily confirms the brand schema, assimilation processes and effects result. When (dis)confirmation of the brand schema requires more effort, piecemeal integration processes and piecemeal effects result.

Regardless of whether the consumer ultimately confirms or disconfirms the brand extension, some conclusions can be drawn of the relative influence of the affect associated with the parent brand, new product, and the inferences drawn about the brand extension. The influence of the parent brand, new product, and inferences depends upon the perceived congruity between the brand extension and the activated brand schema. Brand affect should influence the evaluation of the brand extension more when perceived congruity is extreme than when it is moderate.

Summarizing the relationships between perceived congruity and the

effect of brand affect on extension evaluations:

P13: Perceived extreme congruity should result in the greatest use of affect associated with the brand in forming evaluations, ceteris paribus.

When perceived congruity is moderate, piecemeal integration results. Integration consists of the use of retrieved attribute information and generated inferences to form an understanding and evaluation of the brand extension. When perceived congruity is extreme, consumers base their brand extension evaluation on the affect associated with the brand schema. Further, no inferences need to be drawn, nor attribute information retrieved, to understand the extension as an exemplar of the brand prior to evaluation.

The following propositions are based on these relationships:

P14: Perceived moderate congruity between the brand and new product should result in the greatest use of attribute information and inferences in forming evaluations, ceteris paribus.

Summary of Proposed Model

Summarizing, the model of extension evaluation presented above consists of four stages. The consumer is exposed and attends to the brand extension, consisting of a brand name and new product, with an explicit evaluation goal. The extension is initially categorized as an example of the brand such that the consumer activates her or his prior knowledge and expectations of the brand. This brand schema serves as a frame of reference for subsequent processes and judgments.

The consumer attempts to confirm the appropriateness of the extension as an example of the brand. Whether the brand schema is easily (dis)confirmed or whether additional effort is necessary to understand the extension, depends on the perceived congruity between the new product and prior knowledge about the brand. To further understand

the extension as brand exemplar, consumers may form inferences. If the consumer easily confirms the brand schema, then she or he assimilates the extension into the brand schema. In this case evaluation primarily consists of the affect associated with the brand in memory. If the brand schema is not easily (dis)confirmed, then given the additional effort to understand the extension, the consumer may or may not assimilate the extension. Regardless, the consumer will evaluate the extension in a piecemeal manner based on the information retrieved and inferred. A summary of the research propositions developed from the model are listed in Figure 6.

Contribution of the Model

The proposed model specifically addresses the research issues and research questions enumerated above. This model also overcomes deficiencies present in past models of extension evaluation, while building on existing theses and empirical evidence. Specifically, this conceptualization expands on those evaluative processes operating when consumers do not perceive the new product to be extremely congruent with brand expectations. Conjunctive inferences were proposed as the main source of the piecemeal processes left unspecified by past models. Explication of the process allows the formation of hypotheses concerning the relative impact of brand equity on brand extension evaluations.

Chapter Summary

Based on the research problem and a review of the literature, research questions were developed and a model of brand extension evaluation was proposed in this chapter. The research questions posed were directed towards two points: exploring the process consumers engage in when evaluating brand extensions, and determining the relative effects of the brand on these evaluations.

Schema Activation

P1: Given exposure to a brand extension to be evaluated, consumers will activate the schema associated with the brand name, as opposed to alternative knowledge structures.

Schema Confirmation

P2: The activated brand schema and the expectations which constitute it will form a frame of reference against which the new product is compared.

P3: The process of confirmation or disconfirmation of the schema is a necessary condition for evaluation of the extension.

P4: If the new product is perceived to be congruent with the brand schema, then the brand schema will be easily and quickly confirmed.

P5: If the new product is perceived to be extremely incongruent with the brand schema, then the brand schema will be easily and quickly disconfirmed.

P6: Moderate perceived congruity between the new product and the brand will result in increased cognitive effort and capacity devoted to understanding the extension as an exemplar of the brand.

P7: If the new product is perceived to be moderately congruent with the brand schema, then the brand schema will not be easily nor quickly (dis)confirmed.

P8: Moderate perceived congruity between the new product and the brand will result in an increase in the amount of inferential processing and inferences formed, compared to low or high perceived congruity.

P9: Brand extension inferences made prior to evaluation will consist of the conjunction between the brand and new product and will not be primarily brand nor new product category based.

P10: Abstraction of the associations easily accessible or prototypical of the brand and of the new product will moderate how easily inferences are formed.

Extension Evaluation

P11: If the brand schema is easily confirmed, assimilation effects will result.

P12: If the brand schema is not easily (dis)confirmed, piecemeal effects will result.

P13: Perceived extreme congruity should result in the greatest use of affect associated with the brand in forming evaluations, ceteris paribus.

P14: Perceived moderate congruity between the brand and new product should result in the greatest use of attribute information and inferences in forming evaluations, ceteris paribus.

Figure 6: Summary of Propositions

A consumer perspective was adopted to explore these questions. Brand equity and brand extensions were defined from a consumer's point of view. Brand equity was defined as the meaning that a brand name brings to a product. Brand extension was simply defined as the known brand name linked with some new or unexpected product.

Three models of brand extension evaluation were reviewed as well as a model from social cognition. The key concepts from the models reviewed were integrated to develop a model of brand extension evaluation. This model is based on schema theory and includes several stages: exposure, schema activation, schema confirmation, and brand extension evaluation. Theoretical propositions were developed and discussed, based upon the proposed model.

CHAPTER III

HYPOTHESES AND RESEARCH STRATEGY

Chapter Overview

This dissertation explored the effects of brand equity compared to other information perceived, retrieved, or inferred by consumers, especially for extensions that consumers perceive as less than highly congruent with the brand. The specific research questions explored relate directly to these issues:

> 1. How do consumers evaluate brand extensions (category extensions)? Specifically, how do consumers process the brand and new product information in making an evaluative judgment of the extension, particularly when the new product is less than highly congruent with the consumer's brand knowledge?
>
> 2. What is the relative effect of the equity of the brand on the evaluation of the extension? What is the effect of brand equity relative to the new product information perceived, retrieved, or inferred by the consumer on the consumer's evaluation of the extension?

Given these questions, the model and theoretical propositions offered, and the empirical evidence to date, a series of research hypotheses were formed and tested. This chapter's purpose is to specify this set of hypotheses and review the general objectives of the methodology used to test them.

This chapter has four major sections. First the research hypotheses are formulated pertaining to each of the two research questions. Then the research strategy guiding the specific methods used to test the hypotheses is discussed. Based on this strategy a research plan is proposed. Finally, the last section is a chapter summary.

Hypotheses

A set of operational hypotheses are presented below, applied to different stages of the proposed model. Table 1 illustrates the relationship of these hypotheses to the research questions posed and the theoretical propositions posited.

Schema Activation and Schema Confirmation

The activation and use of the brand schema by consumers as a frame when evaluating a brand extension has been assumed but not tested. Specifically, the operational hypotheses derived from propositions P1 and P2 above are:

H1: Given exposure to a brand extension and an explicit goal to evaluate it, consumers will (a) first activate their brand schema rather than other structures in memory, (b) use the brand schema as a frame of reference in the evaluation process, rather than other structures in memory.

The test of this assumption has important managerial implications. It is possible that knowledge of the new product category may serve as a standard rather than general brand knowledge. Then the affect towards the new product category may have a greater effect on evaluations than brand equity. Therefore, the new product category may be a better focal point of communication strategies than the brand name.

Boush and Loken (1991) reported evidence supporting the idea that more piecemeal and attribute related responses should occur given moderate congruity. However, their stimuli were fictitious and therefore the number of inferences in either case was extremely limited. The hypothesized relationship originates in proposition P8 and is:

H2: A greater number of pre-evaluation inferences and product attribute cognitive responses will be made if perceived congruity is moderate than if it is extreme.

The literature has not explicated how or what type of specific

Table 1

Relationship of Hypotheses to Research Questions and Propositions

Research Question	Proposition	Hypothesis
1--Process	P1	H1(a)
1--Process	P2	H1(b)
1--Process	P8	H2
1--Process	P9	H3
2--Effects	P11, P13	H4
2--Effects	P12, P14	H5, H5(alt)

beliefs consumers generate concerning brand extensions, particularly when the new product is less than congruent with brand expectations. However, the model presupposes that it is the conjunction of brand and new product associations that form the basis of these pre-evaluation inferences. The hypothesis derived from P9 is:

H3: Inferences about the brand extension made prior to evaluation will be predominately conjunctive (brand/product-based), rather than brand-based or product-based.

Evaluation

In general, perceived congruity between the brand schema and new product will moderate the evaluation effects of brand equity, the new product information, and inferences. The evaluation of the brand extension ensues from the schema confirmation process. Extreme perceived congruity between the brand schema and the new product results in schema confirmation. The new product is assimilated into the brand schema. The consumer easily evaluates the brand extension, as she or he conveys the brand affect to the new product. The new product should influence the evaluation less when it is easily assimilated. Further, pre-evaluation inferences are not necessary to confirm the schema, and thus should have no effect.

H4: If perceived congruity is extreme, then brand affect will have a greater positive effect on the evaluation of the extension than the new product information or inferences.

Lack of support for this hypothesis may mean that although brand equity may have an effect on consumers' evaluations of the extension, other information is of equal or greater consequence. Therefore, the importance of brand extension as a new product strategy which impacts heavily on demand may be overstated.

When the consumer perceives congruity between the new product and

the brand schema to be moderate, then more effort is required to understand the extension with the brand name. This cognitive effort results in the retrieval of additional brand and new product associations in memory, and the formation of inferential beliefs about the brand extension. Ultimately, the consumer combines the retrieved and inferred information to form an evaluation. The brand name simply becomes another attribute integrated into the evaluation. Consistent with a cognitive response approach to attitude formation and change, the information gained through a deeper search into memory and elaborated upon should have greater effects on evaluation (Petty and Cacioppo 1981). Therefore, the information generated on-line and elaborated on should overshadow the effect of the brand's equity on the evaluation of the brand extension.

H5: If perceived congruity is moderate, then the new product information and the inferences made will each have a greater effect on the evaluation of the extension than brand affect.

An alternate, competing hypothesis can be offered based on empirical tests of the continuum model by Fiske and Neuberg (1989). They found that attention to and use of schema-based knowledge and affect in forming evaluations does not decrease as congruity decreases, but rather it remains at a constant level. This suggests that given moderate congruity, the effect of brand equity may not diminish relative to the other cues available.

H5(alt): If perceived congruity is moderate, then the brand affect will have a greater or equal effect on the evaluation of the extension than either the new product information or the inferences made.

These latter two hypotheses have important managerial implications relative to the research problem posed. If brand equity decreases in influence as perceived congruity decreases, then limits on how far a

brand may be extended may rest with consumer perceptions. The success of new products that are only moderately congruent with the parent brand may depend upon the specific product attributes offered and inferred. Conversely, if brand equity continues to be a dominant influence of extension evaluations regardless of level of congruity, then using the established brand name may have few limits. In this case factors such as cost efficiencies and marketing synergies may assume a greater importance in the decision to market a brand extension.

General Research Strategy

This dissertation had two objectives guiding the research strategy, each linked both to the research questions posited and the hypotheses formed: (1) to test some of the processes posited in the extension evaluation model, and (2) to test the hypothesized effects of brand equity on consumers' evaluations of extensions. Both objectives involved tests of theory. The model is simply a theoretical representation of how consumers evaluate brand extensions. The hypothesized effects were theoretically derived expectations of relationships between constructs. Thus, the general research objective guiding the research strategy was to test these theoretical relationships. The hypotheses are summarized in Figure 7.

This theory testing objective implies a ranking of validities and the methodological goal of precision and control (Calder, Phillips, and Tybout 1981): internal, statistical conclusion, construct, and external validity. As these are interrelated, the methods used were simply based on the ranking given, with the realization that no type of validity can be maximized without addressing or sacrificing another (Lynch 1982; McGrath 1982).

Because of the methodological goal of precision and control, a series of experiments were conducted to test the model and effects.

H1: Given exposure to a brand extension and an explicit goal to evaluate it, consumers will: (a) first activate their brand schema rather than other structures in memory, (b) use the brand schema as a frame of reference in the evaluation process, rather than other structures in memory.

H2: A greater number of pre-evaluation inferences and product attribute cognitive responses will be made if perceived congruity is moderate than if it is extreme.

H3: Inferences about the brand extension made prior to evaluation will be predominately conjunctive (brand/product-based), rather than brand-based or product-based.

H4: If perceived congruity is extreme, then brand affect will have a greater positive effect on the evaluation of the extension than the new product information or inferences.

H5: If perceived congruity is moderate, then the new product information and the inferences made will each have a greater effect on the evaluation of the extension than brand affect.

H5(alt): If perceived congruity is moderate, then the brand affect will have a greater or equal effect on the evaluation of the extension than either the new product information or the inferences made.

Figure 7: Summary of Hypotheses

Experiments, utilizing manipulated stimuli, allow for greater control of extraneous factors, through manipulative and statistical controls, and random assignment to treatment conditions (Fromkin and Streufert 1976). Experiments also provide the potential to test the causal relationships hypothesized.

The setting selected for these experiments was the behavioral laboratory and classrooms at a major university in the southeast. A lab rather than field setting was selected to eliminate and/or control extraneous factors which may cause unintended effects in the dependent variables (Fromkin and Streufert 1976). Laboratory settings allow collection of the information needed to test the hypotheses, yet permit precise specification of the variables of interest, and limit potential confounds and background variables (McGrath 1982).

All subject samples used in the pretests and experiments were purposely selected from the same population of undergraduate students. Undergraduates are an appropriate sample for this test of theory as they are a relatively homogeneous group of active consumers, and the stimulus materials were developed for that population. Also, homogeneity of subjects may help eliminate a source of error variance (Calder, Phillips, and Tybout 1981).

All the scaled measures were pretested and analyzed to determine unidimensionality, and internal consistency coefficients were calculated to gain a measure of reliability. Additionally, the measures in the main tests were subjected to principal components analysis, and reliability coefficients were calculated in order to help verify the validity and reliability of the measures.

Alpha levels are often set lower than .10 by convention. However, given the lack of research in the substantive area of brand equity and brand extension, these experiments were to identify possible

relationships. Replication should determine the validity of these relationships. Additionally, using tighter Type I error rates reduces the power of the test, ceteris paribus (Rosenthal and Rosnow 1984). Thus, the .10 level of significance was used for all tests.

Research Plan

Given the research strategy outlined above, this research plan involved three laboratory experiments. The specific methods used, research results, and a brief discussion of each experiment are presented in subsequent chapters. The activation and use of the brand schema as a frame of reference (H1(a) and H1(b)) were tested in experiment 1. The hypothesis test for this experiment is addressed in the next chapter. The hypothesized presence of inferences and the relative effects of brand affect on evaluation (H2, H4, H5, H5(alt)) were tested in experiment 2. A preliminary test of these hypotheses or pilot test, as well as the actual full sample hypotheses tests are presented in the subsequent chapter. Finally, the nature of the inferences made (H3) was tested in experiment 3 and is discussed in a separate chapter.

Chapter Summary

This chapter described the hypotheses to be tested and the general objectives of the methods used to test them. The hypotheses formulated are directed towards the two research questions, and derive from the theoretical propositions. The basic research objectives and strategy were introduced, directing the selection of appropriate methods.

CHAPTER IV

EXPERIMENT 1: BRAND SCHEMA ACTIVATION

Chapter Overview

The purpose of the first experiment was to determine whether consumers' activate their brand schemata and subsequently use this knowledge as a source of comparison in the brand extension comprehension process. The specific hypothesis tested was:

H1: Given exposure to a brand extension and an explicit goal to evaluate it, consumers will (a) first activate their brand schema rather than other structures in memory, (b) use the brand schema as a frame of reference in the evaluation process, rather than other structures in memory.

This chapter has three major sections. First, the methodology used to test this hypothesis is discussed, including the research design, procedure, measures, and data analysis plan. The results of the hypothesis test are presented and discussed in the second section. Finally, the last section is a chapter summary.

Methodology

This experiment used a concurrent verbalization task similar to that reported by Boush and Loken (1991), in which subjects evaluated brand extensions by expressing their thoughts outloud in the presence of an experimenter. A priming manipulation determined the efficacy of the hypothesized processes. It was argued above that in evaluating a brand extension, the brand name acts as a cue, priming or activating the consumer's brand schema. This process should be similar to when the consumer's brand schema is explicitly primed, i.e., the brand schema is activated in memory immediately prior to exposure to the actual brand extension stimuli. Conversely, when knowledge of the new product

category is explicitly primed an alternate process should occur, e.g., the new product knowledge category is activated and acts as a frame of reference. These notions form the basis of the first experiment, wherein the priming of the brand or new product category was manipulated and served as the independent variable.

Design

A 3 X (2) mixed design was used in the first experiment (see Figure 8). The manipulated, independent variable was schema primed. Schema primed was the first, between-subjects factor and had three levels: brand primed, new product category primed, and no prime. The second, within-subjects factor was simply a brand/extension product replicate, i.e., each subject evaluated two brand extensions.

The brand extension stimuli were developed in pretests (see Appendix A). These brand extensions consisted of two existing brand names linked with two products that actually exist in the marketplace but not in combination with the particular brands selected. Kodak calculator and Pepperidge Farm salad dressing were used as the two stimuli replicates.

The subjects for experiment 1 consisted of 30 undergraduates, randomly assigned to the conditions. The mean age of the subjects was 21.6 with a 47% female and 53% male split. The majority (97%) were unmarried and juniors (53%). Additionally, 63% were business majors, and only 10% of the total were marketing majors.

Procedure

A procedure that included a priming manipulation with three levels was generated to test brand schema activation in experiment 1 (see Appendix E). The inference processes experiment and the brand schema activation experiment were conducted successively such that they used

	Brand Replication	
Schema Primed	Kodak calculator	Pepperidge Farm salad dressing
Brand primed	Cell 1 n=10	Cell 2
New product category primed	3 n=10	4
No prime	5 n=10	6

Figure 8: Experiment 1 Design

the same subjects.[23]

The researcher acted as interviewer, conducting the session in a behavioral lab in one-on-one interviews. The purpose of the study disclosed to the subjects was to determine the opinions of student consumers. They also were alerted that the session would be tape-recorded, and the reasoning behind the use of recording devices by the researcher. After completing the inference processes experiment and demographic measures, the subjects were told that the second part of the survey also asked them to express their thoughts outloud as they evaluated other potential new products.

The priming manipulation was accomplished with oral instructions to the subjects. For example, the Kodak brand schema was primed using: "Are you familiar with Kodak? Kodak is considering introducing several new products. Take a moment to think to yourself about the brand Kodak." The new product category was primed in a similar fashion: "Are you familiar with calculators? Several manufacturers are considering introducing calculators. Take a moment to think to yourself about calculators." Finally, no knowledge structure was explicitly primed using: "Several well-known companies are considering introducing various new products." The debriefing responses of 12 pretest subjects as well as the subjects in the main test indicated that the priming manipulation was successful, and that they thought about the brand or product category as instructed.

The subjects were given the priming manipulation for Kodak/calculator, and then asked to express their thoughts out-loud as they evaluated Kodak calculator. When finished they then evaluated a second, dummy product. This dummy product was either Kodak cd player,

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[23] The two experiments were conducted successively because: a single group of subjects for both experiments was more economical in terms of time, tapes, transcripts, and sample; and each used a verbalization task, thus the inference processes experiment served as verbalization practice for the brand schema activation experiment.

RCA cd player, or RCA calculator, depending on the priming condition. They were given the priming manipulation for Pepperidge Farm/salad dressing, and asked to express their thoughts out-loud as they evaluated Pepperidge Farm salad dressing. Again, when they finished, they evaluated a second, dummy product. The second dummy product was either Pepperidge Farm dairy topping, Pillsbury dairy topping, or Pillsbury salad dressing, depending on the priming condition. Finally, the subjects were asked what they thought the purpose of the study was, and were debriefed.

Dependent Measures and Data Analysis Plan

The dependent measures were derived from the taped verbal protocols. Similar to a method suggested by Russo and Johnson (1980), the difference between brand and new product category transitions was to form the dependent measure to test brand schema activation. However, an examination of pretest protocols indicated that coding the responses as brand transitions or new product category transitions entailed a great amount of variance and/or error. Many of the thoughts could refer to either the brand or product category, and some thoughts appeared to refer to neither. Based on this difficulty, a new coding scheme was developed for the test of the hypothesis.

In this new scheme, each subject listened to the tape and helped code their own responses. Rather than relying upon a guess by the interviewer or coders, the subjects could recollect their frame of mind given the taped cues of their own words, particularly since the time between their verbalizations and the self-coding was short. This type of self-coding or coding verification by subjects is a common validation technique applied to research in the interpretive tradition (Hirschman 1986; Hudson and Ozanne 1988). The purpose of this verbalization technique was to gain insight into the way or context in which the

subjects were thinking.

Following each subject's written response to the background measures, the tape was played back thought by thought.[24] The subjects were asked what they were thinking about when they expressed each thought: the product category, the brand, or something else. The interviewer probed each response by the subject to insure that the instructions and their responses were clear. The instructions and coding sheet used by the interviewer are found in Appendix E.

The protocols were scanned for overall evaluations, and only those thoughts verbalized prior to an overall evaluation were used to test the hypothesis.[25] The specific dependent measures used to test the two parts to the hypothesis were: the proportion of the subjects' first verbalized thoughts which referred to the brand to test (a); and the brand name's percentage of total thoughts to test (b).

Each part of the hypothesis was first investigated by testing whether the dependent measure in the no prime condition was significantly greater than expected by chance and if so, then by performing a planned contrast across prime conditions for each replicate.[26] This contrast was based on the expected priming effects. First, the no prime condition should result in processes similar to those in the brand prime condition, and so the dependent measures should be equal across the two conditions. Second, the brand schema should be activated and referred to less in the product category prime condition, resulting in lower proportions and percentages than the other two

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[24] Single, non-redundant, complete expressions were coded as thoughts.

[25] It is possible that the thoughts expressed after evaluation are related more to the brand extension itself. Such post-evaluation thoughts are used to justify the evaluation (Bridges 1989). A small number of subjects expressed an evaluation as their first thought. Although this thought was counted, none of their subsequent thoughts were used to test the hypothesis.

[26] The contrast consisted of (Cell 1 = Cell 5) > Cell 3 for Kodak and (Cell 2 = Cell 6) > Cell 4 for Pepperidge Farm.

conditions.

Results

Support was found for the hypothesis; however, it varied across the two brand replicates. Recounting the hypothesis tested:

H1: Given exposure to a brand extension and an explicit goal to evaluate it, consumers will (a) first activate their brand schema rather than other structures in memory, (b) use the brand schema as a frame of reference in the evaluation process, rather than other structures in memory.

If a significant proportion of the subjects' first verbalized thoughts were about the brand, then this indicates that they activated their brand schema rather than some other knowledge structure.[27] Similarly, if the brand schema was used as a frame of reference, then the percentage of total thoughts devoted to the brand should be high.

H1(a) Results

Support was found for H1(a) for the Kodak data, but not the Pepperidge Farm data. The proportion of those who received no prime and thought about Kodak first was significantly greater than those expected by chance ($z = 1.90$, $p = .03$, $r = .567$) (see Table 2).[28] However, the proportion of those who received no prime and thought about Pepperidge Farm first did not significantly differ from chance ($z = .632$, $p > .10$, $r = .198$). The planned contrast was performed on the Kodak data applying the analysis of variance approach on qualitative data suggested

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[27] The schematic structure of brand knowledge was assumed in this test. The subjects' coding of their thoughts indicated whether brand knowledge rather than some other type of knowledge had been accessed, e.g., the new product category, a specific product category already marketed under the brand name, or a specific exemplar of either the new product category or brand. In fact, there was evidence that the subjects sometimes accessed this alternate type of knowledge.

[28] Kraemer and Thiemann (1987) define the effect size r as an intraclass correlation. See Appendix F for the formula for deriving the effect size r in this case.

Table 2

Dependent Measures by Replicate and Condition--Experiment 1

			H1(a)	H1(b)	
					Brand Thoughts[c]
Brand Extension	Schema Primed	N	Brand First[a]	Brand Thoughts > 50% Total[b]	Mean % (Std. Dev)
Kodak calculator	Brand	10	1.00	.90	84.0 (23.6)
	New product category	10	.60	.50	54.9 (39.6)
	No prime	10	.80	.70	63.5 (40.1)
Pepperidge Farm salad dressing	Brand	10	1.00	.90	94.0 (19.0)
	New product category	10	.80	1.00	92.4 (12.3)
	No prime	10	.60	.80	73.8 (40.9)

[a] Reflects the proportion of those subjects who thought about the brand first.

[b] Reflects the proportion of those subjects whose brand thoughts represented more than 50% of total thoughts.

[c] Reflects the percentage of total thoughts that were about the brand.

by Rosenthal and Rosnow (1984).[29] The contrast was significant providing support for hypothesis H1(a) ($t(27) = 2.00$, $p < .05$, $r = .359$).

H1(b) Results

Support was found for H1(b) for the Pepperidge Farm data, but not the Kodak data. The ratio data within cells used to test H1(b) was distributed non-normally. Therefore, non-parametric tests on proportions were conducted to determine if the majority of the subjects used their brand knowledge as a frame of reference more often than expected by chance, i.e., greater than 50% of the time. The proportions and results for the no prime conditions were: Kodak calculator 7 of 10 ($z = 1.26$, $p = .10$, $r = .389$); Pepperidge Farm salad dressing 8 of 10 ($z = 1.90$, $p = .03$, $r = .567$) (see Table 2). In fact, the majority of subjects in all the cells except the product category primed and no prime condition for Kodak calculator differed significantly from chance ($p < .10$). Neither of the planned contrasts were made since in the Kodak replicate the no prime condition did not differ from chance, and in the Pepperidge Farm replicate all the conditions produced a high number of subjects who primarily referenced their brand schema.

Summary and Discussion of Results

The posited model suggested that given exposure to a brand extension, that consumers would activate their brand schema and use this knowledge structure as a frame to compare the new product against. The data seem to support the hypothesis across the brand replicates. Strong support was found for H1(a) in the Kodak calculator data, and no support in the Pepperidge Farm salad dressing data. The opposite results were

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[29] The formula for this contrast is: t = square root(MS contrast / MS error), where MS contrast is defined by Rosenthal and Rosnow (1984, p. 346-349) and MS error is extracted from the analysis of variance.

obtained for H1(b): support was found for the Pepperidge Farm stimulus, but not the Kodak stimulus.

A few subjects provided outlying responses for each of the nonsignificant brand extension replicates. Insights can be gained by examining the protocols and debriefing notes for these subjects into why they did not activate their brand schema first, and/or rarely used the brand schema as a frame of reference.

Examining the responses of the four subjects in the no prime condition for Pepperidge Farm salad dressing, who did not initially activate their brand schema, two said they did not eat salad dressing because they did not like it. Thus, their salad dressing knowledge category was presumably associated with intense affect.[30] Knowledge categories associated with intense affect are chronically more accessible than other, less polarized structures (Feldman and Lynch 1988). Indeed, both subjects activated their product knowledge category first. However, both subjects indicated that the majority of their thoughts were based on their knowledge of the brand. So, when assessing brand extensions, the new product knowledge category may be activated first if affectively charged, but the brand schema may still serve as the frame of reference for comprehension of the new stimuli.

The other two subjects who did not activate their Pepperidge Farm schema in the no prime condition were either not very familiar with the brand, or substantially less familiar with the brand than with the new product category. One subject indicated that he was not familiar with the brand and so based his evaluation on known exemplars--Kraft and Wishbone. The other subject also indicated that he used an exemplar to form an evaluation--Kraft. Both subjects stated that they never

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[30] The subjects' affect towards the new product was not measured in this experiment. Therefore, the conclusion that these subjects had intense affect towards salad dressing can only be inferred from their protocol and debriefing statements.

referenced their knowledge of Pepperidge Farm to form their evaluation.[31] Thus, consumers may not activate their knowledge of the brand when it is limited, but rather may rely on their knowledge of something much more familiar to enable them to form an evaluation, e.g., a specific exemplar.

The subjects' brand and product category familiarity had been measured in a premeasurement session several days prior to the actual experiment (see Appendix G). A median split on the brand familiarity measure supported this contention that brand schema activation may be moderated by brand familiarity. Small cell sizes resulting from the split on familiarity prevented post-hoc statistical tests on the interaction. However, a visual scan of the data indicated that those subjects who were less familiar with Pepperidge Farm and received no prime (proportion brand first = .50), were less likely to first activate their Pepperidge Farm schema than those who were more familiar with Pepperidge Farm (proportion brand first = .67).

Three subjects in the no prime condition indicated that they referenced their brand knowledge less than half of the time in assessing Kodak calculator. Their protocols and comments in debriefing showed that they were either less familiar with the brand than average, or were less familiar with the brand than with the new product category. Regardless, two of the three subjects again mentioned specific exemplars (other brands) against which they compared the brand extension. These three outliers only referenced their brand schema 11.1% of the time, while the balance of the subjects were more in line with predictions.[32] The balance referenced their brand schema 86.0% of the time.

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[31] In fact, when the data of these two subjects is removed, the mean percentage of thoughts which referenced the brand for Pepperidge Farm salad dressing in experiment 1 was much higher--92.3%.

[32] Recall that this was measured by computing the percentage of total thoughts that were about the brand.

Therefore, the data supported the hypothesis with the following post-hoc modifications. First, if affect towards the new product category is intense--positive or negative, such that the product category itself is very meaningful to the consumer, then she or he will tend to activate knowledge about the new product first. However, the consumer may still use her or his brand schema to compare the new product information to. Second, if the consumer is not very familiar with the brand, or is much less familiar with the brand than with the new product category or some specific brand exemplar within that product category, then she or he may activate this product knowledge or exemplar and use it as a source of comparison and expectations for the brand extension.

Thus, brand familiarity or brand familiarity relative to familiarity with the new product category may be an important moderator of the brand extension evaluation process. Familiarity has been found to moderate other effects, such as learning, information search, and evaluation processes (Brucks 1985; Johnson and Russo 1984; Rao and Monroe 1988; Sujan 1985). Additionally, the intensity of the affect associated with other knowledge such as the new product category may also moderate the brand extension evaluation process. Given low brand familiarity or intense like or dislike of the new product category, the consumer may activate her or his new product knowledge category and use it as a frame of reference in the comprehension process rather than brand knowledge. However, the evaluation process itself should remain similar.

It is not clear from these data how critical brand familiarity is to the process.[33] The activation and use of the brand schema as a

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[33] Thompson (1988) did explore the effect of familiarity with the new product category. He hypothesized that brand affect's influence on extension evaluation will increase as product familiarity decreases. However, no support was found for this hypothesis.

frame of reference in the extension comprehension process is robust. Even when the new product category was primed just prior to exposure to the extension stimulus, the subjects activated and used this product category knowledge no more than expected by chance.

The results of this experiment were limited in two important ways. First, these tests assumed that knowledge about brands and products are stored as structures in memory, as opposed to unrelated bits of information, or as an associative network (Bettman 1979). Thus, this experiment tested whether the brand structure as opposed to other structures was activated and used as a frame of reference. However, the schematic structure itself was assumed.

Additionally, the small sample yielded low power tests. For example, the power in the two nonsignificant tests of H1(a) and (b) was .16 and .36, respectively. Thus, there was little probability of finding the differences hypothesized.

Chapter Summary

This chapter reported the results of an experiment used to test whether consumers' activate their brand schemata and subsequently use this knowledge as a source of comparison in the brand extension comprehension process. The methodology used to test this hypothesis was discussed, including the research design, procedure, measures, and data analysis. The hypothesis was supported with the following post-hoc qualifications. Affect towards the new product category and brand familiarity appeared to moderate the subjects' activation and use of their brand schemata in the extension evaluation process.

CHAPTER V

EXPERIMENT 2: PIECEMEAL PROCESSES AND EVALUATION EFFECTS

Chapter Overview

The purpose of the second experiment was to determine whether brand extension inferences are more prevalent when perceived congruity is moderate, and to test the relative effects of brand equity as brand affect on evaluation. The specific hypotheses tested were:

H2: A greater number of pre-evaluation inferences and product attribute cognitive responses will be made if perceived congruity is moderate than if it is extreme.

H4: If perceived congruity it extreme, then brand affect will have a greater positive effect on the evaluation of the extension than the new product information or inferences.

H5: If perceived congruity is moderate, then the new product information and the inferences made will each have a greater effect on the evaluation of the extension than brand affect.

H5(alt): If perceived congruity is moderate, then the brand affect will have a greater or equal effect on the evaluation of the extension than either the new product information or the inferences made.

This chapter has three major sections. First, a pilot test of the experiment is discussed. The methodology used to test the hypotheses is reviewed, including the research design, procedure, dependent measures, and data analysis plan. The results of the pilot are presented and discussed in this section. The results of the main experiment are discussed in the second section. Included are a brief review of the methodology, a presentation of the hypotheses test results, and a discussion of the findings. Finally, the last section is a chapter summary.

Pilot Test

Prior to the actual experiment, a pilot test was conducted to test

the procedure and measures including the coding of thoughts and inferences, test for the effects of brand/new product and manipulation check order, and estimate effect sizes and thus sample sizes needed for the actual experiment.

Methodology

Design

Specific predictions of the effects of brand affect relative to affect associated with the new product category and affect associated with inferences about the extension were made in H4, H5, and H5(alt). These effects were hypothesized to depend on the level of perceived congruity between the brand and new product. Additionally, H2 predicted that subjects would generate more inferences for extensions they perceived to be moderately congruent rather than extremely congruent. Therefore, an experiment was designed that permitted manipulation of perceived congruity and measurement of the relevant variables.

A 2 X (3) mixed design was used in the pilot test (see Figure 9). Perceived congruity was manipulated as a between-subjects independent variable forming two conditions: extreme congruity and moderate congruity. The second, within-subjects variable was a brand replicate. Kodak, Pepperidge Farm, and Black and Decker were used as the three brand replicates.

Perceived congruity was manipulated based upon the combination of brand/new product stimuli developed in pretests (see Appendix A). These brand extensions consisted of the three brand names linked with two products that actually exist in the marketplace but not in combination with the particular brands selected. The manipulation was checked by using a set of seven-point Likert judgment scales developed in pretests (see Appendix A).

	Brand Replicates		
Perceived Congruity	Kodak	Pepperidge Farm	Black and Decker
Extreme congruity	Cell 1 Camcorder n=28	2 Bagels n=26	3 Electric fan n=23
Moderate congruity	4 Calculator n=28	5 Salad dressing n=22	6 Telephone n=28

Figure 9: Pilot Study Design

Each subject evaluated three brand extensions, two of which were directly germane to this study (see Table 3). The study was designed so each subject would evaluate only one extension in each of the conditions--extreme congruity and moderate congruity. The Kodak extensions were always evaluated first because the order of the manipulation check was tested within this brand replicate across congruity conditions. The order and combination of the other two replicates' extensions were counterbalanced within the stipulations above, resulting in 12 different total combinations of brand extensions evaluated by subjects.

The subjects for the pilot test consisted of 89 undergraduates, randomly assigned to the two perceived congruity conditions.[34] The mean age of the subjects was 21.6 with a 52% female and 48% male split. The majority (98%) were unmarried and seniors (83%).

Procedure

The procedure for this experiment was similar to that reported by Fiske and Neuberg (1989). In the first phase, their subjects evaluated job-category labels and sets of trait attributes. Several weeks later in a second phase, the same subjects evaluated individuals that were described as having some job-category with a set of attributes, each from the list originally rated. Fiske and Neuberg (1989) reported correlational analyses between the information rated in the two periods.

Similarly, the data for the pilot test was collected in two separate sessions for each subject. The first session was held in class and was presented to the subjects as a marketing survey to find out how student consumers feel about various brands and products. The subjects received class credit for their participation.

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[34] It is assumed that companies only extend brands to new products if consumers already hold a positive attitude toward the brand. Therefore, only those subjects who liked the brand and who did not dislike the new product category were included in the analysis.

Table 3

Brand Extension Stimuli for Pilot Study

Condition	Brand Replicate		
	Kodak	Pepperidge Farm	Black and Decker
Extreme congruity	Camcorder	Bagels	Electric fan
Moderate congruity	Calculator	Salad dressing	Telephone
N/A (Extreme incongruity)	Electric screwdriver	Pet food	Watch

Brand affect (BA) and affect towards the new product category (PA) were measured in this first session using the scales developed in pretests (see Appendix A). A questionnaire directed each subject to indicate her or his affect for 6 brands and 12 products on optical scan forms (see Appendix H). The first two brands used at the beginning of the questionnaire were chosen because pretests indicated that the subjects would have high (Rolex) and low (Glad) affect for these brands. Thus, these first two brands provided an anchor for the scales, to give a common framework across subjects for indication of their affect (Bradburn 1982; Hippler and Schwarz 1987). After completing the questionnaire, the subjects were thanked for their participation and asked not to discuss the study with anyone.

The subjects were also given the opportunity to volunteer for the second session which was presented as an unrelated, separate study, for which they would receive class credit for their participation. The subjects participated in the second session within 3-6 days of filling out the first questionnaire. Separating the two sets of measures by a sufficient period should have forced the subjects to use their latent attitudes stored in memory and accessed through the evaluation process to evaluate the brand extension (Feldman and Lynch 1988).

The purpose of the second session was to measure the subjects' evaluations of the brand extension stimuli (see Appendix H). The second session was completed in a behavioral laboratory and presented to the subjects as a consumer opinion questionnaire to find out how individual consumers would rate new products that several companies may introduce. The subjects' student numbers were used to match their questionnaires from the first and second session.

The task sequence for the second session was: stimulus exposure, written cognitive responses during evaluation, evaluation of the brand

extension on scaled measures, manipulation check of the perceived congruity manipulation, and repetition of the sequence with the other three brand replicates. This procedure took each subject about 30 minutes. For each brand extension, the subjects were directed to write down their thoughts as they made their evaluation, and to indicate how positive or negative each of these thoughts were. Once they had formed an appraisal of the extension, they indicated this evaluation and perceived congruity between the brand and new product. They then completed some background measures concerning their post-evaluation brand affect, brand/product involvement, brand/product familiarity, task involvement, and demographics. Finally, the subjects were debriefed and asked not to discuss the study with anyone.

Dependent Measures and Data Analysis Plan

The dependent measures used to test H2 were the total thoughts and cognitive responses coded into inferences employing a similar, but more general scheme than Gardial and Biehal (1987). The dependent variables used to test H4, H5, and H5(alt) were correlations of brand affect, new product affect, and inference affect with evaluation of the brand extension.

The subjects indicated the valence of their cognitive responses using a single item, seven-point semantic differential scale--positive to negative (Chattopadhyay and Alba 1988; Sujan and Bettman 1989). This valence scale was used to derive inference affect (IA), which was measured as the average composite score computed for the inferences of each subject for each brand extension. Evaluation of the brand extension (BEE) was measured using sixteen items suggested by Chattopadhyay and Alba (1988).

The specific hypothesis tests are listed in Figure 10. Correlation coefficients were used to operationalize and test the

H2	# of thoughts and inferences Cells 4,5,6 > # of thoughts and inferences Cells 1,2,3
H4	Cells 1,2,3: $r_{BA,BEE} > 0$ and $r_{BA,BEE} > r_{PA,BEE}$
H5	Cells 4,5,6: $r_{PA,BEE} > 0$ and $r_{PA,BEE} > r_{BA,BEE}$ and $r_{IA,BEE} > 0$ and $r_{IA,BEE} > r_{BA,BEE}$
H5(alt)	Cells 4,5,6: $r_{BA,BEE} > 0$ and $r_{BA,BEE} \geq r_{PA,BEE}$ and $r_{BA,BEE} \geq r_{IA,BEE}$

Note: Cells 1,2,3 represent moderately congruent extensions while Cells 4,5,6 represent extremely congruent extensions.

BA = brand affect

PA = product affect

IA = inference affect

BEE = brand extension evaluation

Figure 10: Pilot Study Data Analysis Plan

effects predicted in H4, H5, and H5(alt). For each replicate, these hypotheses were investigated in two steps: (1) by testing whether the correlation of interest was significant; and (2) if significant, then performing two t-tests between this correlation and the other two coefficients. The coefficient of interest and direction of the t-tests were based on the hypothesized relationships tested.

Hypothesis H4 specified that highly congruent brand extensions should result in a significant correlation between brand affect and brand extension evaluation ($r_{BA,BEE}$). Additionally, this coefficient should be greater than both the correlation between product affect and brand extension evaluation ($r_{PA,BEE}$), and inference affect and brand extension evaluation ($r_{IA,BEE}$). Hypothesis H5 specified that moderately congruent brand extensions should result in significant correlations between product affect and brand extension evaluation ($r_{PA,BEE}$), and inference affect and brand extension evaluation ($r_{IA,BEE}$). Additionally, both these coefficients should be greater than the correlation between brand affect and brand extension evaluation ($r_{BA,BEE}$). Hypothesis H5(alt) specified that the correlation between brand affect and brand extension evaluation should remain significant ($r_{BA,BEE}$), and that this correlation should equal or exceed those between product affect and brand extension evaluation ($r_{PA,BEE}$), and inference affect and brand extension evaluation ($r_{IA,BEE}$).

Differences between correlation coefficients were tested using t-tests for non-independent coefficients (Howell 1987, p. 243). These tests for H5 and H5(alt) were calculated simultaneously as H5(alt) is

the null form of H5.[35]

Testing differences between correlation coefficients seemed best in this situation for several reasons. First, the variables correlated and used to test the hypotheses were random variables. Second, regression could have been used because it is robust to the assumption that the antecedent variables are fixed rather than random.[36] However, using the differences in beta weights as indicators of whether one variable has greater effect than another is problematic because of the probable correlation between the antecedent variables in this study (Howell 1987; Pedhazur 1982). Third, the significance of the difference in effects cannot be tested with regression because no tests exist for the differences between betas in the same equation. Finally, the analysis of correlation coefficients is sufficient for inferring causality because of the causal time ordering of the data collection, i.e., the measurement of the antecedent variables preceded exposure of the stimuli and measurement of the evaluation.[37] This type of analysis is commonly used for examining the relationship between schema-based affect, attributes, inferences, and evaluations of products or people (cf., Fiske and Neuberg 1989; Sujan and Bettman 1989).

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[35] Testing H5(alt) involved trying to affirm no or negative differences which is the null hypothesis of H5. Conclusions confirming H5(alt), or any null hypothesis, can only be made if power is high (Cohen 1988; Sedlmeier and Gigerenzer 1989). When testing the null as a research hypothesis, beta is functionally equivalent to alpha. Results in the opposite direction of H5 indicate an effect size of 0 for the effects as defined within the hypothesis. Small effect sizes in the direction of H5 indicate a small difference between the correlation coefficients. Cohen (1988) states that one can never find no differences--only negligible ones. Regardless, a priori power estimates set beta, and therefore the strength of the statistical inferences that can be drawn from the test.

[36] Brand affect, new product affect, and inference affect would be considered the antecedent variables in a regression analysis of this data.

[37] The requirements for inferring a causal relationship include: demonstration of a relationship between the variables, confirmation of the causal time ordering of the variables, and elimination of alternate explanations for the relationship (Rosenthal and Rosnow 1984). Causal inferences for the variables in this analysis are limited by the last requirement.

Results

Preliminary Analyses

Assessment of measures. Multiple-item indicators were used to measure brand affect, new product affect, and brand extension evaluation. Many studies of brand extension evaluation effects used only one or two items to measure these constructs (cf. Aaker and Keller 1990; Boush and Loken 1991; MacInnis and Nakamoto 1990). By using multiple-item measures, no assumptions were made about the reliability of the indicators. Rather, the internal consistency was assessed.

The reliability of the brand affect and product affect scales was assessed using Cronbach's alpha (see Table 4). All alphas were found to exceed .90. Thus, these scales were sufficiently reliable across brands and products (Nunnally 1978). Additionally, each scale was analyzed using a principal components analysis to assess unidimensionality. Each loaded on a single component which accounted for a large degree of variance (> 76%) in the items (see Table 4).

Experiment 2 contained one more brand replicate in the design than the pilot, thus unintentionally lengthening the second session questionnaire by 25%. Therefore, it became necessary to reduce the number of items in the scales without sacrificing reliability. To gain a stable sample for item analysis, reliability and unidimensionality of the brand extension evaluation and perceived congruity scales were assessed for each brand across extensions, rather than for each brand extension. The principal components and reliability data indicated that 7 out of the 16 brand extension evaluation items could be deleted, thus producing unidimensional scales without sacrificing reliability.[38]

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[38] Items 3, and 6 through 11 were deleted from the BEE scales (see Appendix H for an example of the questionnaire containing these items).

Table 4

Brand Affect and Product Affect Reliabilities

and Principal Components Analysis

Brand or Product	N	Alpha	% of Var.
Kodak	89	.9080	78.7
Pepperidge Farm	89	.9046	77.8
Black and Decker	89	.9326	83.3
Camcorder	88	.9523	87.6
Calculator	89	.9131	79.4
Bagels	89	.9564	88.5
Salad dressing	89	.9245	81.8
Electric fan	89	.9164	80.0
Telephone	89	.9007	77.7

This reduced item brand extension evaluation scale was used in subsequent analyses of the pilot test and in the questionnaire for the main experimental test. The reliability coefficients and variance explained by each brand extension evaluation and perceived congruity scale per brand extension is reported in Table 5. All reliability coefficients were satisfactorily high such that alpha > .86.

Coding of cognitive responses. Each subject wrote down their thoughts as they made their evaluation of each brand extension. Two independent judges coded these responses (see Appendix I). The protocols were categorized as thoughts, and then thoughts were coded as inferences or non-inference thoughts. Responses were coded as thoughts if they were single, complete expressions, and were non-redundant. Thoughts were coded as inferences if they were statements relevant to buying or consuming the brand extension. If the responses were obviously directed at only the brand or the product rather than the extension, they were not coded as inferences, but as non-inference thoughts. Alternatively, if the responses were simple attributes, they were assumed to be directed towards the brand extension, and thus were counted as an inference. Thus, features, uses, usage situations, and users in reference to the brand extension were coded as inferences (see Appendix I for examples). Overall evaluations of the brand extensions were not coded as inferences.

The two judges resolved any disagreements, so that an agreement was reached for each discrepancy. An iterative process suggested by Perreault and Leigh (1989) was used to gain reliable coding. Reliability was assessed using Perreault and Leigh's I_r index. The index was used as a coding process diagnostic tool, rather than as the true indicator of reliability since the judges eventually reached an agreement on all the coding. The judges were given an initial practice

Table 5

Brand Extension Evaluation and Perceived Congruity Reliabilities and Principal Components Analysis

	Brand Extension Evaluation			Perceived Congruity		
Brand Extension	N	Alpha	% Var.	N	Alpha	% Var.
Kodak camcorder	30	.9357	66.9	30	.8861	75.4
Kodak calculator	29	.9274	64.9	30	.8644	72.6
Pepperidge Farm bagels	30	.9322	68.7	30	.8614	74.5
Pepperidge Farm salad dressing	29	.9272	65.8	29	.9550	88.3
Black and Decker electric fan	29	.8857	54.7	29	.9062	81.2
Black and Decker telephone	30	.9530	73.9	30	.9403	85.4

set of protocols. Based on the reliability index (I_r thoughts = .907, I_r inferences = .563), the instructions were reviewed and questions were clarified. A second, random set of eight subjects' responses were coded yielding sufficient reliability (I_r thoughts = .935, I_r inferences = .864), and the judges coded the balance of the pilot protocols. Interjudge reliability was high for the pilot overall (I_r thoughts = .967, I_r inferences = .859).

Since only pre-evaluative thoughts and inferences were desired, two separate, independent judges scanned the protocols for indications of an overall evaluation. The researcher resolved any disagreement. If the judges found an overall evaluation of the brand extension imbedded in the protocols, then the thought and inference count was terminated at that point. Post-evaluation thoughts and inferences may differ from those expressed prior to evaluation as the former are equivalent to arguments in support of the evaluation (Bridges 1989). Thus, post-evaluation thoughts should be more consistent with the evaluation than pre-evaluation thoughts, and including them will inflate the hypothesized relationship. The interjudge reliability for this coding task was high (I_r = .866).

The valence of the subjects' thoughts were coded from -3 to +3. The mean of the valences of the thoughts coded as pre-evaluative inferences was calculated to indicate inference affect. Those subjects who made no inferences were included in the hypothesis tests and coded as having neutral inference affect. These subjects were assumed to have a similar response to the brand extension as those whose inference responses averaged neither positive, nor negative, but neutral.

Manipulation check. A manipulation check was performed to determine whether the respondents perceived the brand/new product combinations to vary in congruity, as predicted. A series of three t-

tests indicated that the subjects perceived each of the highly congruent brand extensions as significantly more congruent than the moderately congruent brand extensions ($p < .001$) (see Table 6).

In general, the subjects who assess perceived congruity before the evaluation task might form an evaluation of the extension before asked. These subjects may have fewer thoughts in general and the thoughts listed would be post-evaluative, not pre-evaluative as desired. Thus, a manipulation check after the evaluation was desired. However, the perceived congruity that subjects express after their evaluation may be more consistent with their evaluation than if measured prior to evaluation. In other words, evaluation may influence the manipulation check. As suggested by Perdue and Summers (1986), the pilot test was used to check for differences between perceived congruity before and after brand extension evaluation. Given no differences, perceived congruity would be measured after evaluation in the main experiment.

A two-way ANOVA (brand extension X manipulation check order) was used to check for differences in the responses of those who completed the manipulation check prior to evaluation versus after evaluation of the brand extension. The order of the check was manipulated for the Kodak brand extensions only. Neither the two-way interaction, nor the order main effect (mean 1st = 17.23, mean 2nd = 16.20) were significant ($F_{Int}(1,59) = .927$, $p > .10$; $F(1,59) = .53$, $p > .10$). Thus, perceived congruity did not vary depending on placement of the measure relative to evaluation. Therefore, the items were placed after the brand extension evaluation scales in the main experiment questionnaire.

Summary of preliminary analyses. Preliminary analyses of the pilot study indicated that the brand affect, product affect, and perceived congruity scales were internally consistent and unidimensional. Additionally, the number of items in the brand

Table 6

Perceived Congruity Manipulation Check

Brand	Extension	N	Mean[a]	Std. Dev.	t[b]	df	p
Kodak	Camcorder	28	21.68	5.79	6.45	54	.000
	Calculator	28	12.04	5.39			
Pepperidge Farm	Bagels	26	23.92	4.43	4.24	32	.000
	Salad dressing	22	16.55	7.07			
Black and Decker	Electric fan	23	23.65	4.38	6.47	43	.000
	Telephone	28	13.21	7.05			

[a] Scale ranges from 4 = extreme incongruity, to 28 = extreme congruity.

[b] The tests for the Pepperidge Farm and Black and Decker extensions used the Welch-Satterthwaite solution and t′ and df′ as suggested and defined by Howell (1987, p. 175, 179).

extension evaluation scale was reduced producing a unidimensional and reliable scale. The coding scheme and judgment coding of the written protocols yielded high interjudge reliability. The brand/new product manipulation produced the predicted significant differences in perceived congruity. And finally, the order of the manipulation check was not found to bias the results.

Hypothesis Tests and Effect Sizes

The purpose of the hypotheses tests in the pilot study was to examine the hypothesized effects with a small sample, estimate effect sizes, and determine the sample size necessary for the actual experimental test.

Examination of cognitive responses (H2). No support was found for the hypothesis. Recounting the hypothesis tested:

H2: A greater number of pre-evaluation inferences and product attribute cognitive responses will be made if perceived congruity is moderate than if it is extreme.

This hypothesis was tested using both number of inferences and thoughts as dependent variables. Thus, a multivariate analysis of variance (MANOVA) was used to test the hypothesis for each brand replicate. The results are listed in Table 7. Moreover, the only significant differences ($p < .10$) between those extensions that were perceived to be moderately congruent and those perceived to be highly congruent were in the opposite direction than predicted. The subjects expressed more thoughts and inferences when perceived congruity was extreme rather than moderate for the Pepperidge Farm brand replicate.

Examination of effects on evaluation (H4, H5, H5(alt)). The hypotheses related to brand extension evaluation predicted specific effects of brand affect compared to product affect and inferences

Table 7

H2 MANOVA Results--Pilot Study

Brand	Extension[a]	N	Dependent Variable	Mean	Std. Dev.	Wilks' Lambda	F	Hyp. df	Error df	p	eta^2
Kodak	Camcorder	28	Thoughts	4.18	2.33						
			Inferences	1.39	2.28						
						.9866	.36	2	53	.70	.013
	Calculator	28	Thoughts	3.89	1.73						
			Inferences	2.12	2.49						
Pepperidge Farm	Bagels	26	Thoughts	3.31	2.24						
			Inferences	2.12	2.49						
						.8788	3.10	2	45	.06	.121
	Salad dressing	22	Thoughts	3.14	1.96						
			Inferences	.82	1.44						
Black and Decker	Electric fan	23	Thoughts	3.61	2.29						
			Inferences	1.44	1.93						
						.9973	.06	2	48	.94	.003
	Telephone	28	Thoughts	3.75	1.62						
			Inferences	1.61	1.62						

[a] Camcorder, Bagels, and Electric fan are extremely congruent extensions, while Calculator, Salad dressing, and Telephone are moderately congruent extensions.

depending on the level of perceived congruity of the brand/new product combination. Mixed support was found for these hypotheses. The hypotheses tested were:

H4: If perceived congruity it extreme, then brand affect will have a greater positive effect on the evaluation of the extension than the new product information or inferences.

H5: If perceived congruity is moderate, then the new product information and the inferences made will each have a greater effect on the evaluation of the extension than brand affect.

H5(alt): If perceived congruity is moderate, then the brand affect will have a greater or equal effect on the evaluation of the extension than either the new product information or the inferences made.

The correlation coefficients used to test the hypotheses for each brand replicate are listed in Table 8.

Hypothesis H4 was tested by examining the correlation coefficients for the highly congruent brand extensions. Brand affect was expected to influence extension evaluations, and this effect was expected to exceed that of both product affect and inference affect. Brand affect influenced the evaluations when the extension was highly congruent for all three brand replicates at $p < .10$. Additionally, the t-tests between the correlation coefficients indicated that the influence of brand affect exceeded the influence of product affect only for the Black and Decker brand at $p < .10$ (see Table 9). Further, the influence of brand affect never exceeded the influence of inference affect at $p < .10$. Summarizing the H4 tests, even though brand affect influenced the subjects' evaluations of highly congruent extensions, this effect exceeded the influence of product affect for only the Black and Decker brand, and it never exceeded the influence of inference affect.

Hypotheses H5 and H5(alt) were tested by examining the correlation coefficients for the moderately congruent brand extensions. According to H5, both product affect and inference affect were expected to

Table 8

Correlation Coefficients

Brand	Extension[b]	N	Correlation Coefficient[a] $r_{BA,BEE}$ (p)	$r_{PA,BEE}$ (p)	$r_{IA,BEE}$ (p)
Kodak	Camcorder	28	.35	.30	.20
			(.035)	(.061)	(.160)
	Calculator	28	-.09	-.13	.28
			(.320)	(.257)	(.075)
Pepperidge Farm	Bagels	26	.28	.08	.07
			(.087)	(.357)	(.363)
	Salad dressing	22	.64	.29	.18
			(.001)	(.097)	(.207)
Black and Decker	Electric fan	23	.45	-.27	.30
			(.014)	(.107)	(.080)
	Telephone	28	.58	.05	.66
			(.001)	(.395)	(.000)

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Camcorder, Bagels, and Electric fan are extremely congruent extensions, while Calculator, Salad dressing, and Telephone are moderately congruent extensions.

Table 9

H4 Difference in Correlation Coefficients Results--Pilot Study

Extremely Congruent Brand Extension	N	Coefficients Compared[a] $r_{BA,BEE}$	$r_{PA,BEE}$	$r_{IA,BEE}$	t	df	p[b]	d
Kodak camcorder	28	.35	.30		.19	25	.42	.08
	28	.35		.20	.63	25	.26	.25
Pepperidge Farm bagels	26	.28	.08		.75	23	.23	.31
	26	.28		.07	.77	23	.22	.32
Black and Decker electric fan	23	.45	-.27		2.83	20	.01	1.27
	23	.45		.30	.58	20	.28	.26

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Values of $p > .10$ were estimated using standard normal distribution tables.

influence extension evaluations; while according to H5(alt), brand affect was expected to influence extension evaluations. Inference affect and brand affect usually influenced evaluations of moderately congruent extensions, while product affect usually did not influence these evaluations. Inference affect significantly influenced the moderately congruent extension evaluations for the Kodak and Black and Decker brands at $p < .10$. Conversely, product affect only significantly influenced the evaluation of the Pepperidge Farm brand extension at $p < .10$. Finally, brand affect influenced both the extension evaluations for both the Pepperidge Farm and Black and Decker brands at $p < .10$.

According to H5, the influence of brand affect on extension evaluation was expected to be less than the influence of both product affect and inference affect. Hypothesis H5(alt) provided the alternate prediction: the influence of brand affect on extension evaluation should be equal or greater than the influence of both product affect and inference affect. The t-tests between correlation coefficients indicated that the influence of product affect never exceeded the influence of brand affect at $p < .10$ (see Table 10). In fact, the results directionally supported H5(alt) such that the influence of brand affect exceeded the influence of product affect on the evaluations of these moderately congruent extensions. T-tests between correlation coefficients also indicated that the influence of inference affect only exceeded that of brand affect for the Kodak brand at $p < .10$. The results directionally supported H5(alt) for the Pepperidge Farm brand such that the influence of brand affect exceeded the influence of inference affect on the extension evaluation.[39]

Summarizing the H5 and H5(alt) tests, product affect influenced

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[39] Although the test between the coefficients for inference affect and brand affect was not significant for the Black and Decker brand, thus supporting H5(alt), the estimated power of .24 was low, preventing strong conclusions about the test for this brand.

Table 10

H5 and H5(alt) Difference in Correlation Coefficients Results--Pilot Study

Moderately Congruent Brand Extension	N	Coefficients Compared[a] $r_{PA,BEE}$	$r_{IA,BEE}$	$r_{BA,BEE}$	t[b]	df	p[c]	d
Kodak calculator	28	-.13		-.09	-.15	25	.56	-.06
	28		.28	-.09	1.40	25	.09	.56
Pepperidge Farm salad dressing	22	.29		.64	-1.60	19	.95	-.73
	22		.18	.64	-1.62	19	.95	-.74
Black and Decker telephone	28	.05		.58	-2.42	25	.99	-.97
	28		.66	.58	.63	25	.26	.25

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Results indicated by a positive t value directionally support H5, while a negative t value directionally support H5(alt).

[c] The values of p reflect a one-sided test. Values of p > .10 were estimated using standard normal distribution tables.

the subjects' evaluations of the Pepperidge Farm extension, and inference affect influenced the subjects' evaluations of the Kodak and Black and Decker extensions. However, only inference affect exceeded the influence of brand affect and only for the Kodak brand. Brand affect influenced evaluation as much or more than product affect and inference affect for the other two brands.

The stimuli order effects were also examined. Partial correlation coefficients controlling for order were calculated (see Table 11). None of the hypothesis test results changed by controlling for order.

Estimated power of the majority of these tests at alpha = .10, ranged from .34 to .99.[40] The pilot test effect sizes were used to calculate the sample size necessary to obtain sufficient power in the main experimental test. Specifically, the difference between the correlation coefficients and equivalent effect size considered negligible were derived from the pilot to test H5(alt) in the main experiment (Cohen 1988). Thus, the sample size needed to reach beta = .10 was determined for the test.[41] Given a planned sample size of 120 for the main experiment, the estimated power at alpha = .10 for the majority of the effects found in the pilot would be .90.

Summary of Pilot Results

No major procedural problems were detected with the pilot study. Additionally, the measures were internally consistent and unidimensional. The protocol coding scheme and procedure yielded high

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[40] Power estimates reported for all tests were derived from the tables contained in Cohen (1988), based on the effect size formula in Appendix F. Note that Cohen's d estimate reported for the t-tests of the non-independent correlation coefficients should not be compared with the d's from other tests because of potential inaccuracies in the former estimate.

[41] Defining a negligible difference is somewhat arbitrary, but for a sample of 100 and alpha = .10, a correlation coefficient would have to exceed approximately .13 to be significantly greater than .00 (Cohen 1988). Therefore, the desired difference between non-independent correlation coefficients was set to exceed .13 to be considered evidence of an important difference. Using the average correlation of brand affect with brand extension evaluation, and working backwards to get an effect size (d = .34), the sample size necessary to find a difference of .13 at alpha = .10 and beta = .10 is estimated at 120 per cell. This sample size appeared attainable while maintaining an equal error rate for both H5 and H5(alt).

Table 11

Partial Correlation Coefficients Controlling for Order

			Partial Correlation Coefficient[a]		
Brand[b]	Extension[c]	N	$r_{BA,BEE}$ (p)	$r_{PA,BEE}$ (p)	$r_{IA,BEE}$ (p)
Pepperidge Farm	Bagels	26	.40	.02	.05
			(.025)	(.466)	(.407)
	Salad dressing	22	.64	.30	.18
			(.001)	(.090)	(.216)
Black and Decker	Electric fan	23	.48	-.26	.32
			(.013)	(.122)	(.072)
	Telephone	28	.57	.07	.66
			(.001)	(.368)	(.000)

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Only the order of the Pepperidge Farm and Black and Decker stimuli was varied. Kodak products were always evaluated first.

[c] Bagels and Electric fan are extremely congruent extensions, while Salad dressing and Telephone are moderately congruent extensions.

interjudge reliability. The brand/new product combinations produced the levels of perceived congruity predicted. Both stimulus and manipulation check order effects proved insignificant. The results of the hypotheses tests in the pilot study were examined for their implications concerning conducting the main test of these hypotheses.

No support was found for H2 in the pilot study. However, the sample consisted of marketing undergraduates enrolled in senior level marketing courses which may have affected their responses. The thoughts they listed seemed to reflect a more managerial focus which was consistent with what they learned in class. In examining their elicited thoughts, these appeared to be related to the marketing and manufacturing of the products. As a result, these thoughts were not coded as consumer inferences. A broader sample of student consumers may have produced different results. So, the sample for the main experiment was drawn from a greater range of the student population and academic major was measured to check its composition.

Mixed support was found for H4, H5, and H5(alt) in the pilot study. Brand affect was found to influence evaluations of highly congruent extensions. Although this effect was not found to be significantly greater than the influence of product affect or inference affect in the pilot study, the size of these differences were large enough to be significant given the sample size of 120 planned for the main test of the hypotheses. Thus, the effect sizes found were large enough to provide support for H4 given a larger sample size. Additionally, given the larger sample size planned for the main test of the hypotheses, the pilot study effect sizes were such that H5(alt) would be supported for all but one comparison: the influence of inference affect was greater than brand affect on evaluation of Kodak calculator.

Main Experiment

Methodology

The design, measures, and analyses used in the main experiment duplicated those used in the pilot test with few exceptions. Specifically, an additional brand replicate was added to the design and the size and composition of the sample differed from that used in the pilot study.

A 2 X (4) mixed design was used in the main test of the second experiment (see Figure 11). Like the pilot test, the manipulated, between-subjects, independent variable was perceived congruity forming two conditions: extreme congruity and moderate congruity. Also like the pilot, the second, within-subjects variable was a brand replicate. However, Kraft was added as a fourth brand to those used in the pilot: Kodak, Pepperidge Farm, and Black and Decker.

The stimuli were developed in pretests (see Appendix A). Each subject evaluated four brand extensions, either two or three of which were directly germane to this study (see Table 12). The study was designed so each subject would evaluate one extension for each brand, and no more than two extensions in each of the conditions--extreme congruity and moderate congruity. The order of the brand replicates was randomly assigned and reversed for half of the subjects, resulting in 8 different total combinations of brand extensions evaluated by subjects.

Of the 366 undergraduates who participated as subjects in at least part of the experiment, only 284 were included in subsequent analyses and the hypothesis tests.[42] The pool of subjects was reduced for analysis because of subjects' attrition between measurement sessions,

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[42] Obviously the targeted 120 subjects per cell was not possible given the level of participation by the subjects. Alpha would have to increase substantially in order to maintain an error rate equal to that for H5(alt). Therefore, prior to analyzing the data, alpha was kept at .10, with the realization that no strong inferences could be made concerning non-negative results supporting H5(alt) with a large beta uncontrolled a priori.

	Brand Replicates			
Perceived Congruity	Kodak	Pepperidge Farm	Black and Decker	Kraft
Extreme congruity	Cell 1 Camcorder n=84	2 Bagels n=80	3 Electric fan n=75	4 Soup n=79
Moderate congruity	5 Calculator n=91	6 Salad dressing n=77	7 Telephone n=87	8 Potato chips n=69

Figure 11: Experiment 2 Design

Table 12

Brand Extension Stimuli for Experiment 2

	Brand Replicate			
Condition	Kodak	Pepperidge Farm	Black and Decker	Kraft
Extreme congruity	Camcorder	Bagels	Electric fan	Soup
Moderate congruity	Calculator	Salad dressing	Telephone	Potato chips
N/A (Extreme incongruity)	Electric screwdriver	Pet food	Watch	Beer

incomplete and missing responses, and indication that English was not their first language.[43]

As discussed above, the composition of the sample may have attenuated the number of consumer oriented thoughts and inferences found in the pilot test. A broader sample of student consumers was desired for the main test. In fact, the majority were juniors (86%) and non-marketing majors (92%). Additionally, 32% were non-business majors. So the subjects should have been less oriented to evaluating the extensions using managerial criteria.

The data collection procedure for the main experiment duplicated the pilot test procedure. The data was collected in two separate sessions for each subject. Brand affect and affect towards the new product category were measured in the first session (see Appendix J). The subjects indicated their evaluations of the brand extension stimuli within 3-8 days of filling out the first questionnaire (see Appendix J).

The dependent measures used to test H2 were the total thoughts and cognitive responses coded into inferences. The dependent variables used to test H4, H5, and H5(alt) were correlations of brand affect, new product affect, and inference affect with evaluation of the brand extension. The specific hypothesis tests are listed in Figure 12.

Results

Preliminary Analyses

Assessment of measures. The reliability of the brand and product affect scales was assessed using Cronbach's alpha (see Table 13). All alphas were found to exceed .89. Thus, these scales were sufficiently reliable across brands and products (Nunnally 1978). Additionally, each

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[43] Like the pilot, only those subjects who liked the brand and who did not dislike the new product category were included in the analysis.

H2	# of thoughts and inferences Cells 5,6,7,8 > # of thoughts inferences Cells 1,2,3,4
H4	Cells 1,2,3,4: $r_{BA,BEE} > 0$ and $r_{BA,BEE} > r_{PA,BEE}$
H5	Cells 5,6,7,8: $r_{PA,BEE} > 0$ and $r_{PA,BEE} > r_{BA,BEE}$ and $r_{IA,BEE} > 0$ and $r_{IA,BEE} > r_{BA,BEE}$
H5(alt)	Cells 5,6,7,8: $r_{BA,BEE} > 0$ and $r_{BA,BEE} \geq r_{PA,BEE}$ and $r_{BA,BEE} \geq r_{IA,BEE}$

Note: Cells 1,2,3,4 represent moderately congruent extensions while Cells 5,6,7,8 represent extremely congruent extensions.

BA = brand affect

PA = product affect

IA = inference affect

BEE = brand extension evaluation

Figure 12: Experiment 2 Data Analysis Plan

Table 13

Brand Affect and Product Affect Reliabilities and Principal Components Analysis

Brand or Product	N	Alpha	% of Var.
Kodak	283	.9262	81.9
Pepperidge Farm	284	.9482	86.6
Black and Decker	284	.9211	80.9
Kraft	283	.9219	81.1
Camcorder	284	.9397	84.9
Calculator	284	.8962	76.7
Bagels	283	.9653	90.6
Salad dressing	284	.9341	83.7
Electric fan	283	.9212	81.0
Telephone	280	.9208	81.0
Soup	282	.9349	83.8
Potato chips	283	.8978	76.8

scale was analyzed using a principal components analysis to assess unidimensionality. Each loaded on a single component which accounted for a large degree of variance (> 76%) in the items (see Table 13).

The reliability coefficients and variance explained by each brand extension evaluation and perceived congruity scale per brand extension are reported in Table 14. The reliability coefficients for the brand extension evaluation scales were satisfactorily high (alpha > .91) and all items within each scale loaded on a single component accounting for a large degree of variance (> 64%). The results for the perceived congruity scales were similar (alpha > .80, variance explained > 63%).

Coding of cognitive responses. The same two independent judges who coded the pilot also coded the thoughts listed for each brand extension that was evaluated in the main experiment. The protocols were coded using the same procedure as that used in the pilot. However, no practice sessions were involved since the judges had already learned the procedure and the scheme had demonstrated a high degree of reliability in the pilot. Interjudge reliability was again high for this judgment task (I_r thoughts = .972, I_r inferences = .920).

The same two judges who had coded overall evaluations in the pilot, performed the same judgment task in the main experiment. Again, the researcher resolved any disagreement. If the judges found an overall evaluation of the brand extension imbedded in the protocols, then the thought and inference count was terminated at that point. The interjudge reliability for this coding task was high (I_r = .901). As in the pilot study, inference affect for each subject was scaled using the mean of the inference valences indicated for each brand extension.

The subjects who made no inferences were expected to respond to the brand extensions similarly to those subjects whose inference valences averaged neutral. Relatively few subjects' valences averaged

Table 14

Brand Extension Evaluation and Perceived Congruity Reliabilities and Principal Components Analysis

	Brand Extension Evaluation			Perceived Congruity		
Brand Extension	N	Alpha	% Var.	N	Alpha	% Var.
Kodak camcorder	84	.9656	79.4	84	.8045	64.0
Kodak calculator	91	.9595	76.1	90	.8883	75.3
Pepperidge Farm bagels	80	.9170	64.4	80	.8113	65.8
Pepperidge Farm salad dressing	76	.9657	78.8	77	.8638	71.7
Black and Decker electric fan	75	.9385	68.0	74	.8704	72.4
Black and Decker telephone	87	.9653	79.7	87	.8783	73.5
Kraft soup	79	.9497	73.0	79	.8556	70.2
Kraft potato chips	69	.9359	67.1	69	.8762	73.2

neutral. This assumption was tested for those cells having more than two subjects with neutral average valences. No differences were found in the extension evaluations between those subjects who made no inferences and those whose inference valences averaged neutral ($p > .10$).[44] Therefore, similar to the pilot, those subjects who made no inferences were coded as having neutral inference affect.

Manipulation check. A manipulation check was performed to determine whether the respondents perceived the brand/new product combinations to vary as predicted in perceived congruity. A series of four t-tests indicated that the subjects perceived each of the highly congruent brand extensions as significantly more congruent than the moderately congruent brand extensions ($p < .001$) (see Table 15).

Summary of preliminary analyses. Preliminary analyses of the main experiment indicated the brand affect, product affect, perceived congruity, and brand extension evaluation scales were internally consistent and unidimensional. Finally, the brand/new product manipulation produced the predicted significant differences in perceived congruity.

Hypothesis Tests

Examination of cognitive responses (H2). No support was found for the hypothesis. Recapitulating:

H2: A greater number of pre-evaluation inferences and product attribute cognitive responses will be made if perceived congruity is moderate than if it is extreme.

As in the pilot test, this hypothesis was tested using both

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[44] An unbalanced t-test using the Welch-Satterthwaite solution was used for this test (Howell 1987).

Table 15

Perceived Congruity Manipulation Check--Experiment 2

Brand	Extension	N	Mean[a]	Std. Dev.	t[b]	df	p
Kodak	Camcorder	84	24.21	4.18	15.49	162	.000
	Calculator	91	12.34	5.92			
Pepperidge Farm	Bagels	80	23.03	4.56	4.99	139	.000
	Salad dressing	77	18.74	6.06			
Black and Decker	Electric fan	75	20.52	5.11	9.68	157	.000
	Telephone	87	12.20	5.83			
Kraft	Soup	79	17.77	5.82	3.52	138	.000
	Potato chips	69	14.26	6.24			

[a] Scale ranges from 4 = extreme incongruity, to 28 = extreme congruity.

[b] These tests used the Welch-Satterthwaite solution and t' and df' as suggested and defined by Howell (1987, p. 175, 179).

inferences and thoughts as dependent variables. The MANOVA results for each brand replicate are listed in Table 16. No significant differences in inferences or thoughts were found between those extensions perceived moderately congruent and those perceived to be highly congruent ($p >$ .20).

Examination of effects on evaluation (H4, H5, H5(alt)). The specific effects of brand affect compared to product affect and inferences had been predicted to depend on the level of perceived congruity of the brand/new product combination. Mixed support was found for these hypotheses. The hypotheses tested include:

H4: If perceived congruity it extreme, then brand affect will have a greater positive effect on the evaluation of the extension than the new product information or inferences.

H5: If perceived congruity is moderate, then the new product information and the inferences made will each have a greater effect on the evaluation of the extension than brand affect.

H5(alt): If perceived congruity is moderate, then the brand affect will have a greater or equal effect on the evaluation of the extension than either the new product information or the inferences made.

Testing H4 involved three steps for each brand replicate in the extremely congruent condition: (1) testing the significance of the correlation between brand affect and brand extension evaluation ($r_{BA,BEE}$), (2) testing to see if this correlation coefficient was greater than the correlation between product affect and brand extension evaluation ($r_{PA,BEE}$), and (3) testing to see if the brand affect correlation coefficient was greater than the correlation between inference affect and brand extension evaluation ($r_{IA,BEE}$). The latter two involved t-tests between non-independent correlation coefficients (Howell 1987, p. 243). The correlation coefficients for each brand replicate are listed in Table 17.

Although brand affect influenced the subjects' evaluations of most

Table 16

H2 MANOVA Results--Experiment 2

Brand	Extension	N	Dependent Variable	Mean	Std. Dev.	Wilks' Lambda	F	Hyp. df	Error df	p	eta^2
Kodak	Camcorder	84	Thoughts	3.62	2.25						
			Inferences	1.49	2.06						
						.9815	1.62	2	172	.20	.018
	Calculator	91	Thoughts	3.07	1.82						
			Inferences	1.20	1.66						
Pepperidge Farm	Bagels	80	Thoughts	3.01	1.93						
			Inferences	1.56	1.79						
						.9995	.04	2	154	.96	.001
	Salad dressing	77	Thoughts	3.01	1.91						
			Inferences	1.62	1.85						

Table 16--Continued

H2 MANOVA Results--Experiment 2

Brand	Extension[a]	N	Dependent Variable	Mean	Std. Dev.	Wilks' Lambda	F	Hyp. df	Error df	p	eta^2
Black and Decker	Electric fan	75	Thoughts	3.40	1.75						
			Inferences	1.77	1.73						
						.9892	.86	2	157	.43	.011
	Telephone	85	Thoughts	3.78	2.42						
			Inferences	1.81	2.22						
Kraft	Soup	79	Thoughts	3.32	2.00						
			Inferences	1.56	1.89						
						.9902	.72	2	145	.49	.010
	Potato chips	69	Thoughts	3.32	1.80						
			Inferences	1.27	1.86						

[a] Camcorder, Bagels, Electric fan, and Soup are extremely congruent extensions, while Calculator, Salad dressing, Telephone, and Potato chips are moderately congruent extensions.

Table 17

Correlation Coefficients--Experiment 2

Brand	Extension[b]	N	Correlation Coefficient[a] $r_{BA,BEE}$ (p)	$r_{PA,BEE}$ (p)	$r_{IA,BEE}$ (p)
Kodak	Camcorder	84	.06	.08	.43
			(.287)	(.233)	(.000)
	Calculator	91	.13	.26	.49
			(.110)	(.007)	(.000)
Pepperidge Farm	Bagels	80	.48	.40	.18
			(.000)	(.000)	(.056)
	Salad dressing	77	.38	.17	.43
			(.000)	(.074)	(.000)
Black and Decker	Electric fan	75	.18	.34	.23
			(.057)	(.002)	(.024)
	Telephone	87	.30	.28	.54
			(.003)	(.005)	(.000)
Kraft	Soup	79	.41	.24	.33
			(.000)	(.015)	(.001)
	Potato chips	69	.17	.16	.42
			(.087)	(.099)	(.000)

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Camcorder, Bagels, Electric fan, and Soup are extremely congruent extensions, while Calculator, Salad dressing, Telephone, and Potato chips are moderately congruent extensions.

of the highly congruent extensions, this effect exceeded the influence of inference affect for only the Pepperidge Farm brand, and it never exceeded the influence of product affect. Brand affect significantly influenced evaluation of the extremely congruent extension for three of the four brand replicates at $p < .10$. The only support found for H4 was that the influence of brand affect on extension evaluation exceeded the influence of inference affect for Pepperidge Farm bagels, $p < .10$ (see Table 18).

The correlation coefficients in the moderate congruity condition were examined to test H5 and H5(alt). The significance of the correlations of both product affect and brand extension evaluation ($r_{PA,BEE}$), and inference affect and brand extension evaluation ($r_{IA,BEE}$) was tested for H5, and the significance of brand affect and brand extension evaluation ($r_{BA,BEE}$) was tested for H5(alt). Testing H5 also involved determining whether both $r_{PA,BEE}$ and $r_{IA,BEE}$ are greater than $r_{BA,BEE}$. This test of differences between the correlation coefficients was performed simultaneously for H5 and H5(alt), as H5(alt) is the null hypothesis for H5.

Product affect and inference affect always influenced the evaluations when the extension was moderately congruent, while brand affect influenced the evaluations for three of the four brand replicates. For each of the brands both product affect and inference affect significantly influenced evaluation of the moderately congruent extensions at $p < .10$ (see Table 17). Brand affect also significantly influenced the evaluation of these extensions, except for the Kodak brand, at $p < .10$ (see Table 17).

For the moderately congruent extensions, product affect did not influence evaluation more than brand affect. Further, inference affect was found to influence evaluation more than brand affect for three of

Table 18

H4 Difference in Correlation Coefficients Results--Experiment 2

Extremely Congruent Brand Extension	N	Coefficients Compared[a] $r_{BA,BEE}$	$r_{PA,BEE}$	$r_{IA,BEE}$	t	df	p[b]	d
Kodak camcorder	84	.06	.08		-.14	81	.56	-.03
	84	.06		.43	-2.46	81	.99	-.55
Pepperidge Farm bagels	80	.48	.40		.63	77	.26	.14
	80	.48		.18	2.51	77	.01	.57
Black and Decker electric fan	75	.18	.34		-1.06	72	.86	-.25
	75	.18		.23	-.30	72	.62	-.07
Kraft soup	79	.41	.24		1.28	76	.15	.29
	79	.41		.33	.64	76	.26	.15

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Values of $p > .10$ were estimated using standard normal distribution tables.

the four brand replicates. No significant differences were found in the influence of product affect and brand affect on extension evaluation at $p > .10$, and the direction of the differences provided support for H5(alt) for all but the Kodak replicate (see Table 19). Support for H5 was found for the differences between the influence of inference affect and brand affect on extension evaluation for all but the Pepperidge Farm brand at $p < .10$ (see Table 19).

Summarizing the H5 and H5(alt) tests, product affect and inference affect both influenced evaluations of the moderately congruent extensions. However, only inference affect exceeded the influence of brand affect, and only for the Kodak, Black and Decker, and Kraft brands. Brand affect influenced evaluation as much or more than product affect for all the brands, and brand affect influenced evaluation as much as inference affect for the Pepperidge Farm brand.

The effects of stimuli order were also examined. Partial correlation coefficients controlling for order were calculated (see Table 20). None of the hypothesis test results changed by controlling for order.

Summary and Discussion of Results

The results of experiment 2 are summarized in Table 21. No support was found for H2, while mixed and limited support was found for H4, H5, and H5(alt) across the brand replicates. The results of each of these tests is discussed below.

Perceived congruity and piecemeal processes. Based on H2, a greater number of pre-evaluation thoughts and inferences were expected when perceived congruity was moderate rather than extreme. No support was found for this hypothesis. Lack of support may have been due to a demand artifact or because the evaluation process is different from that

Table 19

H5 and H5(alt) Difference in Correlation Coefficients Results--Experiment 2

Moderately Congruent Brand Extension	N	Coefficients Compared[a] $r_{PA,BEE}$	$r_{IA,BEE}$	$r_{BA,BEE}$	t[b]	df	p[c]	d
Kodak calculator	91	.26		.13	.96	88	.17	.21
	91		.49	.13	2.75	88	.005	.59
Pepperidge Farm salad dressing	77	.17		.38	-1.48	74	.93	-.34
	77		.43	.38	.36	74	.36	.08
Black and Decker telephone	87	.28		.30	-.16	84	.56	-.04
	87		.54	.30	2.04	84	.025	.45
Kraft potato chips	69	.16		.17	-.06	66	.52	-.02
	69		.42	.17	1.79	66	.05	.44

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Results indicated by a positive t value directionally support H5, while a negative t value directionally support H5(alt).

[c] The values of p reflect a one-sided test. Values of $p > .10$ were estimated using standard normal distribution tables.

Table 20

Partial Correlation Coefficients Controlling for Order--Experiment 2

			Partial Correlation Coefficient[a]		
Brand	Extension[b]	df	$r_{BA,BEE}$ (p)	$r_{PA,BEE}$ (p)	$r_{IA,BEE}$ (p)
Kodak	Camcorder	81	.05	.09	.41
			(.319)	(.198)	(.000)
	Calculator	88	.17	.24	.47
			(.057)	(.011)	(.000)
Pepperidge Farm	Bagels	77	.48	.42	.18
			(.000)	(.000)	(.054)
	Salad dressing	74	.38	.17	.36
			(.004)	(.077)	(.001)
Black and Decker	Electric fan	72	.15	.34	.20
			(.102)	(.002)	(.024)
	Telephone	84	.31	.28	.54
			(.002)	(.005)	(.000)
Kraft	Soup	76	.41	.24	.33
			(.000)	(.016)	(.002)
	Potato chips	66	.15	.21	.39
			(.111)	(.039)	(.001)

[a] BA = brand affect, BEE = brand extension evaluation, PA = product affect, and IA = inference affect.

[b] Camcorder, Bagels, Electric fan, and Soup are extremely congruent extensions, while Calculator, Salad dressing, Telephone, and Potato chips are moderately congruent extensions.

Table 21

Summary of Results From Experiment 2

Brand Replicate	Hypothesis				
	H2	H4	H5		H5(alt)
		BA influence? > PA? > IA?	PA influence? > BA?	IA influence? > BA?	BA influence? ≥ PA? ≥ IA?
Kodak	no	no no no	yes no	yes yes	no no no
Pepperidge Farm	no	yes no yes	yes no	yes no	yes directional no
Black and Decker	no	yes no no	yes no	yes yes	yes directional no
Kraft	no	yes no no	yes no	yes yes	yes directional no

Note: BA = Brand affect

PA = Product affect

IA = Inference affect

posited. As expected, many more thoughts were recorded in the evaluation process than found by Boush and Loken (1991) across perceived congruity conditions. Recall that Boush and Loken (1991) used fictitious brands. Their subjects may not have had well developed knowledge. Therefore, their subjects probably found it difficult to produce any thoughts and had little knowledge with which to form inferences. Actual, familiar brands were used in the experiment reported above.

No differences between perceived congruity conditions may have resulted because of a demand artifact. A possible explanation for this finding is that the subjects may have tried to be "good subjects" by attempting to meet their perceptions of the experimenter's expectations (Sawyer 1975). The thought listing portion of the questionnaire was designed to provide ample opportunity for the subjects to record their thoughts. Thus, many blank spaces--15--were provided. The good subjects may have assumed that this was a cue to how many thoughts they should write down, and thus attempted to write down as many as possible across conditions. However, the aim was to measure the number of thoughts and inferences which naturally occurred to the subjects in the process of their evaluation.

If this post-hoc explanation was correct, then each subject should have produced the same number of thoughts across condition. In other words, there should have been no within subject differences even though the perceived congruity of the replicates differed. A repeated measures MANOVA was used to test this explanation. There were significant differences in thoughts and inferences between the brand replicates within subjects ($F(6,1654) = 9.45$, $p = .000$). Therefore, it is unlikely that the subjects were simply being good subjects by writing down as many thoughts as they could for each brand extension.

Rather, the brand extension evaluation process may not be on a linear continuum from schema-based to piecemeal. This process may always be mostly piecemeal with many thoughts and inferences resulting from the comprehension process.[45] Consumers may perceive most brand extensions, and particularly category extensions like the ones tested here, as moderately congruent so piecemeal processes usually operate.[46] In fact, Fiske and Neuberg (1990) stated that judgments that are entirely schema-based may be rare.

Although there was a significant measured difference in perceived congruity between the stimuli in the conditions, these differences may not have been large enough to change the evaluation process. In fact, seven of the eight correlations between inference affect and brand extension evaluation were significant. Thus, the evaluations of all the extensions were somewhat piecemeal. The subjects should have required no inferential processing if the extensions were highly congruent with their brand schemata.

The scale used to measure perceived congruity may have been sensitive enough to detect differences that produced no distinct differences in processing. The subjects were not given a frame of reference with which to anchor their responses on the scale. The difference in perceived congruity between a line extension and category extension may produce distinct processes. So, if a line extension had been presented to the subjects first, the differences in perceived congruity between the stimuli may have dissipated, reflecting a greater

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[45] It is unlikely that the process is mostly schema-based because there were many thoughts and inferences per subject. In fact, the majority of subjects had some thoughts across conditions.

[46] Evaluation of brand extensions may be wholly or mostly based on brand schema affect when the new product is even more congruent with the brand than those tested in this experiment. For example, line extensions by definition deviate little from what consumers expect in the brand. Additionally, ability and motivation to process may moderate the degree to which evaluations are schema-based (Fiske and Neuberg 1990). If attention and effort can be allocated towards less than highly congruent information about the new product, then piecemeal processes may be more likely to operate. Similarly, if motivation to process this information is high, then the evaluation may be more likely based on retrieved or inferred new product attributes.

match between perceived congruity as measured and the extension evaluation process.

Thus, consumers may base their evaluations of brand extensions primarily on brand affect only if they perceive the new product to be much more congruent with the brand than the stimuli used in this experiment. Consumers may generally perceive line extensions to be more congruent, since these new products represent a very minor deviation from what consumers expect in the brand, e.g., a change in flavor or color.

Evaluation effects. Hypothesis H4 predicted that brand affect would have a greater influence on consumers' evaluations of the brand extension than the new product information or inferred beliefs, when perceived congruity was extreme. However, little support was found for this hypothesis. Brand affect was significantly positively correlated with brand extension evaluation for three of the four brand replicates. Additionally, the effect of inferences was greater or no different than that of brand affect for three out of the four brand extensions. As discussed previously, though differences between conditions were found using the perceived congruity scale, these differences may not have been large enough to alter the evaluation process. Thus, the stimuli which were intended as highly congruent, were actually producing the piecemeal effects expected for moderately congruent extensions. The brand becomes just another "piece" of information that the consumer integrates with product affect and extension inferences to form an evaluation.

The data for the condition labeled highly congruent are consistent with this contention and the hypothesized effects of moderate congruity. Brand affect had a greater influence on extension evaluation than inference affect for only one brand extension. Additionally, brand affect never had a greater influence than product affect.

Based on the posited model and H5, the new product information and/or extension inferences were expected to have a greater influence on consumers' evaluations of the brand extension than brand affect, when perceived congruity was moderate. However, based on the continuum model, Fiske's results, and H5(alt), brand affect was still posited to have a greater or equal influence than the new product information and/or extension inferences. In all but one case (Pepperidge Farm salad dressing), the inferences drawn had a greater influence on extension evaluation than brand affect. Inference affect did have a significant effect on evaluation for that exception. Additionally, brand affect was significantly correlated with extension evaluation for three of the four replicates. However, the influence of brand affect and product affect on extension evaluation were equivalent for all brand replicates across both the extreme and moderate congruity conditions. Piecemeal processes involve the integration of the valences of all this knowledge: brand, product, and inferred beliefs. Thus, some support was found for H5 and piecemeal processes were evident in the condition labeled moderately congruent.

Summarizing across the two perceived congruity conditions, the results for the Kodak replicate differed from the other brands. Brand affect neither influenced the evaluation of Kodak camcorder nor Kodak calculator. However, brand affect influenced the evaluation of each of the other brand's extensions. Inference affect also influenced the evaluation of these three brands' extensions, and this effect became stronger relative to the influence of brand affect as perceived congruity became more moderate.

Piecemeal processes appeared to be operating across conditions and replicates. However, the degree of influence of the various information (brand, product, and inferred beliefs) may vary with perceived

congruity. Brand affect still influenced evaluations of extensions even as they became less highly congruent. However, as perceived congruity became more moderate, inference affect tended to influence extension evaluation more than brand affect.

The results of this experiment were limited by the power of the tests. Given the sample constraints, power for the tests of H5 and H5(alt) could not be sufficiently controlled a priori. Thus, no strong statistical inferences could be made concerning acceptance of H5(alt).

Chapter Summary

This chapter reported the results of an experiment used to test whether brand extension inferences are more prevalent when perceived congruity is moderate, and to test the relative effects of brand equity as brand affect on evaluation. The results of a pilot test, and the implications of these results for the main test of the hypotheses were discussed. The methodology used to test these hypotheses was presented, including the research design, procedure, measures, and data analysis. No support was found for H2 and mixed support was found for H4, H5, and H5(alt) in experiment 2. Specifically, no more thoughts and inferences were found when perceived congruity was moderate than when it was extreme. Additionally, piecemeal processes appeared to be operating across perceived congruity conditions and brand replicates. Inference affect tended to influence extension evaluation more than brand affect as perceived congruity became more moderate. However, brand affect influenced evaluations across perceived congruity conditions.

CHAPTER VI

EXPERIMENT 3: EXTENSION INFERENCE PROCESSES

Chapter Overview

The purpose of the third experiment was to explore the qualitative nature of consumers' brand extension inferences. To that end a content analysis of coded responses from a thought eliciting task was conducted. The specific hypothesis tested was:

H3: Inferences about the brand extension made prior to evaluation will be predominately conjunctive (brand/product-based), rather than brand-based or product-based.

This chapter has three major sections. First, the methodology used to test this hypothesis is discussed, including the research design, procedure, measures, and data analysis plan. The results of the hypothesis test are presented and discussed in the second section. Finally, the last section is a chapter summary.

Methodology

This experiment utilized a concurrent verbalization task in which subjects evaluated extensions of fictitious brands. The content of the responses was coded and analyzed to test the hypothesized nature of the subjects' inferences.

Design

The design for the third experiment included only a single factor--a brand replicate consisting of two brands. The data was collected in two sessions conducted at two different times. First, a premeasurement session questionnaire asked the subjects to list their thoughts concerning the new products to be used as stimuli (see Appendix G).

Then within 6 days of the premeasurement session, verbal protocols of the subjects' extension evaluations were collected in the actual experimental session. The prototypical, easily accessed thoughts collected in the premeasurement session were used to code the subjects' protocols collected in the second session.[47]

Thirty-one subjects completed the experiment. The mean age of the subjects was 21.5 with a 48% female and 52% male split. The majority (97%) were unmarried and juniors (55%). Additionally, 65% were business majors, and only 10% of the total were marketing majors.

The stimuli consisted of two fictitious brand names each linked with an actual new product selected to be moderately congruent with the brands and generated through pretesting. Several fictitious brand scenarios were developed based on the pretests of actual brand names listed in Appendix A. These scenarios were placed in a questionnaire to test whether the subjects would perceive the proposed new product and brand to be congruent (see Appendix K). Based on the results of a 12 subject pretest, as well as two other small pretests (n = 3 and 12, respectively), the final stimuli were selected (see Appendix E).[48]

Fictitious rather than actual brand stimuli were used in this experiment, because actual brand stimuli provide too much variance of prototypical/accessible brand associations across consumers. Thus, coding the inferences as conjunctive, brand-based, or product-based would vary substantially using actual brand names, and prevent an accurate measure of the nature of these inferences. Using fictitious brands enabled better control of the associations subjects used to form

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[47] The lists for each subject were to serve as the key to categorizing the brand extension thoughts as product relevant. Thus, the coding would reflect individual differences in product knowledge categories.

[48] The pretest subjects indicated in debriefing that the perceived congruity manipulation was not entirely successful. Thus, the brand descriptions were changed so that the products were perceived as moderately congruent.

their inferences by limiting the brand's prototypical associations. Using fictitious stimuli also means that the brand's attributes are recently learned and may result in brand schemata that are not well developed (cf. Boush and Loken 1991). However, this problem was overcome by using several procedures to insure adequate learning and internalization of the fictitious brand and its meaning.

Procedure

The experimental procedure employed was similar to that used by Boush and Loken (1991) (see Appendix E). The researcher acted as interviewer, conducting the session in a behavioral lab in one-on-one interviews. The subjects were told the purpose of the study was to determine the opinions of student consumers. They were also alerted that the session would be tape-recorded, and the reasoning behind the use of recording devices by the experimenter.

The researcher introduced two new brands--Brand A and Brand Z. A brief description of each brand was provided to each subject. The subjects were instructed to study the descriptions as long as they desired, to form an impression, because they would be tested on this information and asked to indicate a preference later.[49] To insure that affect towards the brands had been generated, the subjects then indicated their affect towards each of the fictitious brands using the brand affect scales developed in pretests (see Appendix A). The subjects were instructed to talk outloud and to express everything that

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[49] Originally, the incentive for the subjects to participate was to consist of a chance in a drawing for their choice of a cash or merchandise prize. In pretests, the subjects were instructed to pay close attention to the brand information, and to form an impression of each brand so they could indicate their preference if they won the drawing. Thus, the potential of winning one of these brands as a prize was used to motivate the subjects to process the brand information and to form an integrated and affect laden schema for each of the brands. However, the subjects indicated in pretest debriefings that the potential of winning the brands with a drawing did not only motivate them to process the brand information. Many of the subjects indicated that they made an explicit choice between the two brands early on, and then did not process the unchosen brand further. So the task goal led to unbalanced processing of the brand replicates. The motivation to follow the instructions, and thus process the information appeared sufficient without the potential of winning a prize. Therefore, the drawing was dropped from the experiment.

came easily to mind about each of the brands in turn.[50] The previous three tasks were used to motivate the subjects to process and evaluate, elaborate, and rehearse the brand information.

Upon completion of a group of demographic measures, the subjects were told that the manufacturers of the two brands that they had just read about were thinking of introducing some new products and that they should evaluate these new products outloud. The interviewer read the brand extension stimuli outloud, and once the subjects had indicated that they had finished their evaluation, they rated it outloud on a 7-point scale. Finally, the subjects completed the brand schema activation experiment and were debriefed.

Dependent Measures and Data Analysis Plan

The dependent variables were cognitive responses coded into conjunctive, brand-based, and product-based inferences as determined by independent coders. The coding scheme was based upon each subject's brand associations, product category associations, and brand extension inferences as determined by independent judges. The hypothesis was tested using a repeated measures ANOVA to test specific contrasts across brand replicates.

Results

Preliminary Analyses

Manipulation Check

The stimuli were developed so that the extensions would be perceived as moderately congruent and thus inferences would be generated. Perceived congruity was measured as a manipulation check

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[50] This list served as the key to categorizing the brand extension thoughts as brand relevant. Thus, the coding would reflect individual differences in brand schemata.

using the same scales as those used in experiment 2. The reliability and unidimensionality of the scales as assessed using Cronbach's alpha and principal components analysis was sufficient (Brand A potato chips: alpha = .8057, % variance = 65.6; Brand Z watch: alpha = .9022, % variance = 77.7). The mean perceived congruity for Brand A potato chips and Brand Z watch was moderate, 10.42 and 16.13, respectively on a scale of 4 to 28.

Coding of Cognitive Responses

To test the hypothesis, the transcribed protocol data had to be coded into brand-based, product-based, and brand extension inference thoughts. The researcher separated each subject's protocol into distinct thoughts. As in the other experiments, responses were coded as thoughts if they were single, complete expressions, and were non-redundant. Two independent judges coded the thoughts listed for each brand extension evaluated (see Appendix L). As in the other experiments, an iterative procedure was used, reliability was assessed using Perreault and Leigh's (1989) I_r index, and the judges ultimately resolved all disagreements.

Similar to the procedure used in the other two experiments, first the judges scanned the protocols for thoughts expressing an overall evaluation of the brand extensions. The reliability of this judgment task in a practice task (I_r = .905) and for the actual protocols (I_r = .885) was high. The pre-evaluation protocols were then categorized as thoughts related to the brand, thoughts related to the product category, and other thoughts. Thoughts were coded as brand-based if they matched an item in the subject's protocol of expressing everything that came easily to mind about the brands, collected in the experimental session prior to exposure to the brand extension stimuli. Thoughts were coded as product-based if they matched an item in the subject's list of

prototypical, easily accessed thoughts concerning the products, collected in the premeasurement session. All other thoughts were classified as "others." Again, the reliability of this judgment task in a practice task (I_r = .791) and for the actual protocols (I_r = .919) was high.

Finally, the thoughts coded as others were further classified into six categories: fit statements, managerial statements, brand-directed statements, product category-directed statements, inferences about the brand extension, and others (see Appendix L for examples of each). All thoughts that refer to attributes or attribute values of the brand extension should be conjunctive inferences within this coding scheme, since all brand-based and product-based thoughts have already been coded out of the protocols. The reliability of this judgment task was high (I_r = .729). The mean number of thoughts in each category are listed in Table 22.

Summary of Preliminary Analyses

Preliminary analyses of the pilot study indicated that the brand extension stimuli were perceived moderately congruent. Additionally, the coding scheme and judgment coding of the written protocols yielded high interjudge reliability.

Hypothesis Test (H3)

Support was found for the hypothesis. Recounting, the hypothesis tested in this experiment was:

H3: Inferences about the brand extension made prior to evaluation will be predominately conjunctive (brand/product-based), rather than brand-based or product-based.

This hypothesis was tested using specific contrasts within a repeated measures ANOVA, with the brand-based, product-based, and brand extension inferences representing one set of repeated measures, and the

Table 22

Mean Number of Thoughts--Experiment 3

Types of Thoughts		Mean # of Thoughts	
		Brand A Potato Chips	Brand Z Watch
Brand-based		.68	.45
Product-based		.48	.26
Others		2.32	2.84
	Fit	.58	.39
	Managerial	.07	.07
	Brand-directed	.19	.19
	Product-directed	.19	.00
	Brand extension inferences	1.10	2.00
	Other	.19	.19

brand replicate as another. Significantly more brand extension inferences were expected than brand-based or product-based thoughts across replicates (see Table 23). This contrast was significant ($F(1,47) = 16.87$; $p = .000$).[51] Additionally, there were significantly more brand extension inferences than brand-based thoughts across replicates ($t(47) = 4.00$; $p = .000$; $d = .84$). Finally, there were significantly more brand extension inferences than product-based thoughts across replicates ($t(47) = 4.87$; $p = .000$; $d = 1.06$). The difference in thoughts by replicate interaction was also significant ($F(1,41) = 7.21$; $p = .02$); however, this interaction simply indicates that the differences between the number of brand extension inferences and both the brand-based and product-based thoughts were greater for Brand Z watch than Brand A potato chips. Regardless, support was found for H3 across the brand replicates.

Additionally, the thoughts coded as brand extension inferences and the protocols in which they were imbedded were inspected to assess the nature of these thoughts. These responses are listed in Table 24. Three types of responses were predominate. Some of the thoughts appeared to be product type category labels, i.e., subcategory labels that are more specific than product classes (Sujan and Dekleva 1987). Examples of product type category labels included "light potato chips," and "sportswatch." A second type of thought found in the list were attributes, features, or user-types at various levels of abstraction. Examples of these included "healthy," "pulsemeter," "cooked in vegetable oil," "digital," and "women's watch." Finally, some of the thoughts appeared to focus on the value or valence of an attribute or feature. Examples included "wouldn't taste good," "low salt," and "not

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[51] The degrees of freedom for all tests for this analysis were adjusted for violations of the sphericity assumption (Stevens 1986, p. 413).

Table 23

H3 Thoughts Compared--Experiment 3

Brand Extension	Type of Thoughts	N	Mean	Std. Dev.
Brand A potato chips	Brand-based	31	.68	.79
	Brand extension inferences	31	1.10	1.25
	Product-based	31	.48	1.00
Brand Z watch	Brand-based	31	.45	.68
	Brand extension inferences	31	2.00	1.77
	Product-based	31	.26	.58

Table 24

Thoughts Coded as Brand Extension Inferences

Brand A Potato Chips	#	Brand Z Watch	#
Light potato chips	4	High or durable quality, or accurate	6
Low or no salt	3	Exercise watch	5
Cooked in vegetable, low cholesterol, or low fat oil	3	Sportswatch	4
Low or lower in cholesterol	3	Stopwatch	4
Healthy or health conscious	3	With heartbeat monitor or pulsemeter	4
Attractive, different, or space-taking packaging	3	Water resistant, waterproof, or a diving watch	4
Bland or wouldn't taste good	3	Stylish, sporty, or streamlined	4
Taste fairly good	1	Chronograph	3
Good to munch on	1	Women's watch	2
Low calorie	1	For athletes	2
Low to medium price	1	Health-oriented	2
More perishable	1	High tech	2
Cheese flavored chip	1	Digital	2
		Colorful or various colors	2
		Functional for sports	2
		Alarm function	1
		Not a fashion statement	1
		Different designs	1
		Status symbol	1
		Between $30 and $40	1
		Expensive	1
		Find it at Kmart or Walmart	1

fashionable."

Given the three predominate types of responses, a continuum of three possible processes may have been operating, from assimilating the new information into present knowledge structures, to accommodating the new information by forming new structures. First, a subcategory or product type existing in memory may have been accessed and inferences made based on it. Or second, specific inferences may have been drawn which then led to the realization that the brand extension belongs to a subcategory existing in memory. This may have led to some minor accommodation. Third and finally, specific inferences may have been drawn and a new subcategory or ad-hoc knowledge structure produced.

The protocols were examined to gain insight into which processes were operating. Only the first and third processes were evident in the data. About 70% of the subjects who made inferences about Brand A potato chips produced these beliefs without first identifying a subcategory, while the rest first identified a subcategory such as "lite potato chips" and then generated beliefs about the brand extension. Similarly, about 60% of the subjects who made inferences about Brand Z watch did not first identify a subcategory, while the remaining first identified a subcategory such as "diving watch."

Summary and Discussion of Results

The brand extension beliefs consumers infer should consist of the brand/new product conjunction and should not simply be brand or product-based. This hypothesis was supported in experiment 3. Significantly fewer cognitive responses were directly attributable to beliefs about the brand or product. The subjects' responses indicated that they were going beyond easily accessible, prototypical brand or product thoughts to form inferential beliefs about the brand extension. Additionally, these beliefs were not just retrieved from existing product

subcategories, but appeared to be formed spontaneously during the comprehension and evaluation process.

This experiment investigated extensions which did not fit with the existing brand schema. The following process is proposed to occur given such an extension, based on an inspection of the subjects' thoughts and the continuum model. The consumer will try to comprehend the new product using a product subcategory to the extent that one exists in memory and is accessible. In this case, the consumer may base her or his brand extension evaluation on affect associated with the brand and with the product subcategory, rather than simply the general new product category. In fact, if a lot of cognitive effort is required to identify a fitting subcategory, then the affect associated with it may be more influential in the extension evaluation formed than brand affect.

If a product subcategory is not available, then the consumer will generate an understanding of the brand extension based on the conjunction of what she or he knows about the brand and new product in the form of brand extension inferences. In this case extension evaluation should be mostly piecemeal such that inferred beliefs weigh heavily in the extension evaluation. In experiment 3 more than one third of the subjects were forming conjunctive extension inferences without apparently accessing a subcategory, and thus were presumably forming their evaluations in a piecemeal fashion.

Although some evidence was found for the existence of conjunctive inferences, the actual belief formation processes involved were not tested. The processes consumers use to derive these inferences, and the determinants of what knowledge they use to form these beliefs remain to be examined.

Chapter Summary

This chapter reported the results of an experiment used to examine

whether consumers form conjunctive inferences when evaluating moderately congruent brand extensions. The methodology used to test this hypothesis was discussed, including the research design, procedure, measures, and data analysis. Support was found for the hypothesis. Significantly more of the subjects' responses were inferences consisting of beliefs which were not easily accessible, prototypical brand or product thoughts.

CHAPTER VII

GENERAL DISCUSSION AND CONCLUSIONS

Chapter Overview

The purpose of this chapter is to summarize the discussion of the results of the three experiments in light of the stated purpose of this dissertation, and to offer insights into the research questions posed. This chapter has five major sections. First, the purpose of the study is summarized. A brief review of the proposed conceptual model is also presented in this section. The results and discussion of the experiments are summarized in the second section. General conclusions and implications are drawn based on the evaluation processes tested, and brand equity effects observed. The third section contains an evaluation of the research. The contributions made and limitations manifest within the substantive, conceptual, and methodological domains are discussed. Future research directions are addressed in the fourth section. Finally, the last section contains a chapter summary.

Study Overview

Recently, firms have extended their brands into untraditional product categories for the brand, thereby violating consumers' expectations for the type of products usually labeled with the brand name. Although these extensions may secure cost efficiencies and/or marketing synergies for the firm, little is known about what influence these extensions have on consumers. The unexplored problem that motivated this dissertation is the degree to which managers can rely on their brand to favorably influence consumers, even when it is placed on a product that is nontraditional for the brand.

Previous research on brand extension has found that the brand name

influences consumer judgments of the extension. Additionally, several brand extension processing models have been proposed to explain these effects. However, the processes and effects of using the brand name on untraditional product categories remains unexplored. In order to better understand the effects of brand extension on consumers' evaluations, and to develop specific prescriptions for the use of brand extension as a strategy, we need to know how consumers evaluate extensions. Therefore, a model of consumers' processing of brand extensions was developed in this dissertation.

Conceptual Model

The model of consumers' evaluation process for brand name extension proposed in this dissertation included four stages: exposure, schema activation, schema confirmation, and extension evaluation. The consumer is exposed and attends to the brand extension in the exposure stage. Exposure to a brand extension results in the second stage in which the brand schema is activated. The brand schema was posited to serve as a frame of reference for subsequent processes and judgments.

The schema confirmation stage consists of the consumer attempting to assess the congruity or degree of compatibility between the new product and the brand. When the new product is highly congruent with the consumer's knowledge of the brand, then the model posited that little effort is required for comprehension. Conversely, if the new product is less than highly congruent with the brand, then comprehension requires more effort. In this case, the model suggested that the consumer will form inferences about the extension as an aid to comprehension. The inferences consumers generate to understand the extension are not based only on their knowledge of the brand or the new product. Rather, the model proposed that the conjunction of prior knowledge of the brand and of the new product form the basis of the

inferences made.

The consumer forms an evaluation of the extension in the final stage of the model. Evaluations of extensions perceived to be highly congruent are primarily influenced by the affect associated with the brand. The model posited that evaluations of extensions perceived to be more moderately congruent are based more on the inferences formed and the information retrieved in the confirmation stage, than on brand affect.

Several of the predicted processes and effects derived from this model were tested in a set of three experiments. The results and discussion presented in previous chapters are summarized below.

Summary and General Discussion of Results

Evaluation Processes

The evaluation processes tested in this dissertation were in the schema activation and confirmation stage. Specifically, three experiments were used to explore: the activation and use of the brand schema as a frame of reference; the formation of inferences given moderate congruity; and the conjunctive nature of the inferences.

The posited model suggested that given exposure to a brand extension, that consumers would activate their brand schema as opposed to other knowledge structures and use it as a frame to compare the new product against. The data from experiment 1 supported this hypothesis with a post-hoc revision. The activation and use of the brand schema as a frame of reference in the extension comprehension process appears to be robust. However, given low brand familiarity or intense like or dislike of the new product category, the consumer may activate her or his new product knowledge category and use it as a frame of reference in the comprehension process rather than the brand schema.

A greater number of pre-evaluation thoughts and inferences were hypothesized when perceived congruity was moderate rather than extreme. The data from experiment 2 provided no support for this hypothesis. The differences in perceived congruity in the stimuli may not have been large enough to cause a change in the evaluation process. Inferences were formed across congruity conditions such that the evaluations of all the extensions were somewhat piecemeal. Consumers may base their extension evaluations primarily on brand affect only if they perceive the new product to be much more congruent with the brand than the stimuli used in experiment 2. Line extensions represent a minor deviation from what consumers expect of the brand. Thus, brand affect may influence the evaluations of line extensions to a greater degree than category extensions.

The extension inferences formed by consumers were posited to consist of the brand/new product conjunction, rather than based only on their knowledge of the brand or new product category. This hypothesis was supported in experiment 3. The data indicated that the subjects went beyond easily accessible, prototypical brand or product thoughts to form extension inferences. Additionally, these inferential beliefs appeared to be formed spontaneously during the comprehension process.

The data from experiment 3 indicated that consumers may try to comprehend the new product by accessing more specific knowledge, a product subcategory such as "sportswatch" rather than "watch." Based on this data: given moderate congruity and failure to confirm the brand schema, the consumer may use a product subcategory to comprehend the new product. If a product subcategory is not available, then the consumer will generate conjunctive inferences to form an understanding.

Summary and Implications

How do consumers process brand extensions? Although consumers'

activation and use of their brand schema as a frame is quite robust, brand familiarity may moderate this process. The process of evaluating a brand extension should be similar, regardless of whether brand familiarity is low or high. However, if brand familiarity is low, the consumer may activate her or his new product knowledge category and use it as a frame (see Figure 13). The process when brand familiarity is not low should be similar to that proposed by the continuum model (see Figure 14).

Brand affect may play a greater role in the evaluation of line extensions, which do not deviate from brand expectations as much as category extensions. If the new product does not easily fit with brand expectations, the consumer may use a product subcategory or specific exemplar to understand and evaluate the extension. Regardless of brand familiarity or degree of congruity, category extension evaluations will most likely consist of some sort of piecemeal integration of schema or exemplar-based affect, and the valence of inferences formed about the extension.

Thus, given consumer familiarity with the brand, brand equity may be more important in securing favorable evaluations of line extensions than of category extensions. Influencing consumers' evaluations of category extensions may be more difficult, if as proposed, the brand is treated as just another attribute in the evaluation.

When managers can identify consumers that are relatively less familiar with the brand, a communications strategy that stresses the positive aspects of the product category itself may be appropriate. The firm cannot count on the brand to influence these consumers heavily. However, the firm could develop brand equity through generalization--introducing the segment to a relatively unknown brand by extending into a well-liked product category. Then, once positive experiences and

•EXPOSURE

↓

•CATEGORY ACTIVATION (PRODUCT CATEGORY)

↓

•CATEGORY CONFIRMATION

Perceived Highly Congruent	Perceived Moderately Congruent
Product Category Confirmed	Development of Understanding
	Cognitive Effort and Inferential Processing
	Product Category (Dis)confirmed

↓

•EXTENSION EVALUATION

Assimilation and + Affect Transfer From Product Category	Piecemeal Integration

Figure 13: Evaluation Process for Brand Name Extension When Brand Familiarity is Low

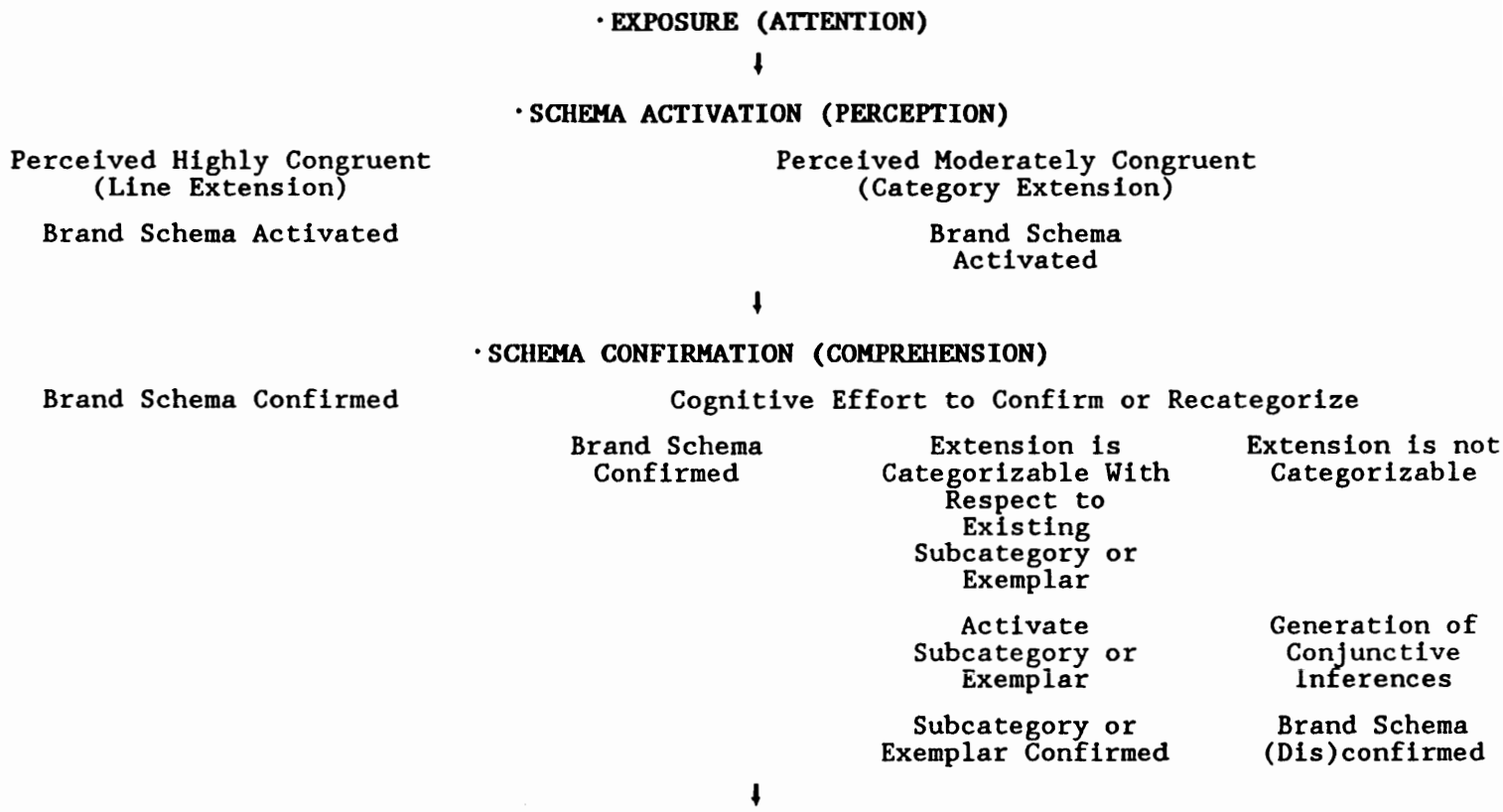

Figure 14: Revised Evaluation Process for Brand Name Extension

knowledge of the brand develops, the firm could extend it into a product category new to the segment. Thus, consumers may generalize the positive aspects of the product category to the brand, and the now well-liked brand could be extended to other product categories.

In general, consumers sometimes generate brand extension beliefs which can influence their evaluations of the extension. Thus, if managers can influence this process, they can guide consumers' beliefs, belief valences, and overall evaluations of brand extensions. Aaker and Keller (1990) found that product descriptions that elaborated on positive extension attributes to inhibit inferred negative beliefs, significantly facilitated positive extension evaluations. So, managers can influence these beliefs and thus consumers' evaluations of the extension. However, we need to know more about how and when consumers form these inferences to be able to offer useful managerial prescriptions.

Evaluation Effects

The proposed model suggested that the relative influence of brand affect on extension evaluation would depend on the perceived congruity between the new product and brand. Specifically, brand affect was hypothesized to have a greater influence on extension evaluations than the new product information or inferred beliefs, when perceived congruity was extreme. However, the data from experiment 2 provided little support for this hypothesis. Additionally, the new product information and/or extension inferences were expected to have a greater influence on extension evaluations than brand affect, when perceived congruity was moderate. The data from experiment 2 provided some support for this hypothesis. Generally, the extension inferences had the hypothesized effect, but the affect associated with the new product category did not.

Across the two perceived congruity conditions, both the inferences and brand affect generally influenced the extension evaluations. However, the influence of the inferences tended to become stronger relative to brand affect as perceived congruity became more moderate.

Summary and Implications

Since inference affect generally had a significant and strong influence on extension evaluation across conditions, the subjects may have perceived all of the brand extensions as moderately congruent. Thus, similar effects across conditions resulted.

What is the relative effect of the equity of the brand on the evaluation of the extension? The brand is no less influential than the product category into which the firm extends it. However, inference affect is generally as much or more important in influencing the evaluation than brand affect, at least if the extensions are category extensions.

Can managers rely on their brand's equity to carry their products further into diverse product categories? Most likely they should not rely on the brand name. Consumers' affect towards the product category into which the brand is being introduced has at least as much influence as the brand on evaluations. So, a brand manager probably cannot expect a highly regarded brand to introduce a product successfully into a category unless it is well-liked by consumers.

Specific extension beliefs inferred by consumers also have as much or more of an effect as the brand on category extension evaluations. Yet, the inferences produced by consumers may be difficult to control. These inferences are not simply brand-based, but are the conjunction of brand and product knowledge. Thus, when the new product differs substantially from brand expectations, managers cannot rely on the consumers to interpret the brand and product meanings as they have in

the past. So, managers must think about how the brand and new product category interact in the consumer's mind. It is not sufficient to use the brand indiscriminately to introduce products into diverse new product categories without investigating what consumers would expect of the combination.

As discussed above, managers may be able to influence these beliefs through their marketing communications such as ad copy. In fact such communications may be more critical in introducing category rather than line extensions, since the new product category probably differs more greatly from brand expectations.

Evaluation of the Research

This research examined the degree to which managers can rely on brand equity in extending to new products, compared to other information, and particularly when the new product deviates from consumers' brand knowledge. The goal was to contribute to our knowledge of the ability of the brand to influence consumers' extension evaluations and to identify those selling points firms might emphasize to help ensure successful introduction of brand extensions. The research also aspired to help further define the processes consumers use to evaluate brand extensions, particularly when the new product is less than highly congruent with brand knowledge. The contributions and limitations of the results, conclusions, and prescriptions presented in the previous section, relative to these objectives are discussed below within the substantive, conceptual, and methodological domains.

Substantive Domain

The primary substantive contribution of this dissertation is that it focuses a strategy on the consumer and the consumer's perspective of the strategy. We must understand how consumers evaluate brand

extensions, in order to use this strategy better.

This dissertation provides managers with a greater understanding of how and under what conditions the strategy works in the marketplace. Firms should not extend their brands only based on efficiencies in producing or marketing the product. Rather they should also examine the final consumers' perceptions of the brand and potential extension before making an extension decision. For example, the congruity between the new product and prior knowledge of the existing brand is in the consumer's mind. Therefore, to use the managerial recommendations offered in the previous section of this chapter, applied marketing researchers will have to pretest brand name/new product combinations.

This dissertation proposes brand extension situations in which the brand's equity contributes considerably more to evaluation compared to other available information. Similarly, situations are identified in which the relative contribution of the brand to the evaluation of the extension is less important. Specifically, the brand may have more influence on evaluation when the extension is one of line than category. This proposed relationship remains to be tested.

Regardless, this dissertation adds to marketing managers' knowledge of the ability of the brand name to influence evaluations when the extension is into a product category that deviates from brand expectations. In such cases extension inferences are critical to consumers' evaluation of the extension. The brand name itself is still important, but no more than the new product category or constructed beliefs. So managers should explore consumers perceptions of the brand and new product combination prior to introduction of the proposed extension. To ensure consumers' acceptance of the brand extension, communications copy should be used to guide and build upon the beliefs consumers generate about the extension.

Conceptual Domain

A consumer-based model of brand extension evaluation was developed in this dissertation, viewing extension strategies from a consumer's perspective. This model was based on and subsumed previous models. This model overcomes deficiencies present in past models of extension evaluation. Specifically, this dissertation expanded upon and empirically examined the processes operating when consumers perceive the extension to be less than highly congruent with their expectations for the existing brand.

Previous research in the brand extension domain has primarily measured the evaluation effects, and rarely the process (see Boush and Loken 1991 for an exception). This dissertation examined consumers' extension evaluation processes testing the assumed schema activation and confirmation processes. The relative impact of information retrieved and inferred by consumers in the brand extension evaluation context was also examined. This research went beyond determining whether any brand equity effect exists, by investigating the degree of the effect relative to other information such as the new product category and extension inferences.

Based on the empirical findings, previously unmodeled, yet important background variables to the process were suggested. Qualitative data indicated that brand familiarity may be an important moderator of the evaluation process. A rationale was presented positing the type of extension--category vs. line--to also moderate this process.

Finally, an inference process quite different from those discussed elsewhere in consumer research was suggested and empirically verified--conjunctive inferences. Conjunctive inferences are not simply brand-based, nor product-based, but represent the conjunction of brand and product knowledge. Given the many situations in which consumers attempt

to understand two disparate but linked concepts, this type of inference may constitute a substantial proportion of the beliefs constructed by consumers. Thus, this inference process should be of interest to consumer researchers.

Although the proposed conceptual model subsumes other conceptualizations of the phenomenon, it is also bounded in several respects. The model is limited to brand extension situations in which there is an explicit goal of extension evaluation. Further, the stimulus information conceptualized is limited to the brand name and new product. Consumers are often exposed to marketing communications that contain more detailed information about the new product than modeled in this dissertation.

The products conceptualized as brand extensions in the proposed model are simply modifications of current products in the market. Introductions into truly innovative new product categories of which the consumer knows nothing may produce alternative evaluation processes. In such a situation the brand name is the consumer's only meaningful cue. Therefore, a shortcut process should occur and the consumer simply bases her or his extension evaluation on brand affect. So, brand equity should be even more critical in the evaluation of such products.

The proposed model also assumes that the consumer evaluates the brand extension in isolation. However, consumers may make many product evaluations to determine the relative value of a brand versus its competitors. Defining brand equity as the brand's unique position against other brands is not considered in this conceptualization and has not been adequately considered elsewhere. In a choice context, brand affect alone may not be of use to distinguish between alternatives (Chattopadhyay and Alba 1988).

The conceptualization also is limited to the effects of brand

equity on evaluation processes and not directly on behavior. Some marketing practitioners perceive brand equity to be important only if the brand name directly influences behavior or results in a transaction (Smith 1990). Although consumers may also store behavioral tendencies in brand-related knowledge structures, the mechanisms of behavior effects such as utility transfer are not well explicated. Brand equity may influence behavior through the proposed processes indirectly assuming some link between consumer attitudes and behavior.

Finally, although conjunctive inferences were conceptualized and evidence was found for their existence, the actual belief formation processes involved were not tested. We still do not know exactly how consumers derive these inferences, and what determines what brand knowledge and what product knowledge they use to form these beliefs.

Methodological Domain

The methodology was an improvement on those used in past brand extension research in several respects. The measurement design in experiment 2 permitted a causal time ordering of extension evaluation effects not found in previous brand extension research. Premeasures in the first measurement session allowed for a causal order to be established between the affect associated with the existing brand, new product, and the brand extension evaluation.

Multiple-item indicators were used to measure brand and product category affect, as well as brand extension evaluation. Most studies of brand extension evaluation effects used only one or two items to measure these constructs (cf. Aaker and Keller; Boush and Loken 1991; MacInnis and Nakamoto 1990). By using multiple-item measures, no assumptions were made about the internal consistency of the indicators. Rather, internal consistency was directly assessed representing an improvement over past brand extension research.

Previous research has used fictitious brand names to test some similar hypotheses (Boush and Loken 1991). Thus, the subjects in those tests were likely relatively unfamiliar with the brand and their brand schemata were probably not well-developed. A well-developed brand schema is likely to be more abstract, complex, organized, moderate, and conservative (Fiske and Taylor 1984). Boush and Loken (1991) found that the majority of their subjects made few inferences or expressed any cognitive responses when evaluating a moderately congruent brand extension. Since fictitious brands were used, the subjects had little brand knowledge to draw on in forming their evaluation. Evidence of attribute retrieval and inference formation is more likely found when the brand schema is well-developed. The first two experiments in this dissertation used actual brand names as stimuli. The schema activated by an actual brand name should be well-developed compared to that activated by a brand name with no real-world referent. Therefore, the use of actual brand names represents a methodological improvement over previous research.

The methodology was limited in several ways. These can be summarized as limits to the generalizability of the relationships, limited operationalizations and measures, and statistical power problems.

The generalizability of the relationships needs to be tested in future studies. Single methods were used to test each hypothesis within this dissertation. However, these tests can be expanded in future studies using multiple methods across studies to verify the relationships found. Several potentially important background factors such as the subjects' brand familiarity were identified, but not manipulated. The proposed revisions to the processes also need to be tested in future studies.

The operationalization and measurement of several of the constructs were limited. The operationalization of brand equity was limited to brand affect in this dissertation. However, brand equity may take other forms, such as retrieved prototypical brand attributes. The methodology used did not account for these. Additionally, inference affect, the verbalization, and cognitive response/thought listings were measured with single item indicators. Therefore, the indicators were assumed to be perfectly reliable, as no internal consistency appraisals can be made. Further, the average value of the inferences produced was used to indicate inference affect. However, this measure does not account for multiple inferences having an effect, and assumes that each inference is equally important to the mean inference effect. To the extent that each inference was not equally important in forming an evaluation, the correlation between inference affect and extension evaluation was attenuated.[52] Future studies should attempt to replicate these findings using alternate operationalizations to determine the reliability of the results.

Finally, constraints on sample availability did not permit powerful tests in the first two experiments. Specifically, testing H5(alt) involved trying to affirm a null hypothesis. Because of the limits of sample availability for experiment 2, the power of this test could not be sufficiently controlled a priori. Therefore, no strong statistical inferences could be made concerning acceptance of H5(alt).

Future Research

The research purpose was to explore questions relevant to the management of brand equity while extending previous brand extension research. The research reported in this dissertation also can serve as

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[52] Given noise in the data caused by this operationalization of inference affect, the effect on evaluation found must be very robust, since these correlations were generally significant and explained as much or more evaluation variance than any other factor.

a baseline on which to build. Thus, future research should: attempt to replicate these findings, verify the interpretations offered, and explore other topics important to our understanding of brand extension processing and effects.

Future research should attempt to replicate the reported findings to determine the validity and generalizability of the results. Other methods, measures, subjects, and settings should be used to help establish the validity of these findings. Additionally, future research should attempt to see if the results extend to other brands, products, consumers, and tasks.

Future research needs to examine operationalizations of brand meaning or equity other than brand affect. We need to know if the results hold for brand meaning in general. Many believe that brand equity is best defined as a position in the consumers mind (Ries and Trout 1986). Does the brand's relative position transfer to the extension?

Other operationalizations of perceived congruity are needed to determine whether consumers engage in piecemeal processing given more moderate perceived congruity. More thoughts and inferences were expected as extensions became more moderate in congruity. Other brand extensions or better measures of perceived congruity may provide insight into the lack of differences reported above, and the differences reported by Boush and Loken (1991).

The operationalization of inference affect used in this study was based on assumptions of how consumers use this inference information. Alternate methods of measuring and recording the valences associated with these inferences are needed to determine their full effect on extension evaluation.

Future research should examine whether these results extend to

other subjects. The subjects used were weighted towards a business student sample. We are training these individuals to think like managers, e.g., to evaluate a new product's fit with the firm's present marketing mix. However, subjects who are non-business students or who are managers and no longer business students may respond differently than business students. The former may think less like managers or in a more flexible manner. They may easily assume the role of consumer or manager with less overlap in role dependent evaluative criteria.

The model posited assumes that consumers have an explicit goal to evaluate the brand extension. Thus, the subjects were given an evaluation goal in the experimental procedures. However, future research should examine whether these processes and effects hold when no explicit evaluation goal exists. Does the brand name have more, less, or the same effect when consumers passively process the brand extension? We need to answer this question because consumers often passively process marketing communications.

Future research studies need to verify the interpretations of these findings. We need to know if consumers process line and category extensions similarly, and if the brand name influences both types of extensions to the same degree. Brand familiarity was posited to moderate the effects of consumers' brand and product category knowledge. Additionally, brand equity may have a greater influence on extension evaluations when the new product is truly new, i.e., unknown to the consumer. These relationships need to be verified.

Finally, additional topics need to be explored in the brand equity/brand extension research stream. These topics include dimensions of perceived congruity, reciprocal effects of brand extension, and consumer conjunctive inference processes.

This dissertation treated perceived congruity at an empirical

level. Congruity was manipulated by measuring subjects' perceptions of in pretests. Firms also can test consumers' congruity perceptions of potential brand extensions. However, if generalizable dimensions of congruity are identified, firms can use these as guidelines for new product selection, rather than going to the time and expense of measuring consumers' perceptions of potential extensions.

One useful dimension may be evaluative congruity (Wilson et al. 1989). The brand and new product are evaluatively congruent if the valence associated with each are in the same direction. They are evaluatively incongruent if there is a valence direction mismatch. For example, a consumer may like the brand name Pepperidge Farm, but dislike the product category salad dressing. This is evaluative incongruity. This dimension leads to additional research questions. For example, if the consumer likes the brand but not the new product category, will she or he evaluate the extension favorably? Or if the consumer likes the new product category, but dislikes the brand, will positive aspects of the product category transfer to the brand so the consumer re-evaluates her or his feeling towards the brand?

John and Loken (1990) have been investigating the effects of extending the brand on consumers' perceptions of the parent brand itself. We need to know more about these reciprocal effects of brand extension. Park, Jaworski, and MacInnis (1986) suggested how firms can manage the meanings consumers derive from brand names over time. Firms may use brand extension to reposition the brand's image. For example, there may be some advantage to extending brands into moderately congruent or highly incongruent product categories even if resulting sales volume is low. In this way the firm might develop brand meaning that it could use to gather greater sales in other product categories. These are the type of long-term extension effects that need to be

explored.

This dissertation introduced a conceptualization of consumer conjunctive inferences. Future research should examine how consumers form these inferences, what these inferential beliefs consist of, and when such inferences are formed.

Are the beliefs and valences inherited more or less than their component parts--the beliefs that constitute the consumer's knowledge of the brand and product? Evidence has been found for overextension, i.e., inheritance beyond the intersection of the concepts (Chater, Lyon, and Myers 1990; Hampton 1988). Thus, inferred attributes given a conceptual conjunction apparently are not only the attributes belonging to both concepts. Rather, attributes are also inherited which belong to only one or the other concept. Additionally, Chater, Lyon, and Myers (1990) found that inheritance was not symmetrical, such that the noun in the qualifier position in the conjunction carried the most weight. The new product is qualified by the brand name in a brand extension. We need to know if these findings in cognitive psychology extend to the conjunction of consumption relevant concepts. We need to expand on this base of knowledge. For example, does the level of knowledge abstraction of the component concepts moderate how easily these inferences are formed?

Consumer research has focused on consumers' inferences of missing attribute values. However, in the present study, consumers not only inferred valences such as "high" quality, but also specific beliefs such as "waterproof." Since many marketing communications contain limited information, and since many consumers process little information in most marketing communications, we need to know more about how consumers infer specific attributes or beliefs.

Are attributes inferred after evaluation different from those inferred before evaluation? We need to know if the attributes inferred

after evaluation are more consistent with brand knowledge because the extension has been assimilated, while pre-evaluation inferences are more conjunctive and less consistent with the brand. Additionally, we need to know if conjunctive inferences are made in other purchase or consumption related contexts. For example, firms use co-branding because they believe that they can access the other firm's/brand's market. However, if the two brands are not highly congruent in consumers' minds, do they view the co-branded product differently than its constituent parts? Does the co-branded product become something new, and is it more or less appealing to the brand's usual target segment? Is the product image the same, enhanced, or diminished when another brand appears on it? Consumers likely use conjunctive inferences to understand and form an opinion about this new information. We need to know more about the conjunctive inference process to gain insight into these questions.

Chapter Summary

This chapter summarized the results of this dissertation. Implications were drawn relating to the research questions of evaluation processes and effects. The model originally proposed was revised based on the research findings. Both the contributions and limitations of this research were discussed. Finally, future research directions were advanced. Replication to determine validity and extend generalizability, verification of the interpretation of the findings, and exploration of other brand extension topics were suggested.

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Appendix A: General Stimuli and Measure Development

This results of two sets of pretests are contained in this appendix. The objectives of these two pretests were to develop and test the general stimuli, manipulations, and scaled measures for the first two experiments. The stimuli for experiment's 1 and 2 consisted of existing brand names linked with products that actually exist in the marketplace but not in combination with the particular brands selected.

The first section of this appendix summarizes the first set of pretests. Their purpose was to develop a list of potential stimulus brand names, and to measure the subject population's affect towards and familiarity with these brand names. The second section summarizes the second set of pretests. The purpose of this second set was to develop a list of potential new product extensions for these brands, and to pretest the brand/new product manipulation of perceived congruity.

Pretest 1

The purpose of the first set of pretests was to produce a list of stimulus brand names, and to pretest the brand affect measures to be used in subsequent analyses. A list of potential stimulus brand names was generated based on actual brand names in the marketplace. Other studies have used fictitious brand names and have created brand expectations to test several similar hypotheses (Boush and Loken 1991). Whether the brand schema is well-developed may be an important background factor. A well-developed brand schema is more likely to be more abstract, complex, organized, moderate, and conservative (Fiske and Taylor 1984). The schema activated by an actual brand name should be well-developed compared to that activated by a brand name with no real-world referent. Therefore, actual, existing brand names were used in the first two experiments.

The list of brand names was based on information found in *Simmons Market Research Bureau* data, *Consumer Reports*, and on researcher

judgment. The qualitative criteria for selection included: sample relevance, moderate breadth, and technicality. The brand names selected should be at least moderately relevant and familiar to the sample population of undergraduate consumers, so that they would have brand affect stored in memory. The brand names should be moderately broad such that products from several product categories are known to be marketed under each of the brand names.[53] Finally, brands were chosen and separated into two groups based on whether they were traditionally found in highly technical product categories, or less technical, consumer non-durable product categories.[54] The two lists of potential stimulus brand names are in Table A1.

In general a brand manager would not want to extend a brand name by targeting a segment for which the brand was not familiar, liked, or relevant. Therefore, familiarity with and affect toward the potential stimulus brand names were measured in this pretest. The assumption of the model is that affect associated with the brand exists and is stored in memory. Although brand affect scales can indicate how positive the subjects' affect is toward the brand, it is difficult to test directly whether the affect exists prior to response to the scales. However, subjects familiar with the brand such that they have used it before and have some knowledge concerning it should meet this requirement. Therefore, this assumption was met by pretesting for brand familiarity.

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[53] Many studies have investigated extension of brand names which market their products in only one product category, e.g., see MacInnis and Nakamoto 1990. In fact, some theories have been proposed which assume that the brand has a presence in only one product category (see Farquhar, Herr, and Fazio 1990). However, breadth of the brand's product category presence has been found to moderate typicality and evaluation effects (Boush and Loken 1991). Brands with a presence across a number of product categories are more likely to produce positive evaluation effects when the new product is less than highly typical of those usually marketed under the brand name (Boush and Loken 1991). In otherwords, they are more extendable. Therefore, to provide a better test of the proposed model and its effects, brands were selected that currently have a presence across a moderate number of product categories.

[54] Brands related to both technical and non-technical product categories were desired. The investment banking community purports that the equity in brands that are primarily in non-technical categories is more valuable because the differential advantage of brands in technical categories lies with the technology itself and not with the brand name (Fredericks 1990). An example contrary to this assertion is Sony, so the second list of stimuli were selected to gain some idea whether this assertion is correct from a consumer's perspective.

Table A1

Potential Stimulus Brand Names

First List (Technical)	Second List (Non-technical)
Sylvania	Bic
Rolex	Pillsbury
General Electric	Carnation
Sharp	Pepperidge Farm
Magnavox	Kraft
Zenith	Heinz
RCA	French's
Kodak	Glad
Black and Decker	
Pioneer	
Technics	
Panasonic	
Toshiba	
Casio	

Additionally, brand affect was measured to insure that stimuli were used for which the greatest number of sample consumers held positive affect.

The samples for these pretests consisted of senior and junior level undergraduates. The subjects received course credit for their participation. The subjects were provided with optical scan sheets to indicate their responses to scale items which measured brand affect and familiarity.

Three samples were used for these pretests. The first sample of 74 indicated their affect towards the first list of brands. The second sample of 75 indicated their familiarity with the first list of brands. Affect and familiarity for the first list were collected separately to maintain a reasonable questionnaire length. The third sample of 48 indicated their affect towards and familiarity with the second list of brands, all within a single questionnaire.

Questionnaires were designed so that affect and familiarity differences between the brands within each set of lists could be tested (see Appendix B). Brand familiarity was measured using a three item scale similar to those used by Brucks (1985) and Spreng (1989). These items were based on the dimensions of familiarity suggested by Alba and Hutchinson (1987): information search/purchase consideration, purchase, and product usage, respectively. Brand affect was measured using six semantic differential items. The brands "Emerson" and "Nike" were listed first for all of these questionnaires, because these two brands provided a common frame of reference across all the subjects for locating their responses on the affect and familiarity scales (Bradburn 1982; Hippler and Schwarz 1987).

The Cronbach's alpha reliability coefficient for the brand affect scales ranged from .8625 for affect towards Kraft to .9770 for Pioneer. However, comments in debriefing and inspection of the data revealed that

at least some of the subjects considered the pretest questionnaires long and boring. Therefore, even though six items were used in the affect measure to increase reliability and therefore validity, in actual practice the number of items added length that may have reduced the validity of the measures in the pretests. Thus for the experiments, four item brand affect scales were used to maintain a reasonable questionnaire length, while still using multiple items to measure the construct.

The four items in the reduced scale were chosen based on an item analysis that indicated that items 2 and 5 usually correlated the least with the total of the other four. These items could most often be deleted with little or no impact on coefficient alpha.[55] In fact, the reliability coefficients for brand affect using a reduced, four item scale ranged from .7998 for Kraft to .9785 for Pioneer (see Table A2 and Table A3).

The reduced four item brand affect scales were unidimensional as indicated by an exploratory principal components analysis. The variance explained by this primary affective component ranged from 64.1% for Kraft to 94.1% for Pioneer (see Table A2 and Table A3).

Thus, the brand affect scales were found to have a high degree of internal consistency and to explain a large proportion of the variance in the items. The scales developed in this pretest were used to measure brand affect in subsequent experiments.

The results of this set of pretests are summarized in Table A2 and Table A3. The data were used to select six brand names as potential stimuli based on high familiarity, high brand affect, and the proportion

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[55] The endpoints for item 2 were pleasant/unpleasant in the first brand affect pretest. This was replaced by appealing/unappealing in the second brand affect pretest, because the pleasant/unpleasant semantic differential item was also used to measure brand extension evaluation in the pilot test of experiment 2. Using same or similiar items across constructs may produce spurious relationships due to method variance. Similarly, the endpoints for item 5 were desireable/undesireable, but the brand extension scale for the pilot test of experiment 2 contained an item which was worded as "undesireable".

Table A2

Pretest 1 Results--Technical Brands

Brand	Brand Familiarity[a]					Brand Affect (4 Item Scale)[b]					
	Mean	Std. Dev.	N	Alpha	% Var.	Mean	Std. Dev.	N	Alpha	% Var.	% + Affect
Sylvania	3.34	4.94	72	.6935	65.3	17.77	3.66	75	.8879	75.3	46.7
General Electric	13.88	5.55	73	.6230	58.2	22.76	3.80	75	.9071	78.9	93.3
Sharp	6.74	5.29	72	.5858	61.0	20.35	3.96	75	.9298	82.7	77.3
Magnavox	4.19	4.45	74	.5150	63.1	19.59	4.21	75	.9396	85.0	68.0
Zenith	4.34	4.73	74	.5084	57.3	20.01	3.58	75	.9171	80.7	76.0
RCA	6.43	5.31	73	.6321	59.1	20.93	4.46	75	.9414	85.1	77.3
Kodak	13.89	6.88	73	.7094	66.0	24.44	3.64	75	.8804	75.2	92.0
Black and Decker	6.60	5.40	74	.6254	63.7	23.59	3.61	75	.9255	81.9	93.3
Pioneer	5.78	5.46	73	.6141	64.4	22.32	5.25	75	.9785	94.1	77.3
Technics	3.60	4.89	74	.6187	68.5	20.10	4.75	73	.9566	88.6	66.2
Panasonic	7.30	5.69	74	.6029	61.3	21.35	3.96	75	.9429	85.6	81.3
Toshiba	2.45	4.19	73	.5788	64.2	19.07	4.17	75	.9449	86.3	58.7
Casio	5.73	5.60	73	.6767	70.7	20.41	4.49	74	.9440	85.9	75.7

[a] Scale ranges from 4 = low familiarity, to 28 = high familiarity.

[b] Scale ranges from 4 = negative affect, to 28 = positive affect.

Table A3

Pretest 1 Results--Non-technical Brands

	Brand Familiarity[a]					Brand Affect (4 Item Scale)[b]					
Brand	Mean	Std. Dev.	N	Alpha	% Var.	Mean	Std. Dev.	N	Alpha	% Var.	% + Affect
Bic	14.06	7.67	48	.7764	71.1	17.67	3.86	48	.8987	77.6	60.4
Pillsbury	13.79	5.19	47	.5366	52.1	22.81	3.57	47	.8387	68.0	95.7
Carnation	6.06	6.52	48	.7897	73.1	16.85	3.95	48	.9221	82.9	41.7
Pepperidge Farm	10.73	6.64	48	.7436	67.8	24.06	3.32	48	.9093	78.9	97.9
Kraft	19.81	4.56	47	.5207	54.3	23.29	3.35	48	.7998	64.1	97.9
Heinz	15.38	6.51	48	.7373	67.4	22.90	3.64	48	.8419	68.0	95.8
French's	9.06	6.68	48	.7372	68.3	19.58	4.05	48	.9363	84.2	77.1
Glad	12.67	6.76	47	.7273	69.4	21.54	4.25	48	.9110	79.2	79.2

[a] Scale ranges from 4 = low familiarity, to 28 = high familiarity.

[b] Scale ranges from 4 = negative affect, to 28 = positive affect.

of the sample who held positive affect towards the brand.[56] Brand names selected as inputs for pretest 2 were those for which the highest percentage of subjects had a positive affect. Thus, Kodak, General Electric, and Black and Decker were selected from among the more technical brand names and Kraft, Pepperidge Farm, and Carnation were selected from among the non-technical brand names.[57]

Pretest 2

In the next stage, idea generation groups were used to create extension stimuli for the first two experiments. Subjects' perceived congruity of the brands and proposed new product extensions was also tested. Perceived congruity was manipulated in the second experiment, based upon the brand/new product combinations selected and pretested. The properties of the perceived congruity scale used to test this manipulation in subsequent experiments were also examined.

Stimuli fitting three levels of congruity were desired--highly incongruent, moderately (in)congruent, and highly congruent; the latter two to be manipulated in subsequent experiments. Using students to generate these stimuli insured that the brand extensions were of some relevance to this population of consumers.

Fifteen subjects were used to generate extensions for Carnation, Pepperidge Farm, and Kraft. A separate sample of 28 were used to create extensions for General Electric, Kodak, and Black and Decker.[58] The questionnaires are contained in Appendix C.

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[56] This mean familiarity and brand affect data were also analyzed using the Tukey procedure for single sample repeated measures with the correction for sphericity assumption suggested by Stevens (1986, p. 413, 420). However, these multiple comparison tests provided no additional help in determining the stimuli to be used in subsequent analyses.

[57] Carnation was selected due to coding error, but was deleted from subsequent pretests when the error was detected. The error did not affect the selection of Kraft nor Pepperidge Farm.

[58] The 43 subjects who participated in the idea generation groups came from the same sample used for pretesting affect and familiarity for the second list of brands.

The procedure was as follows. First individual subjects were asked to list the products they knew were sold under each brand name. Then brand extensions were defined and examples provided to the subjects. Then the subjects formed small groups of 3-4 each and were directed to think about each brand and its meaning to them. They were instructed to list new products that each brand might extend to based on the brand image held by the group. They generated three separate lists of potential new product categories for each brand: those categories to which the brand names would easily extend to, those to which the brand name would be difficult to extend to, and those to which the brand would be moderately difficult to extend to.

These lists were tabulated to obtain potential brand extension stimuli. Several potential brand/new product combinations were selected for each brand (see Table A4 and Table A5). These potential stimuli were selected based on researcher judgment; they were mentioned by several of the idea generation groups and judged to represent a potential new product based on some sort of manufacturing or marketing synergy for the parent brand's firm. For example, Kodak makes batteries and therefore might want to market complementary products, e.g., calculators that use batteries.

This reduced list was tested to determine the sample's perceived congruity of these stimuli to select a subset for each of the two levels of perceived congruity: highly congruent and moderately congruent. The same undergraduates who generated the ideas also rated the perceived congruity of the brand extensions. However, those subjects who generated the Pepperidge Farm and Kraft extensions, rated the Kodak and

Table A4

Pretest 2 Results--Technical Brands

Brand		Perceived Congruity[a]				
New Product	Idea Grp Perceived Congruity	Mean	Std. Dev.	N	Alpha	% Var.
Kodak						
Calculator	Moderate	11.29	3.85	17	.9342	84.7
Dishwasher	Incongruent	4.06	2.08	17	.9357	87.1
Camcorder	Congruent	19.29	2.69	17	.7761	76.7
Compact disc player	Congruent	10.24	5.38	17	.9590	89.1
Sunglasses	Moderate	7.77	4.84	17	.9258	84.2
Electric screwdriver	Incongruent	5.12	2.60	17	.9045	80.4
Black and Decker						
Telephone	Moderate	10.29	5.32	17	.9306	82.9
Carpeting	Incongruent	6.06	3.83	17	.9431	85.6
Electric fan	Congruent	15.71	4.34	17	.9252	83.7
VCR	Moderate	6.71	4.01	17	.9453	87.5
Watch	Incongruent	4.94	2.46	17	.8682	74.8
Hair dryer	Congruent	13.77	5.20	17	.9057	78.1

[a] Scale ranges from 4 = highly incongruent, to 28 = highly congruent.

Table A5

Pretest 2 Results--Non-technical Brands

Brand		Perceived Congruity[a]				
New Product	Idea Grp Perceived Congruity	Mean	Std. Dev.	N	Alpha	% Var.
Pepperidge Farm						
Dairy topping	Moderate	12.57	5.40	28	.9687	91.6
Potato chips	Congruent	10.68	5.27	28	.9617	90.0
Mustard	Incongruent	6.89	4.50	28	.9613	90.0
Bagels	Congruent	16.29	3.77	28	.8768	73.5
Salad dressing	Moderate	10.61	5.15	28	.9375	84.3
Pet food	Incongruent	3.89	2.81	28	.9436	90.1
Kraft						
Pudding	Congruent	18.42	5.46	19	.9766	93.7
Coffee	Incongruent	11.05	4.72	19	.9693	92.5
Potato chips	Moderate	11.84	4.75	19	.9726	92.4
Spaghetti sauce	Congruent	17.56	4.65	19	.9412	85.6
Beer	Incongruent	4.74	1.52	19	.9697	91.9
Soup	Moderate	19.32	5.03	19	.9607	90.3

[a] Scale ranges from 4 = highly incongruent, to 28 = highly congruent.

Black and Decker extensions, and vice versa.[59] An example of the questionnaire for this pretest is found in Appendix D.

The subjects were instructed to think about the brand, its image, and what it means to them as a consumer. They were then instructed to answer questions concerning some new products that the company was thinking of introducing under the existing brand name. The stimuli used are listed in Table A4 and Table A5. Two extensions were used at the beginning of each brand's section of the questionnaire.[60] These extensions were chosen because the idea generation subjects indicated that they were highly congruent and highly incongruent with the brand. Thus, these first two extensions provided a common framework across subjects for meaning of the scale and the rating of the potential stimulus extensions. Perceived congruity was measured using four 7-point Likert items developed for this research.

The perceived congruity scale was analyzed for internal consistency and unidimensionality. The Cronbach's alpha reliability coefficient for these scales ranged from .7761 for Kodak camcorder to .9766 for Kraft pudding, with the majority over .90 (see Table A4 and Table A5). The summative perceived congruity scale was unidimensional as indicated by an exploratory principal components analysis. The variance explained by this primary perceived congruity component ranged from 69.3% for Kodak camcorder to 94.7% for Kraft spaghetti sauce (see Table A4 and Table A5). Thus, the perceived congruity scales were found to have a high degree of internal consistency and to explain a large

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[59] The Carnation brand extensions were tested in this pretest but were not used in subsequent analyses because of the coding error discussed in the footnote above. Additionally, General Electric was dropped from further analyses because the majority of subjects indicated they believed General Electric already had a presence in a large number of the product categories. There was also a high degree of variance in what the subjects believed General Electric made. Therefore, it would be difficult to identify new products to be introduced by this brand that would fit within the perceived congruity manipulation factors consistently across subjects.

[60] These included: Carnation chocolate milk and Carnation beer; Pepperidge Farm muffins and Pepperidge Farm bird feeder; Kodak camera case and Kodak jewelry; and Black and Decker office furniture and Black and Decker coffee grinder.

proportion of the variance in the items. The scales developed in this pretest were used to test the perceived congruity manipulation in subsequent experiments.

The perceived congruity data were analyzed using the procedure outlined in footnote 56. The results are listed in Table A6. Significant differences in perceived congruity were found between extensions within brands. Stimuli were selected based on these mean differences and on the standard deviations of each extension; the goal was to minimize the variance of the congruity of the extensions used in the manipulations. Only two brand extensions stimuli were needed for use in experiment 1, each perceived to be moderately congruent: Kodak calculator, and Pepperidge Farm salad dressing. Additionally, the following extensions were selected for use in the pilot for experiment 2, each perceived to be highly congruent and moderately congruent with their brands, respectively: Kodak camcorder, Kodak calculator, Pepperidge Farm bagel, Pepperidge Farm salad dressing, Black and Decker electric fan, and Black and Decker telephone.

Summary of Results

Summarizing, the purpose of these general pretests was to develop brand extension stimuli, and to develop and evaluate some of the measures for the hypothesis tests. The brand extension stimuli were generated for brands that the student consumer population liked and were familiar. The stimuli chosen enable the manipulation of levels of perceived congruity in experiment 2. The brand affect and perceived congruity scales developed were found to be reliable and unidimensional.

Table A6

Multiple Comparisons of Perceived Congruity of Extensions by Brand

Brand	Extensions[a]					
Kodak	Camcorder	Calculator	CD player	Sunglasses	Electric screwdriver	Dishwasher
Black and Decker	Electric fan	Hair dryer	Telephone	VCR	Carpet	Watch
Pepperidge Farm	Bagels	Dairy topping	Potato chips	Salad dressing	Mustard	Pet food
Kraft	Soup	Pudding	Spaghetti sauce	Potato chips	Coffee	Beer

[a] All extensions not covered by a common line have means that differ at $p < .05$.

Appendix B: Pretest 1 Brand Affect and Familiarity Questionnaires

OPINION QUESTIONNAIRE

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to indicate your opinion by filling in the appropriate bubble on the OPSCAN. For example, if you were asked to rate "The Weather in Blacksburg" on such a scale, the seven places should be interpreted as follows:

The Weather in Blacksburg is

Extremely bad	_____	: _____	: _____	: _____	: _____	: _____	: _____	**Extremely good**
	1	2	3	4	5	6	7	

If you think the Weather in Blacksburg is extremely bad, then you would place your mark as follows:

● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is extremely good, then you would place your mark as follows:

① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is somewhere in between these extremes, please fill-in the appropriate bubble on your OPSCAN.

PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN. In making your ratings please be sure to answer all items, and never make more than one mark for a single question.

Please mark your OPSCAN as indicated to show your opinion of each of the following brands.

Emerson

1.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
2.	**Extremely pleasant**	1	2	3	4	5	6	7	**Extremely unpleasant**
3.	**Extremely positive**	1	2	3	4	5	6	7	**Extremely negative**
4.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**
5.	**Extremely desireable**	1	2	3	4	5	6	7	**Extremely undesireable**
6.	**Extremely satisfactory**	1	2	3	4	5	6	7	**Extremely unsatisfactory**

Nike

7.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
8.	**Extremely pleasant**	1	2	3	4	5	6	7	**Extremely unpleasant**
9.	**Extremely positive**	1	2	3	4	5	6	7	**Extremely negative**
10.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**
11.	**Extremely desireable**	1	2	3	4	5	6	7	**Extremely undesireable**
12.	**Extremely satisfactory**	1	2	3	4	5	6	7	**Extremely unsatisfactory**

Sylvania

13.	Extremely bad	1	2	3	4	5	6	7	Extremely good
14.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
15.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
16.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
17.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
18.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Rolex

19.	Extremely bad	1	2	3	4	5	6	7	Extremely good
20.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
21.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
22.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
23.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
24.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

General Electric

25.	Extremely bad	1	2	3	4	5	6	7	Extremely good
26.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
27.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
28.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
29.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
30.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Sharp

31.	Extremely bad	1	2	3	4	5	6	7	Extremely good
32.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
33.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
34.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
35.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
36.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Magnavox

37.	Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely good
		1	2	3	4	5	6	7	
38.	Extremely pleasant	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely unpleasant
		1	2	3	4	5	6	7	
39.	Extremely positive	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely negative
		1	2	3	4	5	6	7	
40.	Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely favorable
		1	2	3	4	5	6	7	
41.	Extremely desireable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely undesireable
		1	2	3	4	5	6	7	
42.	Extremely satisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Zenith

43.	Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely good
		1	2	3	4	5	6	7	
44.	Extremely pleasant	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely unpleasant
		1	2	3	4	5	6	7	
45.	Extremely positive	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely negative
		1	2	3	4	5	6	7	
46.	Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely favorable
		1	2	3	4	5	6	7	
47.	Extremely desireable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely undesireable
		1	2	3	4	5	6	7	
48.	Extremely satisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

RCA

49.	Extremely bad	1	2	3	4	5	6	7	Extremely good
50.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
51.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
52.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
53.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
54.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Kodak

55.	Extremely bad	1	2	3	4	5	6	7	Extremely good
56.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
57.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
58.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
59.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
60.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Black and Decker

61.	Extremely bad	1	2	3	4	5	6	7	Extremely good
62.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
63.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
64.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
65.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
66.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Pioneer

67.	Extremely bad	1	2	3	4	5	6	7	Extremely good
68.	Extremely pleasant	1	2	3	4	5	6	7	Extremely unpleasant
69.	Extremely positive	1	2	3	4	5	6	7	Extremely negative
70.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable
71.	Extremely desireable	1	2	3	4	5	6	7	Extremely undesireable
72.	Extremely satisfactory	1	2	3	4	5	6	7	Extremely unsatisfactory

Technics

73.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
74.	Extremely pleasant	____	____	____	____	____	____	____	Extremely unpleasant
		1	2	3	4	5	6	7	
75.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
76.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
77.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
78.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Panasonic

79.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
80.	Extremely pleasant	____	____	____	____	____	____	____	Extremely unpleasant
		1	2	3	4	5	6	7	
81.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
82.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
83.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
84.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Toshiba

85.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
86.	Extremely pleasant	____	____	____	____	____	____	____	Extremely unpleasant
		1	2	3	4	5	6	7	
87.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
88.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
89.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
90.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Casio

91.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
92.	Extremely pleasant	____	____	____	____	____	____	____	Extremely unpleasant
		1	2	3	4	5	6	7	
93.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
94.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
95.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
96.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

OPINION QUESTIONNAIRE

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to indicate your opinion by filling in the appropriate bubble on the OPSCAN. For example, if you were asked to rate "The Weather in Blacksburg" on such a scale, the seven places should be interpreted as follows:

The Weather in Blacksburg is

Extremely bad	_____	_____	_____	_____	_____	_____	_____	**Extremely good**
	1	2	3	4	5	6	7	

If you think the Weather in Blacksburg is extremely bad, then you would place your mark as follows:

● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is extremely good, then you would place your mark as follows:

① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is somewhere in between these extremes, please fill-in the appropriate bubble on your OPSCAN.

PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN. In making your ratings please be sure to answer all items, and never make more than one mark for a single question.

Now we want you to think about the **last four years**. For questions which ask you to provide a **numeric estimate**, please mark 0 when you wish to answer zero, none, or no. Please mark 9 when your answer is nine or more.

1. How often have you considered purchasing any **Emerson** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

2. How many times have you actually purchased any **Emerson** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

3. How often have you used **Emerson** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

4. How often have you considered purchasing any **Nike** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

5. How many times have you actually purchased any **Nike** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

6. How often have you used **Nike** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

7. How often have you considered purchasing any **Sylvania** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

8. How many times have you actually purchased any **Sylvania** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

9. How often have you used **Sylvania** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

10. How often have you considered purchasing any **Rolex** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

11. How many times have you actually purchased any **Rolex** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

12. How often have you used **Rolex** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

13. How often have you considered purchasing any **General Electric** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

14. How many times have you actually purchased any **General Electric** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

15. How often have you used **General Electric** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

16. How often have you considered purchasing any **Sharp** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

17. How many times have you actually purchased any **Sharp** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

18. How often have you used **Sharp** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

19. How often have you considered purchasing any **Magnavox** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

20. How many times have you actually purchased any **Magnavox** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

21. How often have you used **Magnavox** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

22. How often have you considered purchasing any **Zenith** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

23. How many times have you actually purchased any **Zenith** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

24. How often have you used **Zenith** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

25. How often have you considered purchasing any **RCA** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

26. How many times have you actually purchased any **RCA** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

27. How often have you used **RCA** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

28. How often have you considered purchasing any **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

29. How many times have you actually purchased any **Kodak** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

30. How often have you used **Kodak** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

31. How often have you considered purchasing any **Black and Decker** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

32. How many times have you actually purchased any **Black and Decker** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

33. How often have you used **Black and Decker** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

34. How often have you considered purchasing any **Pioneer** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

35. How many times have you actually purchased any **Pioneer** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

36. How often have you used **Pioneer** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

37. How often have you considered purchasing any **Technics** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

38. How many times have you actually purchased any **Technics** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

39. How often have you used **Technics** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

40. How often have you considered purchasing any **Panasonic** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

41. How many times have you actually purchased any **Panasonic** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

42. How often have you used **Panasonic** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

43. How often have you considered purchasing any **Toshiba** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

44. How many times have you actually purchased any **Toshiba** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

45. How often have you used **Toshiba** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

46. How often have you considered purchasing any **Casio** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

47. How many times have you actually purchased any **Casio** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

48. How often have you used **Casio** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

MAKE SURE YOUR STUDENT NUMBER IS ON YOUR OPSCAN.

OPINION QUESTIONNAIRE

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to indicate your opinion by filling in the appropriate bubble on the OPSCAN. For example, if you were asked to rate "The Weather in Blacksburg" on such a scale, the seven places should be interpreted as follows:

The Weather in Blacksburg is

Extremely bad	_____	: _____	: _____	: _____	: _____	: _____	: _____	**Extremely good**
	1	2	3	4	5	6	7	

If you think the Weather in Blacksburg is extremely bad, then you would place your mark as follows:

● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is extremely good, then you would place your mark as follows:

① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨ ⑩

If you think the Weather in Blacksburg is somewhere in between these extremes, please fill-in the appropriate bubble on your OPSCAN.

PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN. In making your ratings please be sure to answer all items, and never make more than one mark for a single question.

Please mark your OPSCAN as indicated to show your opinion of each of the following brands.

Emerson

1.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
2.	**Extremely appealing**	1	2	3	4	5	6	7	**Extremely unappealing**
3.	**Extremely positive**	1	2	3	4	5	6	7	**Extremely negative**
4.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**
5.	**Extremely desireable**	1	2	3	4	5	6	7	**Extremely undesireable**
6.	**Extremely satisfactory**	1	2	3	4	5	6	7	**Extremely unsatisfactory**

Nike

7.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
8.	**Extremely appealing**	1	2	3	4	5	6	7	**Extremely unappealing**
9.	**Extremely positive**	1	2	3	4	5	6	7	**Extremely negative**
10.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**
11.	**Extremely desireable**	1	2	3	4	5	6	7	**Extremely undesireable**
12.	**Extremely satisfactory**	1	2	3	4	5	6	7	**Extremely unsatisfactory**

Bic

13.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
14.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
15.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
16.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
17.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
18.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Pillsbury

19.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
20.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
21.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
22.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
23.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
24.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Carnation

25.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
26.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
27.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
28.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
29.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
30.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Pepperidge Farm

31.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
32.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
33.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
34.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
35.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
36.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Kraft

37.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
38.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
39.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
40.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
41.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
42.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

Heinz

43.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
44.	Extremely appealing	____	____	____	____	____	____	____	Extremely unappealing
		1	2	3	4	5	6	7	
45.	Extremely positive	____	____	____	____	____	____	____	Extremely negative
		1	2	3	4	5	6	7	
46.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	
47.	Extremely desireable	____	____	____	____	____	____	____	Extremely undesireable
		1	2	3	4	5	6	7	
48.	Extremely satisfactory	____	____	____	____	____	____	____	Extremely unsatisfactory
		1	2	3	4	5	6	7	

French's

49.	Extremely bad	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely good
50.	Extremely appealing	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely unappealing
51.	Extremely positive	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely negative
52.	Extremely unfavorable	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely favorable
53.	Extremely desireable	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely undesireable
54.	Extremely satisfactory	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely unsatisfactory

Glad

55.	Extremely bad	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely good
56.	Extremely appealing	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely unappealing
57.	Extremely positive	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely negative
58.	Extremely unfavorable	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely favorable
59.	Extremely desireable	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely undesireable
60.	Extremely satisfactory	_____ 1	: _____ 2	: _____ 3	: _____ 4	: _____ 5	: _____ 6	: _____ 7	Extremely unsatisfactory

Now we want you to think about the last four years. **REMEMBER, PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN.** For questions which ask you to provide a **numeric estimate**, please mark 0 when you wish to answer zero, none, or no. Please mark 9 when your answer is nine or more.

61. How often have you considered purchasing any **Emerson** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

62. How many times have you actually purchased any **Emerson** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

63. How often have you used **Emerson** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

64. How often have you considered purchasing any **Nike** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

65. How many times have you actually purchased any **Nike** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

66. How often have you used **Nike** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

67. How often have you considered purchasing any **Bic** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

68. How many times have you actually purchased any **Bic** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

69. How often have you used **Bic** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

70. How often have you considered purchasing any **Pillsbury** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

71. How many times have you actually purchased any **Pillsbury** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

72. How often have you used **Pillsbury** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

73. How often have you considered purchasing any **Carnation** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

74. How many times have you actually purchased any **Carnation** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

75. How often have you used **Carnation** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

76. How often have you considered purchasing any **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

77. How many times have you actually purchased any **Pepperidge Farm** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

78. How often have you used **Pepperidge Farm** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

79. How often have you considered purchasing any **Kraft** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

80. How many times have you actually purchased any **Kraft** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

81. How often have you used **Kraft** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

82. How often have you considered purchasing any **Heinz** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

83. How many times have you actually purchased any **Heinz** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

84. How often have you used **Heinz** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

85. How often have you considered purchasing any **French's** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

86. How many times have you actually purchased any **French's** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

87. How often have you used **French's** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

88. How often have you considered purchasing any **Glad** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

89. How many times have you actually purchased any **Glad** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

90. How often have you used **Glad** products?

About _____ times a month.

0 1 2 3 4 5 6 7 8 9 (or more)

MAKE SURE YOUR STUDENT NUMBER IS ON YOUR OPSCAN.

Appendix C: Pretest 2 Idea Generation Questionnaire

Student #_____

OPINION QUESTIONNAIRE

Please list all the different types of products you know to be sold under each brand name. For example, binoculars, 35mm cameras, and camera lenses are sold under the **Nikon** brand name.

General Electric

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Kodak

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Black and Decker

_____
_____
_____
_____
_____
_____

_____
_____
_____
_____
_____
_____

One type of brand extensions are category extensions. Category extensions use the old brand name on a product in a **new product category**. So Nikon might introduce a television set--which is a product category new to this brand. Companies may extend their brands into product categories that are very congruent with the brand image, somewhat congruent with the brand image, and very incongruent with the brand image. For example camcorders may be very congruent with Nikon's brand image, sunglasses and eyewear may be somewhat congruent with Nikon's brand image, and office furniture may be very incongruent with Nikon's brand image.

Please form small groups now.

Now, **within your group**, we want you to come up with several lists. We want you to think about the brand name **General Electric**. Think about the image of **General Electric** and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to **General Electric** but most **consistent** with their present offerings? In otherwords, what new categories would **General Electric** find it **extremely easy** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to **General Electric** but **least consistent** with their present offerings? In otherwords, what new categories would **General Electric** find it **difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to **General Electric** but only **somewhat consistent** with their present offerings? In otherwords, what new categories would **General Electric** find it **moderately difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now, we want you to think about the brand name **Kodak**. Think about the image of Kodak and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to Kodak but most **consistent** with their present offerings? In otherwords, what new categories would **Kodak** find it **extremely easy** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to **Kodak** but **least consistent** with their present offerings? In otherwords, what new categories would **Kodak** find it **difficult** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to **Kodak** but only **somewhat consistent** with their present offerings? In otherwords, what new categories would **Kodak** find it **moderately difficult** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now, we want you to think about the brand name **Black and Decker**. Think about the image of **Black and Decker** and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to **Black and Decker** but most **consistent** with their present offerings? In otherwords, what new categories would **Black and Decker** find it **extremely easy** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to **Black and Decker** but **least consistent** with their present offerings? In otherwords, what new categories would **Black and Decker** find it **difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to **Black and Decker** but only **somewhat consistent** with their present offerings? In otherwords, what new categories would **Black and Decker** find it **moderately difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Student #_____

OPINION QUESTIONNAIRE

Please list all the different types of products you know to be sold under each brand name. For example, binoculars, 35mm cameras, and camera lenses are sold under the Nikon brand name.

Carnation	Pepperidge Farm
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Kraft	
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

One type of brand extensions are category extensions. Category extensions use the old brand name on a product in a new product category. So Nikon might introduce a television set--which is a product category new to this brand. Companies may extend their brands into product categories that are very congruent with the brand image, somewhat congruent with the brand image, and very incongruent with the brand image. For example camcorders may be very congruent with Nikon's brand image, sunglasses and eyewear may be somewhat congruent with Nikon's brand image, and office furniture may be very incongruent with Nikon's brand image.

Please form small groups now.

Now, **within your group**, we want you to come up with several lists. We want you to think about the brand name **Carnation**. Think about the image of **Carnation** and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to **Carnation** but most **consistent** with their present offerings? In otherwords, what new categories would **Carnation** find it **extremely easy** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to **Carnation** but **least consistent** with their present offerings? In otherwords, what new categories would **Carnation** find it **difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to **Carnation** but only **somewhat consistent** with their present offerings? In otherwords, what new categories would **Carnation** find it **moderately difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now, we want you to think about the brand name **Pepperidge Farms**. Think about the image of **Pepperidge Farms** and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to **Pepperidge Farms** but most **consistent** with their present offerings? In otherwords, what new categories would **Pepperidge Farm** find it **extremely easy** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to **Pepperidge Farms** but **least consistent** with their present offerings? In otherwords, what new categories would **Pepperidge Farm** find it **difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to **Pepperidge Farm** but only **somewhat consistent** with their present offerings? In otherwords, what new categories would **Pepperidge Farms** find it **moderately difficult** to extend to, given their **image**. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now, we want you to think about the brand name **Kraft**. Think about the image of Kraft and what it means to you. Imagine this brand is thinking about extending the brand into products new to them.

1. As a consumer, what new product categories do you think are new to Kraft but most **consistent** with their present offerings? In otherwords, what new categories would Kraft find it **extremely easy** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

2. As a consumer, what product categories do you think are new to Kraft but **least consistent** with their present offerings? In otherwords, what new categories would Kraft find it **difficult** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

3. As a consumer, what product categories do you think are new to Kraft but only **somewhat consistent** with their present offerings? In otherwords, what new categories would Kraft find it **moderately difficult** to extend to, given their image. Please make a list as a group.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Appendix D: Pretest 2 Perceived Congruity Questionnaire

Student # _____

OPINION QUESTIONNAIRE

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to make a checkmark in the place that best describes your opinion as a **consumer**. For example, if you were asked whether "Umbrellas are important to have in Blacksburg" on such a scale, the seven places should be interpreted as follows:

Umbrellas are important to have in Blacksburg.

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

If you **strongly agree** that umbrellas are important to have in Blacksburg, then you would place your mark as follows:

Umbrellas are important to have in Blacksburg.

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

If you **strongly disagree** that umbrellas are important to have in Blacksburg, then you would place your mark as follows:

Umbrellas are important to have in Blacksburg.

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

If you agree or disagree less strongly and somewhere in between these extremes, please check the appropriate space.

In making your ratings please be sure to answer all items, and never put more than one checkmark on a single scale.

Think about the brand name **Carnation.** Think about the image of **Carnation** and what it means to you as a **consumer.** This brand is thinking about introducing new products. Please answer the following questions concerning each of these new products.

CHOCOLATE MILK

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

BEER

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

PUDDING

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

KETCHUP

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

FRUIT JUICE

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

BREAKFAST CEREAL

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

PICKLES

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

SOUP

This product is consistent with the Carnation image.

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

I would **not** expect Carnation to make this product.

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

This product is consistent with what I know about Carnation.

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

This product is **not** similar to other products that Carnation makes.

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

Think about the brand name **Pepperidge Farm.** Think about the image of **Pepperidge Farm** and what it means to you as a **consumer.** This brand is thinking about introducing new products. Please answer the following questions concerning each of these new products.

BIRD FEEDER

This product is consistent with the Pepperidge Farm image.

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

I would **not** expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is **not** similar to other products that Pepperidge Farm makes.

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

MUFFINS

This product is consistent with the Pepperidge Farm image.

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

I would **not** expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is **not** similar to other products that Pepperidge Farm makes.

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

DAIRY TOPPING

This product is consistent with the Pepperidge Farm image.

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

I would **not** expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is **not** similar to other products that Pepperidge Farm makes.

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

POTATO CHIPS

This product is consistent with the Pepperidge Farm image.

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

I would **not** expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is **not** similar to other products that Pepperidge Farm makes.

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

MUSTARD

This product is consistent with the Pepperidge Farm image.

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

I would not expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is not similar to other products that Pepperidge Farm makes.

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

BAGELS

This product is consistent with the Pepperidge Farm image.

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

I would not expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is not similar to other products that Pepperidge Farm makes.

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

SALAD DRESSING

This product is consistent with the Pepperidge Farm image.

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

I would not expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is not similar to other products that Pepperidge Farm makes.

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

PET FOOD

This product is consistent with the Pepperidge Farm image.

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

I would not expect Pepperidge Farm to make this product.

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

This product is consistent with what I know about Pepperidge Farm.

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

This product is not similar to other products that Pepperidge Farm makes.

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

Think about the brand name Kodak. Think about the image of Kodak and what it means to you as a consumer. This brand is thinking about introducing new products. Please answer the following questions concerning each of these new products.

CAMERA CASE

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

JEWELRY

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

CALCULATOR

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

DISHWASHER

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

CAMCORDER

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

COMPACT DISC PLAYER

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

SUNGLASSES

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

ELECTRIC SCREWDRIVER

This product is consistent with the Kodak image.

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

I would not expect Kodak to make this product.

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

This product is consistent with what I know about Kodak.

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

This product is not similar to other products that Kodak makes.

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

Think about the brand name **Black and Decker.** Think about the image of **Black** and Decker and what it means to you as a **consumer.** This brand is thinking about introducing new products. Please answer the following questions concerning each of these new products.

OFFICE FURNITURE

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is **not** similar to other products that Black and Decker makes.

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

COFFEE GRINDER

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is **not** similar to other products that Black and Decker makes.

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

TELEPHONE

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

CARPETING

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

ELECTRIC FAN

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

VCR

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

WATCH

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

HAIR DRYER

This product is consistent with the Black and Decker image.

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

I would not expect Black and Decker to make this product.

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

This product is consistent with what I know about Black and Decker.

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

This product is not similar to other products that Black and Decker makes.

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

Appendix E: Experimental Procedure--Experiment 1 and Experiment 3

Thank-you for participating in this study. We are interested in the opinions of student consumers. There are two parts to this survey. Part of this study requires you to think out-loud. So, our session will be tape-recorded, so these thoughts can be transcribed and written down later. We are interested in student consumers as a whole and not in individual responses. Thus we use only your student number to identify the interview. Do you have any questions?

In this first part of the survey we are going to introduce you to two brands that are new to you--Brand A and Brand Z. I will show you a sheet that contains information about these two brands. It is very important that you pay very close attention to this information. You will be tested on this information later. Also, I will ask your preference of these brands as compared to others later on. Therefore, you should try to form an impression of each of these brands. Do you have any questions?

Brand Descriptions

The following are brief descriptions of each brand's product offerings.

Brand A:

Products offered:

Low Fat Cottage Cheese
Packaged Macaroni and Cheese
Lite Cheesecake and Other Lite Frozen Desserts

When asked the most important attributes of Brand A, a group of consumers replied:

Healthy
Creaminess
Cheese
Smooth

Brand Z:

Products offered:

Exercise Equipment (Treadmills, Stationary Bicycles)
Women's Workout Shoes and Clothes
Women's Swimming Suits

When asked the most important attributes of Brand Z, a group of consumers replied:

High-tech
Health
Unique materials
Functional

Remember, to form an impression of each of these brands, because you will be tested on this information and will need indicate your opinion of these two brands later. When you feel you have formed an impression, please hand this sheet back to me.

Student #_____

Please use a checkmark to indicate your opinion of each of these brands on the scales below.

Brand A

1.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
2.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
3.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
4.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Brand Z

5.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
6.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
7.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
8.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

What is your student #?

Now, tell me everything that comes easily to mind when you think about Brand A.

Does anything else come easily to mind?

Now, tell me everything that comes easily to mind when you think about Brand Z.

Does anything else come easily to mind?

INSTRUCTIONS: Please answer a few general questions about yourself.

Age: _____

Marital Status: Married_____ Single_____

Gender: Female_____ Male_____

Present classification: Freshman_____
Sophomore_____
Junior_____
Senior_____
Graduate Student_____

Major: Marketing____
Accounting____
Finance____
Management____
Management Science____
Other (specify)_____

In this portion of the survey I will ask you to express your thoughts out-loud as you rate some potential new products. I want you to talk as you think, not think and then talk, OK?

The two brands you just read about, Brand A and Brand Z, are thinking of introducing some new products. We want to know how you as a consumer would rate these potential new products. You will be asked to rate one potential product idea at a time. I want you to express any and all of your thoughts out-loud as you appraise each product.

Do you have any questions? Are the instructions clear?

REMEMBER, to express your thoughts out-loud as you appraise each product.

Now, please appraise Brand A potato chips.

Do you have any more thoughts? Have you completed your appraisal of Brand A potato chips? How would you rate it, -3 to +3?

Ok, let's go on to the next product.

Please appraise Brand Z watch.

Do you have any more thoughts? Have you completed your appraisal of Brand Z watch? How would you rate it, -3 to +3?

Now we will go to the second part of this survey.

Schema Activation Test
(BRAND PRIMED)

This part of the survey also asks you to express your thoughts out-loud as you rate some other potential new products. Again, please talk as you think. Again, we want to know how you as a consumer would rate some potential new products. You will be asked to rate one potential product idea at a time. We want you to express <u>any</u> and <u>all</u> of your thoughts out-loud as you appraise or evaluate each product.

Do you have any questions? Are these instructions clear?
*****
Are you familiar with the brand Kodak? Kodak is considering introducing several new products. Take a moment to think TO YOURSELF about the brand Kodak.

10 count

Now, please express your thoughts OUTLOUD. Please appraise Kodak calculator.

Do you have any more thoughts? Have you completed your appraisal of Kodak calculator? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise Kodak cd player.

Do you have any more thoughts? Have you completed your appraisal of Kodak cd player? How would you rate it, -3 to +3?

Are you familiar with the brand Pepperidge Farm? Pepperidge Farm is considering introducing several new products. Take a moment to think TO YOURSELF about the brand Pepperidge Farm.

10 count

Now, please express your thoughts OUTLOUD. Please appraise Pepperidge Farm salad dressing.

Do you have any more thoughts? Have you completed your appraisal of Pepperidge Farm salad dressing? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise Pepperidge Farm dairy topping.

Do you have any more thoughts? Have you completed your appraisal of Pepperidge Farm dairy topping? How would you rate it, -3 to +3?

This concludes the study.

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

Since there will be many other students taking this survey, please do not discuss it either with anyone in your class or outside of your class. Your help will ensure unbiased and accurate measures of what students consumers really think.

Schema Activation Test
(PRODUCT CATEGORY PRIMED)

This part of the survey also asks you to express your thoughts out-loud as you rate some other potential new products. Again, please talk as you think. Again, we want to know how you as a **consumer** would rate some potential new products. You will be asked to rate one potential product idea at a time. We want you to express <u>any</u> and <u>all</u> of your thoughts out-loud as you appraise or evaluate each product.

Do you have any questions? Are these instructions clear?
*****
Are you familiar with calculators? Several manufacturers are considering introducing calculators. Take a moment to think TO YOURSELF about calculators.

10 count

Now, please express your thoughts OUTLOUD. Please appraise Kodak calculator.

Do you have any more thoughts? Have you completed your appraisal of Kodak calculator? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise RCA calculator.

Do you have any more thoughts? Have you completed your appraisal of RCA calculator? How would you rate it, -3 to +3?

Are you familiar with salad dressings? Several manufacturers are also considering introducing salad dressings. Take a moment to think TO YOURSELF about salad dressing.

10 count

Now, please express your thoughts OUTLOUD. Please appraise Pepperidge Farm salad dressing.

Do you have any more thoughts? Have you completed your appraisal of Pepperidge Farm salad dressing? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise Pillsbury salad dressing.

Do you have any more thoughts? Have you completed your appraisal of Pillsbury salad dressing? How would you rate it, -3 to +3?

This concludes the study.

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

Since there will be many other students taking this survey, please do not discuss it either with anyone in your class or outside of your class. Your help will ensure unbiased and accurate measures of what students consumers really think.

(Check to see if Product Category was primed.)

Schema Activation Test
(NO PRIME)

This part of the survey also asks you to express your thoughts out-loud as you rate some other potential new products. Again, please talk as you think. Again, we want to know how you as a consumer would rate some potential new products. You will be asked to rate one potential product idea at a time. We want you to express <u>any</u> and <u>all</u> of your thoughts out-loud as you appraise or evaluate each product.

Do you have any questions? Are these instructions clear?
*****
Several well-known companies are considering introducing various new products. Now I'll name the potential new product to be appraised.

Now, please express your thoughts OUTLOUD. Please appraise Kodak calculator.

Do you have any more thoughts? Have you completed your appraisal of Kodak calculator? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise RCA cd player.

Do you have any more thoughts? Have you completed your appraisal of RCA cd player? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise Pepperidge Farm salad dressing.

Do you have any more thoughts? Have you completed your appraisal of Pepperidge Farm salad dressing? How would you rate it, -3 to +3?

Again, please express your thoughts OUTLOUD. Please appraise Pillsbury dairy topping.

Do you have any more thoughts? Have you completed your appraisal of Pillsbury dairy topping? How would you rate it, -3 to +3?

This concludes the study.

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

Since there will be many other students taking this survey, please do not discuss it either with anyone in your class or outside of your class. Your help will ensure unbiased and accurate measures of what students consumers really think.

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel these potential new products are with your image of each of the brands.

Brand A potato chips

This product is consistent with the Brand A image.

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

I would not expect Brand A to make this product.

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

This product is consistent with what I know about Brand A.

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

This product is not similar to other products that Brand A makes.

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

Brand Z watch

This product is consistent with the Brand Z image.

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

I would not expect Brand Z to make this product.

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

This product is consistent with what I know about Brand Z.

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

This product is not similar to other products that Brand Z makes.

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

Kodak calculator

This product is consistent with the Kodak image.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

I would not expect Kodak to make this product.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

This product is consistent with what I know about Kodak.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

This product is not similar to other products that Kodak makes.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Pepperidge Farm salad dressing

This product is consistent with the Pepperidge Farm image.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

I would not expect Pepperidge Farm to make this product.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

This product is consistent with what I know about Pepperidge Farm.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

This product is not similar to other products that Pepperidge Farm makes.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

INSTRUCTIONS: Finally, we want to ask you some questions about the study you have just participated in.

I

wanted _____:_____:_____:_____:_____:_____:_____ did not want
1 2 3 4 5 6 7

to do a good job.

I

did not care _____:_____:_____:_____:_____:_____:_____ did care
1 2 3 4 5 6 7

about my performance.

This study was

enjoyable _____:_____:_____:_____:_____:_____:_____ unenjoyable
1 2 3 4 5 6 7

This study was

boring _____:_____:_____:_____:_____:_____:_____ interesting
1 2 3 4 5 6 7

I would

recommend _____:_____:_____:_____:_____:_____:_____ not recommend
1 2 3 4 5 6 7

participation in this study.

What do you think the purpose of this study was?

When did you determine that this was the purpose?

Self-coding Instructions

INSTRUCTIONS TO SUBJECT: There's just one more part to do. The whole idea of having you express your thoughts outloud is so we can get an idea of what you were thinking as you were doing this task. And rather than trying to interpret what you said to figure out what you were thinking at the time, it is a lot easier since you're here to have you retrospect. So, we want you to listen to the tape and try to recollect what you were thinking about at the time. Specifically what we are interested in is: were you thinking about the product category in general, or were you thinking about the brand, or were you thinking about something else? I think that this will be a lot clearer when we listen to the tape.

PLAY TAPE

FOR EACH RECOLLECTION, VALDIDATE: Do you mean you were thinking about Kodak calculator in terms of Kodak compared to other calculators (product category) or in terms of a calculator compared to other Kodak products (brand schema)?

What were you thinking about when you said "_____"?

Questions: Product category, i.e., _____ in general??
Brand, i.e., _____ in general??
Or ????

Subj#_____

Counter/Note	Product category	Brand	Other (specify)

Appendix F: Effect Size Formulas

The r listed as an effect size index for the results of the tests of proportion greater than .50 in experiment 1 was derived from Cohen's (1988) h. According to Cohen:

$$h = 2\arcsin\sqrt{PI} - 2\arcsin\sqrt{.50} \ .$$

Then, according to Kraemer and Thiemann (1987):

$$r = \frac{e^{2h}-1}{e^{2h}+1} \ .$$

Similarly, the r for the contrast tested in experiment 1 was calculated according to Rosenthal and Rosnow (1984):

$$r = \sqrt{\frac{t^2}{t^2+df}} \ .$$

The d listed as an effect size index for the results of the tests of non-independent correlation coefficients in Experiment 2 was estimated according to Rosenthal and Rosnow (1984):

$$d = \frac{2t}{\sqrt{df}} \ .$$

However, d estimated in this way was not derived from the t-test for non-independent correlation coefficients. No equivalent for d for this particular test has been reported in the literature. Therefore, the accuracy of this estimate and the level of power based on the estimate, was checked by converting the single sample, non-independent correlation coefficients into semi-partial coefficients. These semi-partial or part correlations were calculated by partialling out each of the criterion

variables from each other (Pedhazur 1982). Thus, $r_{BEE(BA.PA)}$, $r_{BEE(PA.BA)}$, $r_{BEE(BA.IA)}$, and $r_{BEE(IA.BA)}$ were calculated, producing the equivalent of independent correlation coefficients. These coefficients were transformed to r' and tested using Fisher's z statistic using:

$$z = \frac{r_1' - r_2'}{\sqrt{\frac{2}{N-3}}} .$$

The p values obtained with this test were equivalent to those found using the non-independent t-test. Additionally, power estimated using Cohen's (1988) tables for effect size q, yielded estimates within .01 of the power estimated using the d effect size estimate. Therefore, the accuracy of the estimates of d and subsequent power estimates were considered adequate.

The d reported for the t-test contrasts in experiment 3 was estimated as follows. First each effect was estimated according to Rosenthal and Rosnow (1984):

$$\hat{d}_z = \frac{t}{\sqrt{df}} .$$

However, this formula yields an effect size which is reported in units of variance of the difference scores. The following formula from Cohen (1988) was used to convert the raw effect size into a d comparable to those used in tests of independent samples:

$$d = \hat{d}_z\sqrt{2(1-r)}$$

where r is the correlation between the two pairs (type of thoughts) on

the dependent variable (number of thoughts).

Appendix G: Experiment 1 and Experiment 3 Premeasurement Session Questionnaire

Student # _____

CONSUMER OPINION QUESTIONNAIRE

Please read these instructions carefully as you begin. Throughout this survey please only work on one page at a time. Neither turn ahead to other pages before you have finished your task, nor turn back to a previous page once you have finished it.

We want to know how familiar student consumers are with various products. We want to know what you as a consumer think about several different brands and products.

In the first part of the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to make a checkmark in the place that best describes your opinion as a consumer. For example, if you were asked whether "Honda makes good cars" on such a scale, the seven places should be interpreted as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly agree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	✓	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly disagree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	✓	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you agree or disagree less strongly and somewhere in between these extremes, please check the appropriate space.

Please turn the page and begin. And remember, work on only one page at a time in the order presented.

INSTRUCTIONS: Now we wish to find out how familiar you are with certain brands and products. Now we want you to think about the **last two years.** For questions which ask you to provide a **numeric estimate,** please fill in the blanks.

How often have you considered purchasing any **RCA** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **RCA** products?

About _____ times in the last two years.

How familiar are you with **RCA** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **RCA** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How often have you considered purchasing any **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Pepperidge Farm** products?

About _____ times in the last two years.

How familiar are you with **Pepperidge Farm** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

Remember, we want you to think about the **last two years.**

How often have you considered purchasing any **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Kodak** products?

About _____ times in the last two years.

How familiar are you with **Kodak** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How often have you considered purchasing any **Pillsbury** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Pillsbury** products?

About _____ times in the last two years.

How familiar are you with **Pillsbury** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Pillsbury** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

Remember, we want you to think about the **last two years.**

How often have you considered purchasing a **cd player?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **cd player?**

About _____ times in the last two years.

How familiar are you with **cd players?**

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **cd player?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How often have you considered purchasing **salad dressing?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased **salad dressing?**

About _____ times in the last two years.

How familiar are you with **salad dressings?**

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **salad dressing?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

Remember, we want you to think about the **last two years**.

How often have you considered purchasing a **calculator**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **calculator**?

About _____ times in the last two years.

How familiar are you with **calculators**?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **calculator**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How often have you considered purchasing a **dairy topping**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **dairy topping**?

About _____ times in the last two years.

How familiar are you with **dairy toppings**?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **dairy topping**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

INSTRUCTIONS: We are trying to determine what image students' have of various products. Think about each of the following products. What image does the product have for you as a consumer? Please write down all the thoughts that come easily to mind when you read each of these products. Please work on each list separately and do not go back and add to or change your list once you have gone on to the next product.

Potato Chips

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Hair Dryer

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Remember to write down all the thoughts that come easily to mind.

Breakfast Cereal

Soup

Remember to write down all the thoughts that come easily to mind.

Watches

Frozen Dinners

Remember to write down all the thoughts that come easily to mind.

Electric Fan

Fruit Drink

MAKE SURE YOUR STUDENT NUMBER IS IN THE TOP RIGHT HAND CORNER OF THE FIRST PAGE. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE MANY OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT THESE PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

Appendix H: Pilot Study Session 1 and Session 2 Questionnaires

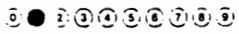
MARKETING SURVEY

This is a marketing survey to find out how student consumers really feel about various brands and products. In this survey we ask questions which make use of rating scales with seven places. You are to indicate your opinion by filling in the appropriate bubble on the OPSCAN. For example, if you were asked to rate "Budweiser" on such a scale, the seven places should be interpreted as follows:

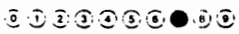
Budweiser is

Extremely bad	_____	: _____	: _____	: _____	: _____	: _____	: _____	**Extremely good**
	1	2	3	4	5	6	7	

If you think Budweiser is extremely bad, then you would place your mark as follows:



If you think Budweiser is extremely good, then you would place your mark as follows:



If you think Budweiser is somewhere in between these two extremes, you would fill-in the appropriate bubble on your OPSCAN. If you are completely unfamiliar with the brand or product mark response 4.

PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN. In making your ratings please be sure to answer all items, and never make more than one mark for a single question.

Please mark your OPSCAN to show your opinion of each of the following brands.

Rolex

1.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
2.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
3.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
4.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Glad

5.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
6.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
7.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
8.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Kodak

9.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
10.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
11.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
12.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Carnation

13.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
14.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
15.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
16.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Black and Decker

17.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
18.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
19.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
20.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Pepperidge Farm

21.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
22.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
23.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
24.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Please mark your OPSCAN to show your opinion of each of the following products.

Pickles

25.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
26.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
27.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
28.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Electric Fans

29.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
30.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
31.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
32.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Salad Dressings

33.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
34.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
35.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
36.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Watches

37.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
38.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
39.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
40.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Puddings

41.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
42.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
43.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
44.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Calculators

45.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
46.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
47.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
48.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Pet Food

49.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
50.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
51.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
52.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Camcorders

53.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
54.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
55.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
56.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Soups

57.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
58.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
59.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
60.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Electric Screwdrivers

61.	Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely good
		1	2	3	4	5	6	7	
62.	Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely satisfactory
		1	2	3	4	5	6	7	
63.	Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely positive
		1	2	3	4	5	6	7	
64.	Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely favorable
		1	2	3	4	5	6	7	

Bagels

65.	Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely good
		1	2	3	4	5	6	7	
66.	Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely satisfactory
		1	2	3	4	5	6	7	
67.	Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely positive
		1	2	3	4	5	6	7	
68.	Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely favorable
		1	2	3	4	5	6	7	

Telephones

69.	Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely good
		1	2	3	4	5	6	7	
70.	Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely satisfactory
		1	2	3	4	5	6	7	
71.	Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely positive
		1	2	3	4	5	6	7	
72.	Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	Extremely favorable
		1	2	3	4	5	6	7	

MAKE SURE YOUR STUDENT NUMBER IS IN THE UPPER RIGHT HAND CORNER OF YOUR OPSCAN. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT MANY PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

101 _1

Student # _____

CONSUMER OPINION QUESTIONNAIRE

Please read these instructions carefully as you begin. Throughout this survey please only work on one page at a time. Neither turn ahead to other pages before you have finished your task, nor turn back to a previous page once you have finished it.

We want to know how you as a **consumer** would rate some new products that several companies may introduce. You will be asked to rate one potential product idea at a time. Please write down your thoughts as you appraise each product. For each thought you write down indicate how positive or negative the thought is. Please indicate your opinion of the potential product after you have written and rated all your thoughts and finished your appraisal.

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to make a checkmark in the place that best describes your opinion as a **consumer**. For example, if you were asked whether "Honda makes good cars" on such a scale, the seven places should be interpreted as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly agree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	✓	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly disagree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	✓	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you agree or disagree less strongly and somewhere in between these extremes, please check the appropriate space.

Please turn the page and begin. And remember, work on only one page at a time in the order presented.

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Kodak**.

Kodak camcorder

This product is consistent with the **Kodak** image.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

I would **not** expect **Kodak** to make this product.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is consistent with what I know about **Kodak**.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is **not** similar to other products that **Kodak** makes.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Please write down all your thoughts in the space provided below as you appraise the following potential new product. Remember to indicate how positive or negative each thought you write down is. Stop writing and rating your thoughts when you feel you have formed an appraisal of the potential product.

Kodak camcorder

____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative
____________________	**Extremely positive**	1	2	3	4	5	6	7	Extremely negative

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Kodak camcorder

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely interesting	____	____	____	____	____	____	____	**Extremely boring**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

Does **Kodak camcorder** make you feel:

Angry

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Happy

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Cheerful

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Irritated

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Pleased

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Repulsed

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

I like the **Kodak camcorder**.

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

I think the **Kodak camcorder** is bad.

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

I think the **Kodak camcorder** is valuable.

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

I think the **Kodak camcorder** is undesirable.

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

I approve of the **Kodak camcorder**.

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

INSTRUCTIONS: Now, we would like you to appraise another potential new product. Please write down all your thoughts in the space provided below as you appraise the following potential new product. Remember to indicate how positive or negative each thought you write down is. Stop writing and rating your thoughts when you feel you have formed an appraisal of the potential product.

Pepperidge Farm salad dressing

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

______________________________ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Pepperidge Farm salad dressing

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely interesting	____	____	____	____	____	____	____	**Extremely boring**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

Does **Pepperidge Farm salad dressing** make you feel:

Angry

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Happy

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Cheerful

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Irritated

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Pleased

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Repulsed

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

I like the **Pepperidge Farm salad dressing.**

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

I think the **Pepperidge Farm salad dressing** is bad.

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

I think the **Pepperidge Farm salad dressing** is valuable.

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

I think the **Pepperidge Farm salad dressing** is undesirable.

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

I approve of the **Pepperidge Farm salad dressing.**

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

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Pepperidge Farm.**

Pepperidge Farm salad dressing

This product is consistent with the **Pepperidge Farm** image.

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

I would **not** expect **Pepperidge Farm** to make this product.

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

This product is consistent with what I know about **Pepperidge Farm.**

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

This product is **not** similar to other products that **Pepperidge Farm** makes.

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

INSTRUCTIONS: Now, we would like you to appraise another potential new product. Please write down all your thoughts in the space provided below as you appraise the following potential new product. Remember to indicate how positive or negative each thought you write down is. Stop writing and rating your thoughts when you feel you have formed an appraisal of the potential product.

Black and Decker watch

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

____________________ **Extremely positive** ____:____:____:____:____:____:____ **Extremely negative**
1 2 3 4 5 6 7

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Black and Decker watch

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely interesting	____	____	____	____	____	____	____	**Extremely boring**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

Does **Black and Decker watch** make you feel:

Angry

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Happy

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Cheerful

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Irritated

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Pleased

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

Repulsed

Very much so	____	____	____	____	____	____	____	**Not at all**
	1	2	3	4	5	6	7	

I like the **Black and Decker watch.**

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

I think the **Black and Decker watch** is bad.

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

I think the **Black and Decker watch** is valuable.

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

I think the **Black and Decker watch** is undesirable.

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

I approve of the **Black and Decker watch.**

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

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Black and Decker**.

Black and Decker watch

This product is consistent with the **Black and Decker** image.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

I would not expect **Black and Decker** to make this product.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is consistent with what I know about **Black and Decker**.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is not similar to other products that **Black and Decker** makes.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Please indicate your opinion of each of the following brands.

Kodak

Extremely bad	____	____	____	____	____	____	____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	____	____	____	____	____	____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	____	____	____	____	____	____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	____	____	____	____	____	____	**Extremely favorable**
	1	2	3	4	5	6	7	

Pepperidge Farm

Extremely bad	____	____	____	____	____	____	____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	____	____	____	____	____	____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	____	____	____	____	____	____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	____	____	____	____	____	____	**Extremely favorable**
	1	2	3	4	5	6	7	

Black and Decker

Extremely bad	____	____	____	____	____	____	____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	____	____	____	____	____	____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	____	____	____	____	____	____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	____	____	____	____	____	____	**Extremely favorable**
	1	2	3	4	5	6	7	

INSTRUCTIONS: The purpose of these questions is to measure a person's involvement or interest in various brands and products.

Using **Kodak** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products is important to achieve my personal values.

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

Using **Black and Decker** products doesn't have anything to do with me or my needs.

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

Using **Black and Decker** products is relevant to me.

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

Using **camcorders** is important to achieve my personal goals.

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

Using **camcorders** is important to achieve my personal values.

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

Using **camcorders** doesn't have anything to do with me or my needs.

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

Using **camcorders** is relevant to me.

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

Using **salad dressing** is important to achieve my personal goals.

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

Using **salad dressing** is important to achieve my personal values.

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

Using salad dressing doesn't have anything to do with me or my needs.

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

Using salad dressing is relevant to me.

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

Using a watch is important to achieve my personal goals.

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

Using a watch is important to achieve my personal values.

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

Using a watch doesn't have anything to do with me or my needs.

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

Using a watch is relevant to me.

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

INSTRUCTIONS: Now we wish to find out how familiar you are with certain brands and products. Now we want you to think about the **last two years**. For questions which ask you to provide **a numeric estimate**, please mark **0** when you wish to answer zero, none, or no. Please mark **9** when your answer is nine or more.

How often have you considered purchasing any **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Kodak** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Kodak** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing any **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Pepperidge Farm** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Pepperidge Farm** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

Remember, we want you to think about the **last two years.**

How often have you considered purchasing any **Black and Decker** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Black and Decker** products?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Black and Decker** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Black and Decker** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing a **camcorder?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **camcorder?**

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **camcorders?**

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **camcorder?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

Remember, we want you to think about the **last two years**.

How often have you considered purchasing a **salad dressing**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **salad dressing**?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **salad dressings**?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **salad dressing**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing a **watch**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **watch**?

About _____ times in the last four years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **watches**?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **watch**?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

INSTRUCTIONS: Finally, we want to ask you some questions about the survey you have just filled out.

I

wanted ____:____:____:____:____:____:____ did not want
1 2 3 4 5 6 7

to do a good job.

I

did not care ____:____:____:____:____:____:____ did care
1 2 3 4 5 6 7

about my performance.

This study was

enjoyable ____:____:____:____:____:____:____ unenjoyable
1 2 3 4 5 6 7

This study was

boring ____:____:____:____:____:____:____ interesting
1 2 3 4 5 6 7

I would

recommend ____:____:____:____:____:____:____ not recommend
1 2 3 4 5 6 7

participation in this study.

What do you think the purpose of this study was?

When did you determine that this was the purpose?

INSTRUCTIONS: In this section please answer a few general questions about yourself.

Age: _____

Marital Status: Married_____ Single_____

Gender: Female_____ Male_____

Present classification: Freshman_____
Sophomore_____
Junior_____
Senior_____
Graduate Student_____

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

MAKE SURE YOUR STUDENT NUMBER IS IN THE TOP RIGHT HAND CORNER OF THE FIRST PAGE. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE MANY OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT THESE NEW PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

Appendix I: Pilot Study and Experiment 2 Protocol Coding Instructions

Coding Scheme for Cognitive Responses in Main Experiment

You will be coding lists of subjects' cognitive responses to brand extension stimuli. You will asked to determine the total number of thoughts for each response sheet, and the total number of inferences for each response sheet.

Total number of thoughts is simply the total number of non-redundant responses expressed per sheet. Each thought should have at most only one adjective, subject, verb, and object, e.g., "known for great quality" or "good product". Responses which have more than one adjective, subject, verb, or object should be split/counted as multiple thoughts, e.g., "wholesome and healthy" is two thoughts, "quiet and efficient" is two thoughts, etc.

Inferences are specific belief statements which go beyond the stimulus/brand extension information. Stated beliefs should be coded as inferences only if they relate to the extension product and its purchase and use. Stated beliefs which are couched in managerial terms (manufacturing, advertising, etc.) should not be coded as inferences, e.g., "calculator would add to Kodak's line," "competition," or "seems to be a viable market." Stated beliefs which are simply general statements either about the general product category, brand, or about the brand extension should also not be coded as inferences, e.g., "known for great quality," "fits with image of company," "good brand name," "not appealing," or "good product." Total number of inferences is simply the total number of non-redundant inferences per sheet. Redundancy should be judged as discussed above for thoughts.

In general, inferences should concern the brand extension's features, use, usage situation, or user. General overall evaluations are <u>not</u> to be coded as inferences.

EXAMPLES

Features

This product probably has a timer.
This product looks pretty convenient.
That sounds like a good lens on that product.

Use/Usage situation/User

With this product you'll probably have to make a lot of tricky adjustments.
This product is more for vacation or family get-togethers.
This is a beginner's product.

Inferences

quality would not be as good
wholesome and healthy
quality product
industrial product
quality product
reliable
high priced
has latest technology
product would be durable

Non-inference evaluations

All these products are about the same.
This is a good product.

TEST

Extension product: Carnation pickles

good brand name
I like pickles
Carnation has a good image
milk products
Carnation and pickles do not go together
bread and butter pickles
pickles would be sweet
moderate price
Carnation brand is good
bad product
doesn't fit with the rest of Carnation's product line

Total # of thoughts_____
Which are inferences? Line(s)_____ Line(s)_____ Line(s)_____
Line(s)_____
Total # of inferences_____

Go through 10 questionnaires (30 response sheets) each. Then swap the pack of 10 with the other judge.

When you have completed the two packs of ten questionnaires, compare your coding sheets and discuss/reach agreement on:

-Total # of thoughts per sheet
-Which responses are inferences
-Total # of inferences

As you reach agreement for each of these:

-Write the total # of thoughts at top of each response sheet
-Number and circle the responses you have judged to be inferences on each response sheet
-Write the total # of inferences at bottom of each response sheet

Remember to:

-Keep track of the number of agreements and disagreements of total # of thoughts, inferences, and total # of inferences

Appendix J: Experiment 2 Session 1 and Session 2 Questionnaires

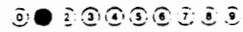
MARKETING SURVEY

This is a marketing survey to find out how student consumers really feel about various brands and products. In this survey we ask questions which make use of rating scales with seven places. You are to indicate your opinion by filling in the appropriate bubble on the OPSCAN. For example, if you were asked to rate "Budweiser" on such a scale, the seven places should be interpreted as follows:

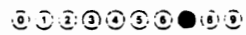
Budweiser is

Extremely bad	_____	: _____	: _____	: _____	: _____	: _____	: _____	**Extremely good**
	1	2	3	4	5	6	7	

If you think Budweiser is extremely bad, then you would place your mark as follows:



If you think Budweiser is extremely good, then you would place your mark as follows:



If you think Budweiser is somewhere in between these two extremes, you would fill-in the appropriate bubble on your OPSCAN. If you are completely unfamiliar with the brand or product mark response 4.

PLEASE DO NOT WRITE ON THE QUESTION SHEETS. PLEASE MARK YOUR ANSWERS ONLY ON THE OPSCAN. In making your ratings please be sure to answer all items, and never make more than one mark for a single question.

Please mark your OPSCAN to show your opinion of each of the following brands.

Rolex

1.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
2.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
3.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
4.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Emerson

5.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
6.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
7.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
8.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Kodak

9.	**Extremely bad**	1	2	3	4	5	6	7	**Extremely good**
10.	**Extremely unsatisfactory**	1	2	3	4	5	6	7	**Extremely satisfactory**
11.	**Extremely negative**	1	2	3	4	5	6	7	**Extremely positive**
12.	**Extremely unfavorable**	1	2	3	4	5	6	7	**Extremely favorable**

Kraft

13.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
14.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
15.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
16.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Black and Decker

17.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
18.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
19.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
20.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Pepperidge Farm

21.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
22.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
23.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
24.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Please mark your OPSCAN to show your opinion of each of the following products.

Beer

25.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
26.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
27.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
28.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Electric Fans

29.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
30.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
31.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
32.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Salad Dressings

33.	**Extremely bad**	____	____	____	____	____	____	____	**Extremely good**
		1	2	3	4	5	6	7	
34.	**Extremely unsatisfactory**	____	____	____	____	____	____	____	**Extremely satisfactory**
		1	2	3	4	5	6	7	
35.	**Extremely negative**	____	____	____	____	____	____	____	**Extremely positive**
		1	2	3	4	5	6	7	
36.	**Extremely unfavorable**	____	____	____	____	____	____	____	**Extremely favorable**
		1	2	3	4	5	6	7	

Watches

37.	Extremely bad	1	2	3	4	5	6	7	Extremely good
38.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
39.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
40.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Soups

41.	Extremely bad	1	2	3	4	5	6	7	Extremely good
42.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
43.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
44.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Calculators

45.	Extremely bad	1	2	3	4	5	6	7	Extremely good
46.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
47.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
48.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Pet Food

49.	Extremely bad	1	2	3	4	5	6	7	Extremely good
50.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
51.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
52.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Camcorders

53.	Extremely bad	1	2	3	4	5	6	7	Extremely good
54.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
55.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
56.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Potato Chips

57.	Extremely bad	1	2	3	4	5	6	7	Extremely good
58.	Extremely unsatisfactory	1	2	3	4	5	6	7	Extremely satisfactory
59.	Extremely negative	1	2	3	4	5	6	7	Extremely positive
60.	Extremely unfavorable	1	2	3	4	5	6	7	Extremely favorable

Electric Screwdrivers

61.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
62.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
63.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
64.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Bagels

65.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
66.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
67.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
68.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

Telephones

69.	Extremely bad	____	____	____	____	____	____	____	Extremely good
		1	2	3	4	5	6	7	
70.	Extremely unsatisfactory	____	____	____	____	____	____	____	Extremely satisfactory
		1	2	3	4	5	6	7	
71.	Extremely negative	____	____	____	____	____	____	____	Extremely positive
		1	2	3	4	5	6	7	
72.	Extremely unfavorable	____	____	____	____	____	____	____	Extremely favorable
		1	2	3	4	5	6	7	

MAKE SURE YOUR STUDENT NUMBER IS IN THE UPPER RIGHT HAND CORNER OF YOUR OPSCAN. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT MANY PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

Student # _____

CONSUMER OPINION QUESTIONNAIRE

Students are important purchasers and users of many products. We are interested in your opinions as a **consumer**.

Please read these instructions carefully as you begin. Throughout this survey please only work on one page at a time. Neither turn ahead to other pages before you have finished your task, nor turn back to a previous page once you have finished it.

We want to know how you as a **consumer** would rate some new products that several companies may introduce. You will be asked to rate one potential product idea at a time. Please write down your thoughts as you appraise each product. For each thought you write down indicate how positive or negative the thought is. Please indicate your opinion of the potential product after you have written and rated all your thoughts and finished your appraisal.

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to make a checkmark in the place that best describes your opinion as a **consumer**. For example, if you were asked whether "Honda makes good cars" on such a scale, the seven places should be interpreted as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly agree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	____	____	____	____	____	____	✓	**Strongly agree**
	1	2	3	4	5	6	7	

If you **strongly disagree** that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	✓	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

If you agree or disagree less strongly and somewhere in between these extremes, please check the appropriate space.

Please turn the page and begin. And remember, work on only one page at a time in the order presented.

INSTRUCTIONS: Use the space below to write down as few or as many thoughts you have while you appraise the following potential new product. Write any thoughts you have down. Remember to indicate how positive or negative each thought you write down is. When you have formed an appraisal of the potential product, STOP writing your thoughts down and rating them.

Kraft potato chips

______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative
______________________________	Extremely positive	1	2	3	4	5	6	7	Extremely negative

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Kraft potato chips

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

I like **Kraft potato chips.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Kraft potato chips** are bad.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Kraft potato chips** are valuable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Kraft potato chips** are undesirable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I approve of **Kraft potato chips.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Kraft**.

Kraft potato chips

This product is consistent with the **Kraft** image.

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

I would not expect **Kraft** to make this product.

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

This product is consistent with what I know about **Kraft**.

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

This product is not similar to other products that **Kraft** makes.

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

INSTRUCTIONS: Use the space below to write down as few or as many thoughts you have while you appraise the following potential new product. Write any thoughts you have down. Remember to indicate how positive or negative each thought you write down is. When you have formed an appraisal of the potential product, STOP writing your thoughts down and rating them.

Pepperidge Farm pet food

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

____ **Extremely** ____:____:____:____:____:____:____ Extremely
positive 1 2 3 4 5 6 7 negative

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Pepperidge Farm pet food

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

I like **Pepperidge Farm** pet food.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Pepperidge Farm** pet food is bad.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Pepperidge Farm** pet food is valuable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think **Pepperidge Farm** pet food is undesirable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I approve of **Pepperidge Farm** pet food.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Pepperidge Farm**.

Pepperidge Farm pet food

This product is consistent with the **Pepperidge Farm** image.

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

I would **not** expect **Pepperidge Farm** to make this product.

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

This product is consistent with what I know about **Pepperidge Farm**.

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

This product is **not** similar to other products that **Pepperidge Farm** makes.

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

INSTRUCTIONS: Use the space below to write down as few or as many thoughts you have while you appraise the following potential new product. Write any thoughts you have down. Remember to indicate how positive or negative each thought you write down is. When you have formed an appraisal of the potential product, STOP writing your thoughts down and rating them.

Kodak camcorder

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

____ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Kodak camcorder

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

I like the **Kodak camcorder.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Kodak camcorder** is bad.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Kodak camcorder** is valuable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Kodak camcorder** is undesirable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I approve of the **Kodak camcorder.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Kodak**.

Kodak camcorder

This product is consistent with the **Kodak** image.

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

I would not expect **Kodak** to make this product.

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

This product is consistent with what I know about **Kodak**.

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

This product is not similar to other products that **Kodak** makes.

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

INSTRUCTIONS: Use the space below to write down as few or as many thoughts you have while you appraise the following potential new product. Write any thoughts you have down. Remember to indicate how positive or negative each thought you write down is. When you have formed an appraisal of the potential product, STOP writing your thoughts down and rating them.

Black and Decker telephone

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

________________________ **Extremely** ____:____:____:____:____:____:____ **Extremely**
positive 1 2 3 4 5 6 7 **negative**

When you have formed your appraisal of the potential new product please turn the page.

INSTRUCTIONS: Please indicate your appraisal of the potential new product.

Black and Decker telephone

Extremely pleasant	____	____	____	____	____	____	____	**Extremely unpleasant**
	1	2	3	4	5	6	7	
Extremely likeable	____	____	____	____	____	____	____	**Extremely not likeable**
	1	2	3	4	5	6	7	
Extremely enjoyable	____	____	____	____	____	____	____	**Extremely unenjoyable**
	1	2	3	4	5	6	7	
Extremely attractive	____	____	____	____	____	____	____	**Extremely unattractive**
	1	2	3	4	5	6	7	

I like the **Black and Decker telephone.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Black and Decker telephone** is bad.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Black and Decker telephone** is valuable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I think the **Black and Decker telephone** is undesirable.

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

I approve of the **Black and Decker telephone.**

Strongly agree	____	____	____	____	____	____	____	**Strongly disagree**
	1	2	3	4	5	6	7	

INSTRUCTIONS: Now, please indicate how consistent or inconsistent you feel this potential new product is with your image of **Black and Decker**.

Black and Decker telephone

This product is consistent with the **Black and Decker** image.

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

I would not expect **Black and Decker** to make this product.

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

This product is consistent with what I know about **Black and Decker**.

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

This product is not similar to other products that **Black and Decker** makes.

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

INSTRUCTIONS: Please indicate your opinion of each of the following brands.

Kodak

Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely favorable**
	1	2	3	4	5	6	7	

Pepperidge Farm

Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely favorable**
	1	2	3	4	5	6	7	

Black and Decker

Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely favorable**
	1	2	3	4	5	6	7	

Kraft

Extremely bad	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely good**
	1	2	3	4	5	6	7	
Extremely unsatisfactory	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely satisfactory**
	1	2	3	4	5	6	7	
Extremely negative	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely positive**
	1	2	3	4	5	6	7	
Extremely unfavorable	____	: ____	: ____	: ____	: ____	: ____	: ____	**Extremely favorable**
	1	2	3	4	5	6	7	

INSTRUCTIONS: The purpose of these questions is to measure a person's involvement or interest in various brands and products.

Using **Kodak** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kodak** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Pepperidge Farm** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Black and Decker** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kraft** products is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kraft** products is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kraft** products doesn't have anything to do with me or my needs.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **Kraft** products is relevant to me.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **camcorders** is important to achieve my personal goals.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using **camcorders** is important to achieve my personal values.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

Using camcorders doesn't have anything to do with me or my needs.

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

Using camcorders is relevant to me.

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

Using pet food is important to achieve my personal goals.

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

Using pet food is important to achieve my personal values.

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

Using pet food doesn't have anything to do with me or my needs.

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

Using pet food is relevant to me.

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

Using a telephone is important to achieve my personal goals.

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

Using a telephone is important tc achieve my personal values.

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

Using a telephone doesn't have anything to do with me or my needs.

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

Using a telephone is relevant to me.

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

Eating potato chips is important to achieve my personal goals.

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

Eating potato chips is important to achieve my personal values.

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

Eating potato chips doesn't have anything to do with me or my needs.

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

Eating potato chips is relevant to me.

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

INSTRUCTIONS: Now we wish to find out how familiar you are with certain brands and products. Now we want you to think about the **last two years**. For questions which ask you to provide a **numeric estimate**, please mark **0** when you wish to answer zero, none, or no. Please mark **9** when your answer is nine or more.

How often have you considered purchasing any **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Kodak** products?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Kodak** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Kodak** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing any **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Pepperidge Farm** products?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Pepperidge Farm** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Pepperidge Farm** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

Remember, we want you to think about the **last two years.**

How often have you considered purchasing any **Black and Decker** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Black and Decker** products?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Black and Decker** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Black and Decker** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing any **Kraft** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased any **Kraft** products?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **Kraft** products?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **Kraft** products?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

Remember, we want you to think about the **last two years.**

How often have you considered purchasing a **camcorder?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a **camcorder?**

About _____ **times in the last two years.**

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **camcorders?**

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a **camcorder?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing **pet food?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased **pet food?**

About _____ **times in the last two years.**

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with **pet food?**

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used **pet food?**

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

Remember, we want you to think about the last two years.

How often have you considered purchasing a telephone?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased a telephone?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with telephones?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you used a telephone?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

How often have you considered purchasing potato chips?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**
1 2 3 4 5 6 7

How many times have you actually purchased potato chips?

About _____ times in the last two years.

0 1 2 3 4 5 6 7 8 9 (or more)

How familiar are you with potato chips?

Very unfamiliar _____:_____:_____:_____:_____:_____:_____ **Very familiar**
1 2 3 4 5 6 7

How often have you eaten potato chips?

Very often _____:_____:_____:_____:_____:_____:_____ **Never**

INSTRUCTIONS: Finally, we want to ask you some questions about the survey you have just filled out.

I

wanted _____:_____:_____:_____:_____:_____:_____ did not want
1 2 3 4 5 6 7

to do a good job.

I

did not care _____:_____:_____:_____:_____:_____:_____ did care
1 2 3 4 5 6 7

about my performance.

This study was

enjoyable _____:_____:_____:_____:_____:_____:_____ unenjoyable
1 2 3 4 5 6 7

This study was

boring _____:_____:_____:_____:_____:_____:_____ interesting
1 2 3 4 5 6 7

I would

recommend _____:_____:_____:_____:_____:_____:_____ not recommend
1 2 3 4 5 6 7

participation in this study.

What do you think the purpose of this study was?

When did you determine that this was the purpose?

INSTRUCTIONS: In this section please answer a few general questions about yourself.

Age: _____

Marital Status: Married_____ Single_____

Gender: Female_____ Male_____

Present classification: Freshman_____
Sophomore_____
Junior_____
Senior_____
Graduate Student_____

Present Major: Marketing_____
Management_____
Management Science_____
Finance_____
Accounting_____
Economics_____
Psychology_____
Other_____

Is English your first language? yes_____
no_____

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

MAKE SURE YOUR STUDENT NUMBER IS IN THE TOP RIGHT HAND CORNER OF THE FIRST PAGE. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE MANY OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT THESE NEW PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

Appendix K: Experiment 3 Stimuli Pretest Questionnaire

Student #_____

CONSUMER OPINION QUESTIONNAIRE

Please read these instructions carefully as you begin. Throughout this survey please only work on one page at a time. Neither turn ahead to other pages before you have finished your task, nor turn back to a previous page once you have finished it.

We want to know what you as a consumer think about several different brands and new products they are thinking of introducing. The brands will be will not be identified by name, but simply using a letter designation, for example, Brand P.

In the questionnaire you are about to fill out we ask questions which make use of rating scales with seven places. You are to make a checkmark in the place that best describes your opinion as a consumer. For example, if you were asked whether "Honda makes good cars" on such a scale, the seven places should be interpreted as follows:

Honda makes good cars

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

If you strongly agree that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
	____	____	____	____	____	____	✓	

If you strongly disagree that Honda makes good cars, then you would place your mark as follows:

Honda makes good cars

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
	✓	____	____	____	____	____	____	

If you agree or disagree less strongly and somewhere in between these extremes, please check the appropriate space.

Please turn the page and begin. And remember, work on only one page at a time in the order presented.

Brand X markets several different products including:

Cameras
Film
Camera accessories
Copiers

When asked the most important attributes of Brand X, a group of consumers replied:

Durable
Clear pictures
Easy to use
High quality
Moderate price

Brand X is thinking about introducing a new product: Camcorder.
Please indicate how consistent or inconsistent you feel this potential new product is with your image of Brand X.

Camcorder

This product is consistent with the Brand X image.

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

I would not expect Brand X to make this product.

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

This product is consistent with what I know about Brand X.

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

This product is not similar to other products that Brand X makes.

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

Brand Y markets several different products including:

Cookies and other desserts
Crackers
Bread and bakery products

When asked the most important attributes of Brand Y, a group of consumers replied:

Premium products
Very tasty
Wholesome food
High quality
High price

Brand Y is thinking about introducing a new product: Pet Food.
Please indicate how consistent or inconsistent you feel this potential new product is with your image of Brand Y.

Pet Food

This product is consistent with the Brand Y image.

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

I would not expect Brand Y to make this product.

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

This product is consistent with what I know about Brand Y.

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

This product is not similar to other products that Brand Y makes.

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

What features, attributes, or other thoughts come to mind when you think about potato chips in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand A markets several different products including:

Cheese
Packaged Macaroni and Cheese
Cheesecake and other frozen desserts

When asked the most important attributes of **Brand A**, a group of consumers replied:

Low fat
Low salt
Creaminess
Sweet
High quality
High price

Brand A is thinking about introducing a new product: **Potato Chips**. Please indicate how consistent or inconsistent you feel this potential new product is with your image of **Brand A**.

Potato Chips

This product is consistent with the **Brand A** image.

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

I would not expect **Brand A** to make this product.

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

This product is consistent with what I know about **Brand A**.

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

This product is not similar to other products that **Brand A** makes.

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

What features, attributes, or other thoughts come to mind when you think about hair dryers in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand H markets several different products including:

Power tools
Electric shavers

When asked the most important attributes of Brand H, a group of consumers replied:

Small
Portable
Cordless/Battery operated
High-tech
Sleek, black finish
High quality
High price

Brand H is thinking about introducing a new product: Hairdryer.
Please indicate how consistent or inconsistent you feel this potential new product is with your image of Brand H.

Hairdryer

This product is consistent with the Brand H image.

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

I would not expect Brand H to make this product.

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

This product is consistent with what I know about Brand H.

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

This product is not similar to other products that Brand H makes.

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

What features, attributes, or other thoughts come to mind when you think about breakfast cereal in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand C markets several different products including:

Fruit Juices
Fruit--Citrus and Bananas
Cookies

When asked the most important attributes of **Brand C**, a group of consumers replied:

Low sugar
Low fat
Healthy
High quality
High price

Brand C is thinking about introducing a new product: **Breakfast Cereal.** Please indicate how consistent or inconsistent you feel this potential new product is with your image of **Brand C.**

Breakfast Cereal

This product is consistent with the **Brand C** image.

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

I would not expect **Brand C** to make this product.

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

This product is consistent with what I know about **Brand C.**

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

This product is not similar to other products that **Brand C** makes.

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

What features, attributes, or other thoughts come to mind when you think about soup in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand E markets several different products including:

Microwave popcorn
Freeze-dried coffee
Diet soft drinks
Instant spaghetti sauce mix

When asked the most important attributes of Brand E, a group of consumers replied:

Individual servings
Healthy
High quality
High price

Brand E is thinking about introducing a new product: Soup.
Please indicate how consistent or inconsistent you feel this potential new product is with your image of Brand E.

Soup

This product is consistent with the Brand E image.

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

I would not expect Brand E to make this product.

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

This product is consistent with what I know about Brand E.

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

This product is not similar to other products that Brand E makes.

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

What features, attributes, or other thoughts come to mind when you think about watches in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand F markets several different products including:

High-tech exercise equipment (treadmills, stationary bicycles)
Women's workout shoes and clothes
Women's swimming suits

When asked the most important attributes of **Brand F**, a group of consumers replied:

High-tech
Bright, fashionable colors
High quality
High price

Brand F is thinking about introducing a new product: **Watches.**
Please indicate how consistent or inconsistent you feel this potential new product is with your image of **Brand F.**

Watches

This product is consistent with the **Brand F** image.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

I would not expect **Brand F** to make this product.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is consistent with what I know about **Brand F.**

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

This product is not similar to other products that **Brand F** makes.

Strongly disagree	____	____	____	____	____	____	____	**Strongly agree**
	1	2	3	4	5	6	7	

What features, attributes, or other thoughts come to mind when you think about frozen dinners in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand D markets several different products including:

Microwave popcorn
Canned spaghetti sauce
Ice cream

When asked the most important attributes of **Brand D**, a group of consumers replied:

Individual servings
Healthy
High quality
High price

Brand D is thinking about introducing a new product: **Frozen Dinners**. Please indicate how consistent or inconsistent you feel this potential new product is with your image of **Brand D**.

Frozen Dinners

This product is consistent with the **Brand D** image.

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

I would not expect **Brand D** to make this product.

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

This product is consistent with what I know about **Brand D**.

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

This product is not similar to other products that **Brand D** makes.

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

What features, attributes, or other thoughts come to mind when you think about electric fans in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand G markets several different products including:

Computers
Appliances
Stereo Equipment

When asked the most important attributes of Brand G, a group of consumers replied:

Portable
Cordless/Battery operated
High-tech
Sleek, black finish
High quality
High price

Brand G is thinking about introducing a new product: Electric Fan. Please indicate how consistent or inconsistent you feel this potential new product is with your image of Brand G.

Electric Fan

This product is consistent with the Brand G image.

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

I would not expect Brand G to make this product.

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

This product is consistent with what I know about Brand G.

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

This product is not similar to other products that Brand G makes.

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

What features, attributes, or other thoughts come to mind when you think about fruit juice in general? Please list any thoughts that come easily to mind.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Brand B markets several different products including:

Freeze Dried Coffee
Diet Instant Chocolate Milk Mix
Diet Instant Pudding

When asked the most important attributes of **Brand B**, a group of consumers replied:

Low calorie
Unique flavors
High quality
High price

Brand B is thinking about introducing a new product: **Fruit Juice**. Please indicate how consistent or inconsistent you feel this potential new product is with your image of **Brand B**.

Fruit Juice

This product is consistent with the **Brand B** image.

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

I would not expect **Brand B** to make this product.

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

This product is consistent with what I know about **Brand B**.

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

This product is not similar to other products that **Brand B** makes.

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

INSTRUCTIONS: In this section please answer a few general questions about yourself.

Age: _____

Marital Status: Married_____ Single_____

Gender: Female_____ Male_____

Present classification: Freshman_____
Sophomore_____
Junior_____
Senior_____
Graduate Student_____

Companies introduce many new products each year. However, the failure rate of such products is as high as 80 percent and the losses due to failed new product introductions has been estimated to exceed $400 billion annually in U.S. consumer markets. The purpose of this study is to explore what student consumers feel about potential new products.

MAKE SURE YOUR STUDENT NUMBER IS IN THE TOP RIGHT HAND CORNER OF THE FIRST PAGE. THIS IS THE WAY YOU WILL GET CREDIT FROM YOUR INSTRUCTOR.

SINCE THERE WILL BE MANY OTHER STUDENTS TAKING THIS SURVEY, WE ASK YOU TO PLEASE NOT DISCUSS IT EITHER WITH ANYONE IN YOUR CLASS OR OUTSIDE OF YOUR CLASS. YOUR HELP WILL ENSURE UNBIASED AND ACCURATE MEASURES OF WHAT STUDENTS REALLY FEEL ABOUT THESE NEW PRODUCTS.

THANK-YOU FOR YOUR COOPERATION.

Appendix L: Experiment 3 Protocol Coding Instructions

Coding Scheme for Verbal Protocols (Conjunctive Inferences)

You will be coding lists of subjects' transcribed verbal cognitive responses to brand extension stimuli. You will be asked to categorize the thoughts into brand-related, product-related, and other.

You will only be coding the thoughts elicited to Brand A potato chips and Brand Z watch. Each thought is contained within brackets. For example, "/I think it would be yellow/and it may be of good quality/" are two separate thoughts.

1. First, for each subject, examine each thought for Brand A potato chips and for Brand Z watch. Circle in red any thought that is an overall evaluation of Brand A potato chips or Brand Z watch.

The following statements are examples of overall evaluations:

Very good.
It would be bad.
I would like it.
I would not try it.
I would buy it.

The following statements are <u>not</u> examples of overall evaluations. If the thought refers to a specific attribute, then it is <u>not</u> an overall evaluation.

It would <u>taste</u> good.
The <u>quality</u> would be poor.
The <u>price</u> would be low.

Keep a tally of how many overall evaluations you find. #_____

2. When you have completed #1 above for all of the subjects, then look at each subject's list for Brand A and their list for potato chips.

Now look at their thoughts concerning Brand A potato chips. If the thought is the same as something listed under Brand A, then mark both the thought under Brand A potato chips and under Brand A with the color pink.

If the thought is the same as something listed under potato chips, then mark both the thought under Brand A potato chips and under potato chips with the color blue.

If the thought is neither the same as Brand A, nor the same as potato chips, then mark the thought under Brand A potato chips with the color yellow.

Now look at each subject's list for Brand Z and their list for watches.

Now look at their thoughts concerning Brand Z watch. If the thought is the same as something listed under Brand Z, then mark both the thought under Brand Z watch and under Brand Z with the color pink.

If the thought is the same as something listed under watches, then mark

both the thought under Brand Z watch and under watches with the color blue.

If the thought is neither the same as Brand Z, nor the same as watches, then mark the thought under Brand Z watches with the color yellow.

When you have completed this task for all of the subjects, write down at the top of the page:

# of Brand A thoughts
# of potato chips thoughts
# of other thoughts (Brand A potato chips)
# of Brand Z thoughts
# of watches thoughts
# of other thoughts (Brand Z watch)

Practice Test

Appraise Brand A potato chips

/They probably would taste good/and creamy./
/They would be lite in flavor./
/I wouldn't buy them./
/They would be cooked with light oil/and the quality would be good./

Appraise Brand Z watch

/I would like to try it./
/It would be a sportswatch/with digital time controls./
/The price would be very high./
/I would buy one if I had enough money./

...think about Brand A

Its lite.
Its creamy.
Cheesy
Good quality.

...think about Brand Z

Sports equipment.
Good quality.
High price.
For women.

Potato Chips

Salty
Oily
Fried
Junk fook
Crisp

Watches

Second hands
Batteries
Wrist
Bands
Swatch

Coding Scheme for Verbal Protocols Coded as "Others"

You will be coding lists of subjects' transcribed verbal cognitive responses to brand extension stimuli. You will be asked to categorize the thoughts into six different categories.

You will only be coding the thoughts elicited to Brand A potato chips and Brand Z watch that are highlighted in yellow. Each thought is contained within brackets. For example, "/I think it would be yellow/and it may be of good quality/" are two separate thoughts.

Write down the category number corresponding to each thought highlighted in yellow.

Category #	Type of thought
1	Fit statements: statements referring to how well or poorly the new product fits with what the brand usually makes "It doesn't fit well with what they are doing." Or a form of: -typical -fit -similar -consistent
2	Managerial market/production oriented: statements referring to the firm's marketing or production abilities or expertise "I think they wouldn't know how to make this product." "They can't make..." "They wouldn't know how to market this product." "Getting out of their expertise."
3	Brand-directed: statements referring only to the brand itself "The rest of their products are..." "They make..." "Brand __ has...products."
4	Product-directed: statements referring only to the product itself "When I think of ___ product, I..." "___ products have..."
5	Brand extension relevant: statements referring to the brand extensions, i.e., the brand and product "It would have..." "It would be..."
6	Others: statements that fit none of the other categories

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Vita

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