

The Pennsylvania State University
The Graduate School
The Mary Jean and Frank P. Smeal College of Business

**ESSAYS IN BRANDING: A LOOK AT BRANDS THROUGH THE
CONSUMERS' EYES**

A Thesis in
Business Administration

by

Puligadda Sanjay Subba Rao

© 2007 Puligadda Sanjay Subba Rao

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2007

The thesis of Puligadda Sanjay Subba Rao was reviewed and approved* by the following:

William T. Ross Jr.
Professor of Marketing
Thesis Co-Advisor
Co Chair of Committee

Rajdeep Grewal
Dean's Faculty Fellow
and Professor of Marketing,
Associate Research Director – ISBM
Thesis Co-Advisor
Co Chair of Committee

Hans Baumgartner
Charles & Lillian Binder Faculty Fellow
and Professor of Marketing
Head of the Department of Marketing

Naomi Altman
Associate Professor of Statistics

*Signatures are on file in the Graduate School

ABSTRACT

Investigating a perceptual process in the first essay and evaluative processes in the second essay, this research examines the consumer-brand relationship from a dual perspective (inside-out and outside-in), showing how individual differences in consumers influence how they perceive and evaluate incoming brand information. In essay 1, it is argued that due to the unique nature of brand as an attribute, variety in brand influences perceived variety contingent on regulatory focus and the degree of brand differentiation. Experimentally studying assortments of ice cream, potato chips and yogurt, it is shown that a) flavor is a stronger determinant of perceived variety than brand and b) the role of brand as a determinant of perceived variety is contingent on the degree of brand differentiation in the category and the regulatory focus of the perceiver. In essay 2, brand centricity is defined as a generalized predisposition of the consumer to center or focus on brands. Developing the theoretical background for the construct and a scale to measure it, this essay shows that a) brand-centric consumers assign higher weight to brand information as opposed to item specific attribute information while evaluating products, and b) brand centricity influences the evaluation of brand extensions such that brand-centric consumers assign i) a higher weight to brand concept consistency than non brand-centric consumers and ii) a higher weight to brand concept consistency than product feature similarity while evaluating brand extensions.

TABLE OF CONTENTS

LIST OF FIGURES	v
LIST OF TABLES	vi
ACKNOWLEDGEMENTS	vii
Chapter 1 INTRODUCTION.....	1
Chapter 2 ESSAY 1	4
Chapter 3 ESSAY 2	36
Chapter 4 CONCLUSION	82
Appendix A Perceived Variety Scale	89
Appendix B Brand Centricity Scale.....	90
Appendix C Single Item Brand Centricity Scale	91
Appendix D Manipulation Check	92
Appendix E Extension Evaluation Scale	93
References.....	94

LIST OF FIGURES

Figure 2.1 : Effects of number of distinct brands on perceived variety score for promotion and prevention focused participants.....	20
Figure 2.2 : Effects of number of distinct brands on perceived variety score for promotion and prevention focused participants (Study 2).....	30
Figure 3.3 : Full Structural Model from Round 2 data	59
Figure 3.4 : Effect of Brand Information on Product Evaluation (Study 1)	68
Figure 3.5 : Effect of Brand Concept Consistency on Extension Evaluation (Study 2).....	75
Figure 3.6 : Effect of Brand Centricity on Extension Evaluation (Study 2).....	76

LIST OF TABLES

Table 2-1: : Brand equity scores for brands of ice cream from pretest	15
Table 2-2: Schematic representation of stimulus.....	17
Table 2-3: First and third quartiles for Ideal number of flavors (Study 2)	25
Table 2-4: Brand equity scores for brands of yogurt and chips from pretest (Study 2).....	26
Table 2-5: Schematic representation of stimulus (Study 2).....	27
Table 2-6: Summary of Results (Study 2)	29
Table 3-7: The four types of traits	44
Table 3-8: Summary of brand related constructs from extant literature.....	51
Table 3-9: Item-total Correlations, Intercorrelations and Completely Standardized Loadings	55
Table 3-10: Schematic diagram of design (Study 1)	65
Table 3-11: Products distinguished in terms of Concept Types	70
Table 3-12: Experiment design (Study 2).....	72

ACKNOWLEDGEMENTS

I would like to thank my committee comprising of Professors Ross, Grewal, Baumgartner and Altman, for their insightful comments, criticisms and suggestions that have brought my dissertation to this stage. Special thanks are due to the co-chairs of the committee Prof Ross and Prof Grewal, who spent countless hours on this research with me. They have been especially instrumental in the shaping of this research. Professor Baumgartner was also extremely involved in this research, especially in the development of essay 1.

A very special thank you is due to Professor Ross. He is an advisor who really cares. Not only did he provide direction and technical guidance to the essays, but he also gave me moral support at very critical points in time during the course of this research. He inspired me and gave me unflinching support and encouragement with complete patience and sincerity. I do not know where this research would have been without him.

Professor Grewal has been the steady support for my work from its inception. I benefited significantly from his intelligence, knowledge and vision. He has also given me extremely useful advice, not only on my research but even during the job search process.

Very special thanks to Professor Frank Kardes who has given extremely insightful and constructive suggestions. His knowledge of the field is remarkable - he is a virtual encyclopedia of this field and I feel honored that he delved into his deep well of knowledge to bring out gems of advice for me.

Finally, I would like to thank my family for believing in me, standing by and supporting me in every way that they could. My sister Shubha and brother-in-law Ram

have given me so much support and encouragement throughout this process. My parents have been the pillar of strength for me - without their blessings, I would be nowhere. I owe them everything! Very special thanks to my sisters Dolly and Surya and their families who gave me their unflinching support.

Chapter 1

Introduction

Extant research seems to be of the view that the role of brands (in consumption) and the development of the consumer-brand relationship depends to a larger extent on marketer activity than on consumers themselves. While investigating the consumer-brand relationship with an outside-in perspective has its merits, it is also important to examine the relationship from inside-out, as the consumer is also a co-creator of a brand (Allen, Fournier and Miller 2007). A brand resides in the consumer's mind (Keller 1998), having no existence without the consumer, and all brand building expenditure (Keller 2003) goes into the construction of the brand in the consumer's mind. It is important therefore, to examine the 'home' of all brands. Brands and branding have been extensively researched as suggested by the fact that between now and 2000, nine percent of the articles published in four influential journals of marketing literature (in alphabetical order: Journal of Consumer Psychology, Journal of Consumer Research, Journal of Marketing Research, and Journal of Marketing) have had "brand" in the title. Yet, relatively scant attention has been paid to individual differences in consumers that can shape the consumer brand relationship.

Investigating a perceptual process in the first essay and evaluative processes in the second essay, this research examines the consumer-brand relationship from a dual perspective (inside-out and outside-in), showing how individual differences in consumers influence how they perceive and evaluate incoming brand information. To this end, the

first essay examines the role of an extant construct (regulatory focus) while the second essay conceptualizes a new construct (brand centrality) and investigates its role in product and brand extension evaluations.

Specifically, the first essay builds on regulatory focus theory to show that regulatory focus, in partnership with the degree of differentiation in brand images, influences the variety perceived among an assortment of brands. As consumers lack the motivation, capacity or opportunity to process all product information they are exposed to in a thoughtful or deliberative manner, they assess variety on the basis of variety in focal attribute(s). Due to the unique nature of brand as an attribute, variety in brand influences perceived variety contingent on regulatory focus and the degree of brand differentiation. Experimentally studying assortments of ice cream, potato chips and yogurt, I show that a) flavor is a stronger determinant of perceived variety than brand and b) the role of brand as a determinant of perceived variety is contingent on the degree of brand differentiation in the category and the regulatory focus of the perceiver.

Unlike extant research examining perception of variety that has viewed brand name as a label, this essay takes the view that the image of the brand (Keller 1993) and the degree of differentiation in the images of the brands (Sujan and Bettman 1989) comprising the assortment have a role to play in the perception of variety. Another significant contribution of this essay is that unlike previous research that has investigated the role of regulatory focus in several evaluative and judgment contexts such as efficacy of health messages (Keller 2006), responses to comparative frames (Jain, Agrawal and

Maheswaran 2006), and information processing and persuasion (Aaker and Lee 2001) among others, this essay examines its role in a purely perceptual process.

The second essay extends trait theory to brand research to develop a) the construct of brand centrality and b) a scale to measure it. This essay presents an attempt to measure a consumer's personality and how it influences consumption decisions by identifying domain specific traits relevant to the consumption domain (Baumgartner 2002). I define brand centrality as a generalized predisposition of the consumer to center or focus on brands. Developing the theoretical background for the construct and a scale to measure it, this essay shows that a) brand-centric consumers assign higher weight to brand information as opposed to item specific attribute information while evaluating products, and b) brand centrality influences the evaluation of brand extensions such that brand-centric consumers assign i) a higher weight to brand concept consistency than non brand-centric consumers and ii) a higher weight to brand concept consistency than product feature similarity while evaluating brand extensions. Brand centrality has a potentially important influence on a wide array of existing theoretical models pertaining to the consumer-brand relationship.

Chapter 2

The Differential Importance of Flavor and Brand in Variety Perception among Food Products

Abstract

I propose that there is heterogeneity in the importance of different attributes in determining perceived variety because consumers lack the motivation, capacity or opportunity to process all product information they are exposed to in a thoughtful or deliberative manner, leading them to assess variety on the basis of variety in focal attribute(s). Further, due to the specific nature of brand as an attribute, variety in brand influences perceived variety contingent on regulatory focus and the degree of brand differentiation. Investigating assortments of ice cream, potato chips and yogurt in the studies, I show that a) flavor is a stronger determinant of perceived variety than brand and b) the role of brand as a determinant of perceived variety is contingent on the degree of brand differentiation in the category and the regulatory focus of the perceiver.

INTRODUCTION

Perceived variety is important to study; it influences consumption quantity (Kahn and Wansink 2004), product choice (Boatwright and Nunes 2001) and store choice (Arnold, Oum and Tigert 1983, Craig, Ghosh and McLafferty 1984, Louviere and Gaeth 1987, van Herpen and Pieters 2000). Extant literature has examined several determinants of perceived variety including: availability of preferred alternative, category space and SKU count (Broniarczyk, Hoyer, and McAlister 1998); information structure of each assortment and level of organization of objects and task orientations (analytic or holistic: Hoch, Bradlow and Wansink 1999); structure of an assortment (organization and entropy), actual variety (number of distinct options) and size of assortment, (Kahn and Wansink 2004); dispersion of attributes and dissociation between unique pairs of attributes (van Herpen and Pieters 2000).

This body of work suggests that a consumer assesses variety based entirely on incoming visual information, independent of internal cognitive processes or self-regulatory state. Specifically with reference to product attributes, all attributes are considered equally important as determinants of perceived variety (van Herpen and Pieters 2000) independent of the regulatory state (Higgins 1996, 1998) of the consumer. Examining the role of two ‘meaningful’ attributes (Boatwright and Nunes 2001), viz., flavor and brand in the context of food products, I show that a) attributes of a product are unequally weighted by consumers as determinants of perceived variety in an assortment of the product, b) between flavor and brand, variety in flavor is the principal determinant of perceived variety, and c) brand variety being riskier and brand being a “perceptual entity rooted in reality but also reflecting the perceptions of ” consumers (Keller 1998,

p10), the role of number of brands in determining perceived variety is contingent on the consumer's regulatory focus (Higgins 1998) and how differentiated the brands are in the consumer's mind (Sujan and Bettman 1989).

Just as product evaluation occurs on the basis of focal attributes (Muthukrishnan and Kardes 2001), perception of variety or lack of similarity (Hoch, Bradlow and Wansink 1999) also occurs on the basis of focal attributes as consumers lack the motivation, capacity or opportunity to evaluate all product information they are exposed to in a thoughtful or deliberative manner (Kardes 1994), particularly for low involvement products. Consequently, assortment perceptions are determined by simple cues (Broniarczyk, Hoyer, and McAlister 1998) such as variety in focal attribute(s). Investigating assortments of ice cream, potato chips and yogurt, I show that variety in flavor, which is the focal attribute for the three products (Inman 2001), is a stronger driver of perceived variety than variety in brand. Further, as evidenced by brand, the nature of the attribute affects the role it plays in variety perception.

Specifically, as brand switching is riskier (Inman 2001) and brand is a 'perceptual entity' (Keller 1998, p 10), how variety in brands drives perceived variety is dependent not on the actual number of distinct brand names in the assortment but on the interaction between consumers' regulatory focus (Higgins 1998) and the extent of differentiation of the brands in consumers' minds (Sujan and Bettman 1989). When brand differentiation is high, number of brands is a more effective driver of perceived variety for promotion than prevention-focused individuals because the former are less conservative in their perceptual scanning than prevention-focused individuals who filter out risky variety.

In the remainder of this essay, I first discuss the theoretical background for perceived variety and the role of attributes as drivers of perceived variety. Subsequently, I describe regulatory focus of the perceiver and extent of brand differentiation as potential moderators of the influence of attributes in variety perception. I then describe two studies that test my hypotheses and conclude by summarizing the results, discussing the contributions of the essay and its limitations.

CONCEPTUAL BACKGROUND

Perceived Variety

Perceived variety in the selection of products available for choice is a key influence on product choice. If grocers maintain variety perception, they can make sizable reductions in the actual number of SKUs offered without negatively affecting sales (Boatwright and Nunes 2001). In fact, Boatwright and Nunes (2001) found category sales to increase as a result of SKU reduction and asserted “(recent research) suggests that consumer choice is affected by the perception of variety among a selection, which depends on more than just the number of distinct products on the shelves” (p 50).

Research has revealed that besides influencing product choice, perceived variety is the third most important determinant of store choice after location and price (Hoch, Bradlow and Wansink 1999) due to the following reasons. Firstly, greater perceived variety implies a higher probability of consumers finding what they want (Baumol and Ide 1956). Secondly, when tastes are not well formed or preferences are uncertain (Kahn and Lehmann 1991), consumers seeking information about available alternatives are likely to reduce search costs by preferring stores perceived to offer high variety

assortments (Hoch, Bradlow and Wansink 1999). Thirdly, some consumers have an inherent variety-seeking tendency in some categories (McAlister and Pessemier 1982) and a need for stimulation through exposure to novel stimuli (Berlyne 1960), which leads to preference for stores with higher perceived variety (Hoch, Bradlow and Wansink 1999).

In addition to product and store choice, perceived variety also influences the amount consumed by influencing the anticipated consumption utility (Kahn and Wansink 2004). Variety is generally considered positive (Ratner and Kahn 2002) and enhances consumers' mood, increasing the anticipated consumption utility of the items as positive mood makes individuals evaluate everything more favorably (Schwarz 1998). Further, varied consumption provides more favorable consumption memories (Ratner, Kahn, and Kahneman 1999) increasing the anticipated consumption utility for assortments with higher perceived variety. Consequently, higher perceived variety leads to increased consumption quantities (Kahn and Wansink 2004).

Attributes as Determinants of perceived variety

There are two models of variety assessment viz., the attribute based approach (van Herpen and Pieters 2002) and the product-based approach (Hoch, Bradlow and Wansink 1999). According to the attribute-based approach, consumers estimate the variety of an assortment on the basis of the dispersion and/or dissociation between attributes of the products in the assortment (van Herpen and Pieters 2002). van Herpen and Pieters (2002) show the superiority of this attribute-based approach to the product-based approach according to which consumers assess variety on the basis of the dissimilarity between product pairs in the assortment. I suggest that van Herpen and Pieter's (2002) assumption

of equal importance weights for all attributes can be replaced and assert that not all attributes are equally weighted as determinants of perceived variety.

Perceived variety is the inverse of perceived similarity (Hoch, Bradlow and Wansink 1999) among a set of products. Although individuals categorize products to simplify processing (Coupey and Jung 1996), it is obvious that the greater the number of dissimilar categories, or ‘groups’ (Murphy and Medlin 1985), the greater the variety. Insofar as categorization is concerned, individuals often categorize items in cognitive structures based on how well they might serve a goal (Barsalou 1985). For example, a consumer searching for coffee with a desirable aroma and flavor could have a goal-derived categorization (Coupey and Jung 1996) based on “source of origin of coffee beans” as opposed to “brands of coffee.” All coffee ground from beans originating from the same source would be clubbed together while coffee ground from beans originating from different sources would be organized in different categories. This goal-derived categorization would thereby influence variety perception such that the more the diversity in the bean source, the higher the perceived variety.

Products are “bundles of attributes” (van Herpen and Pieters 2002, p 332) and the underlying goal determines the importance weights of the attributes such that attributes most predictive of goal fulfillment are important (Chernev 2004). Since the important attribute helps fulfill the goal, and categorization is driven by the goal, by implication categorization occurs on the basis of important attributes. The greater the diversity in the levels of the important attribute, the more the number of categories, and consequently, the more the perceived variety. Thus just as important attributes have a stronger influence on

product evaluation (Muthukrishnan and Kardes 2001), variety in the important attribute has a stronger influence on variety perception.

Further, assortment cues are based on simple cues (Broniarczyk, Hoyer, and McAlister 1998) because consumers do not process all product information in a thoughtful or deliberative manner (Kardes 1994). This suggests that instead of complex algorithms based on multiple attributes (van Herpen and Pieters 2002), consumers are likely to rely on variety in focal attribute(s) to assess variety.

Flavor and brand as determinants of perceived variety

I specifically investigate the role of flavor and brand for a number of reasons. First, their role in determining variety-seeking behavior has been explicitly examined (Inman 2001). Second, sensory-satiation is the important goal of hedonic, low involvement products (Inman 2001) and flavor, a sensory attribute, is important in the sensory-satiety literature (Johnson and Vickers 1992) while brand, a non-sensory attribute, is important in the marketing literature (Inman 2001, Keller 1993, 1998). I keep the total number of SKUs (brand-flavor combinations) constant and investigate the relative effects of changing the number of flavors and brands on assortment perceptions.

Building on literature establishing the importance and enduring nature of the influence of sensory-specific satiety on consumption behavior (Hetherington, Rolls, and Burley 1989, Wisniewski, Epstein, and Caggiula 1992, Johnson and Vickers 1992, Rolls and Hammer 1995), Inman (2001) shows that in food products, sensory-specific satiety induces consumers to seek variety more intensively on sensory attributes such as flavor than on non sensory attributes such as brand. Evidence from three studies indicates that consumers are more likely to switch between flavors than brands as sensory variety is

sought (Inman 2001). This suggests that flavor is a more important attribute than brand for food products where the goal is sensory-satiation. Building on the argument that consumers rely on variety in the focal attribute to assess variety, I argue that flavor, being the focal attribute, would be a more important determinant of perceived variety. Further, since consumers use simple cues (Broniarczyk, Hoyer, and McAlister 1998) I argue that between flavor and brand, number of distinct flavors dominates the influence of number of distinct brands in perception of variety. Thus:

H1: In food products, increasing number of flavors will positively influence perceived variety.

H2: In food products, increasing number of flavors will have a stronger positive influence on perceived variety than increasing number of brands

While practitioners recommend variety in brands to create perceived variety (Raftery 1993), surprisingly, not much research has explored how the presence of a number of brands influences perceived variety. Broniarczyk, Hoyer, and McAlister (1998) studied the SKU and not the brand, while Hoch, Bradlow and Wansink (1999) used fictitious names, not actual brands. I argue that there is differential risk involved in number of flavors versus number of brands and, building on this argument, I hypothesize that regulatory focus (Higgins 1998) is a potential moderator of the relationship between the number of brands and perceived variety.

Moderating role of regulatory focus

According to regulatory focus theory (Higgins 1998) individuals are either promotion or prevention focused. A promotion focus seeks to achieve matches to desired end states so that the promotion focused individual is in a state of eagerness, aiming to

ensure “hits” and avoid errors of omission, while prevention focus centers on avoiding mismatches to desired end states so that the prevention focused individual is in a state of vigilance aiming to ensure “correct rejections” and avoid errors of commission (Higgins 1998, p 27). In other words, promotion focused individuals are more eager to seek positive outcomes without being too concerned about negative outcomes, while prevention focused individuals are more focused on avoiding negative outcomes (Zhou and Pham 2004).

A greater number of brands offers the experience of a new or different brand (potential positive outcome) that may be inferior in quality (potential negative outcome). In contrast, variety in an attribute such as flavor offers the experience of a new or different flavor (potential positive outcome) that may be inferior in sensory satiation (potential negative outcome) but flavors of a particular brand do not generally offer variability in quality (Montgomery and Wernerfelt 1992). Thus, a greater number of flavors offers a potential positive outcome without the accompanying strong potentially negative outcome (inferior quality) that a greater number of brands offers.

Furthermore, Ratner, Kahn and Kahneman (1999) show that consumers prefer to switch to less-preferred options despite enjoying them less rather than repeating a more-preferred option because retrospective evaluations favor varied sequences to non varied sequences of more preferred alternatives. Thus, in consumption sequences over time, variety is preferred over the sensory satisfaction derived from the consumption sequences. By this argument, potential poorer sensory satisfaction due to number of flavors is a relatively weak negative outcome.

Thus, increasing number of flavors offers a potential positive outcome (variety) with only weak potential negative outcomes, which implies that flavor variety is ‘safer’ than number of brands. Indeed, Inman (2001) finds lesser perceived risk in switching among flavors of a brand than among brands (Inman 2001). If this is true, a prevention-focused individual, concerned with minimizing negative outcomes, would pay more attention to options that minimize possible negative outcomes, and less attention to options that maximize possible negative outcomes such as number of brands.

Consequently, such an individual will selectively attend to flavor variety information, ignoring information pertaining to variety in brands. Increasing number of flavors will increase such an individual’s perceptions of variety in an assortment but increasing number of brands will not have a commensurate effect on variety perception. In contrast, a promotion-focused individual who is not so preoccupied with minimizing negative outcomes would attend to information pertaining to number of brands as well as number of flavors. Thus increasing number of brands is likely to contribute to perceived variety to a larger extent for promotion-focused individuals than for prevention focused individuals. In contrast, variety in flavors being less risky, increasing number of flavors is likely to create perceived variety regardless of the regulatory focus of the perceiver. Thus:

H3: Increasing the number of brands will increase perceived variety only for promotion focused individuals.

STUDY 1

Participants and Design

In order to test my hypotheses, I invited 322 undergraduate students at a leading Northeastern university to participate in the first study for extra credit. Participants were assigned randomly to either a promotion or prevention focus condition. Participants were also randomly assigned to three levels (low, medium and high) of flavor and number of brands. Thus the experiment used a 3 (number of flavors: three, six and nine) X 3(number of brands: three, six and nine) X 2 (regulatory focus: promotion, prevention focus) between subjects design.

Stimulus material

For this research I needed a hedonic, low involvement product since variety-seeking behavior occurs more often for such products (van Trijp 1995). Secondly, there needed to be homogeneity in participants' knowledge of and familiarity with this product. Finally, consistent with Inman (2001), who found that assortments of ice cream had the maximum perceived variety, I found a relatively large assortment of flavors available in ice cream (45 flavors) in a preliminary survey of three prominent retail stores, leading us to select ice cream as the product in study 1. To determine the specific flavors and brands to use in the experimental conditions, I conducted a pretest among an independent sample of 41 students at a leading Northeastern university.

The participants were ostensibly in charge of refreshments to be served at a hypothetical marketing seminar organized by the university's marketing organization. In the first part of the exercise, they inspected a list of (45) existing flavors of ice cream and

selected the ideal set of flavors to be served to create a perception of variety. Among ideal choices, Chocolate, Vanilla, Cookies N Cream, Strawberry, Mint Chocolate Chip, Coffee, Rocky Road, Chocolate Chip, Butter Pecan and Strawberry Cheesecake emerged as favorites in that order.

In the second part of the pretest, participants filled out a brand equity scale for some common brands of ice cream. The nine flavors most selected in the ideal condition and the nine brands with the highest brand equity scores (table 1) were selected to be used in the stimulus. As suggested by Chernev (2004), I used two procedures for priming regulatory focus, which consisted of reporting duties and obligations (Pham and Avnet 2004) and completing a paper-and-pencil maze (e.g., Friedman and Forster 2001, Chernev 2004).

Table 2-1: : Brand equity scores for brands of ice cream from pretest

	BRAND	Mean
1	Ben & Jerry's	3.54
2	University Creamery	3.38
3	Dairy Queen	3.28
4	Breyer's	3.14
5	Haagen Dazs	3.06
6	Hershey	2.93
7	Edy's Grand	2.87
8	Baskin Robbins	2.85
9	Klondike	2.65
10	Maggie Moo	2.34
11	Blue Bunny	2.26

Procedure

Participants were provided with a booklet containing explicit instructions pertaining to the experiment and a set of nine cards, each of which contained a single

brand-flavor combination of ice cream. After reading the instructions, participants first completed the regulatory focus prime tasks. The first manipulation of regulatory focus used the Ideal /Ought prime (Pham and Avnet 2004) in which participants assigned to the ideal prime condition were asked to list two of their past and two of their current hopes, aspirations, and dreams, while those in the ought prime condition were asked to list two of their past and two of their current duties, obligations, and responsibilities.

After reporting their duties and obligations, participants completed a paper-and-pencil maze to help a mouse navigate through a maze (Chernev 2004). In the promotion condition, a piece of Swiss cheese lay outside the maze and participants were asked to guide the mouse through the maze to the cheese. In the prevention condition, an eagle was shown as ready to swallow the mouse unless it escaped from the maze. Thus in the promotion condition, guiding the mouse to the piece of cheese was a movement towards a desired end state, thereby priming a promotion focus, whereas in the prevention condition, guiding the mouse away from the eagle to safety was a movement away from an undesired end state towards safety, thereby activating a prevention focus.

After completing these tasks, participants' attention was directed to the set of brand-flavor cards. Each participant was exposed to nine cards in all the conditions. To mask the real purpose of the experiment, they were instructed to make a choice of one card among these options. The brand-flavor combination listed on each card was obtained by pairing the brands and flavors of the specific condition. For example, the low flavor and brand condition had each of the top three flavors (brands) from the pretest appearing three times while the medium condition had flavors (brands) ranked one through six appear once with flavors (brands) ranked one, three and five repeating. The high

condition had the top nine flavors (brands) appearing once. Pairing flavors and brands thus gave us nine brand-flavor combinations for each of the nine cells of the 3 X 3 matrix of flavor and number of brands conditions (for a schematic representation of the brand-flavor combinations please refer to table 2). This ensured a) the availability of the top three brands and flavors to all participants to avoid any confounding effects of lack of preferred alternative (Broniarczyk, Hoyer, and McAlister 1998) and, b) that no particular brand-flavor combination was present more than any other in any condition.

Table 2-2: Schematic representation of stimulus

		FLAVORS		
		Low (Top 3 flavors)	Med (Top 6 flavors with flavors 1,3 and 5 repeating)	High (Top 9 flavors)
BRANDS	Low (Top 3 brands)	Brand1 flavor1 Brand1 flavor2 Brand1 flavor3 Brand2 flavor1 Brand2 flavor2 Brand2 flavor3 Brand3 flavor1 Brand3 flavor2 Brand3 flavor3	Brand1 flavor 1 Brand1 flavor 2 Brand1 flavor 3 Brand2flavor 4 Brand2flavor 5 Brand2flavor 6 Brand3 flavor 1 Brand3 flavor 3 Brand3 flavor 5	Brand1 flavor 1 Brand1 flavor 2 Brand1 flavor 3 Brand2flavor 4 Brand2flavor 5 Brand2flavor 6 Brand3 flavor 7 Brand3 flavor8 Brand3 flavor9
	Med (Top 6 brands with brands 1,3 and 5 repeating)	Brand1 flavor1 Brand2 flavor2 Brand3 flavor3 Brand4 flavor1 Brand5 flavor2 Brand6 flavor3 Brand1 flavor1 Brand3 flavor2 Brand5 flavor3	Brand1 flavor 1 Brand2flavor 2 Brand3flavor 3 Brand4flavor 4 Brand5flavor 5 Brand6flavor6 Brand1 flavor3 Brand3 flavor5 Brand5 flavor1	Brand1 flavor 1 Brand2flavor 2 Brand3flavor 3 Brand4flavor 4 Brand5flavor 5 Brand6flavor6 Brand1 flavor7 Brand3 flavor8 Brand5 flavor9

After completing the card exercise, participants responded to the perceived variety scale, following which they responded to the manipulation check for the regulatory focus prime (Pham and Avnet 2004). Finally, they recorded their brand preferences for the nine brands of ice cream and were debriefed before leaving.

Measures

To measure perceived variety, I developed a nine-item scale (appendix A) which was anchored by 1 = completely disagree and 9 = completely agree. Items 4, 5 and 9 of this scale were adapted from the scale used by Kahn and Wansink (2004). Factor analysis on the variety scale items yielded one factor with an Eigen value greater than 1 that explained 75% of the variation. I computed the perceived variety score by averaging the scores on the nine items (item 6 was reverse coded). The reliability coefficient for this scale was .96. This perceived variety score was my main dependent measure.

To measure the effectiveness of the regulatory focus prime, I used a manipulation check (Pham and Avnet 2004). In this, participants read three personal choices that capture conflicts between ideals and oughts as pairs of statements anchoring opposite ends of seven-point scales. All three pairs began with the statement "I would prefer to," followed by in the first pair "do what is right" (ought) versus "do whatever I want" (ideal); "take a trip around the world" (ideal) versus "pay back my loans" (ought) in the second pair; and "go wherever my heart takes me" (ideal) versus "do whatever it takes to keep my promises" (ought) in the last pair. For each pair of statements, a prevention (promotion) score was coded as 1 (2) and the scores for the three statements were added to arrive at the manipulation check score which ranged from three (prevention) to six (promotion). Finally participants rated their preference for the nine brands of ice cream

used in the study on a scale anchored by 1 = completely disagree and 9 = completely agree.

Results

Manipulation Check: A 3 (number of flavors) X 3 (number of brands) X 2 (regulatory focus) ANOVA revealed that only regulatory focus had a significant effect on the manipulation check score ($M_{\text{promotion}} = 4.056 > M_{\text{prevention}} = 3.594$; $F(1,304) = 18.03$, $p < .0001$).

Tests of hypotheses: A 3 (number of flavors) X 3 (number of brands) X 2 (regulatory focus) ANOVA revealed that increasing number of flavors increased perceived variety ($M_{\text{high flav}} = 6.06 > M_{\text{med flav}} = 4.96 > M_{\text{low flav}} = 4.12$; $F(2,304) = 27.91$, $p < .0001$). Thus H1, which states that increasing number of flavors will increase perceived variety, is supported. Decomposing the main effects of number of flavors into linear and quadratic effects revealed that while the linear trend was significant ($F(1,304) = 55.35$, $p < .0001$), the quadratic trend was not ($F(1,304) = .33$, $p = .56$) suggesting that perceived variety increases as a function of increasing number of flavors. In contrast, increasing number of brands had no effect on perceived variety ($F(2,304) = .22$, $p = .80$), lending support to H2, which predicts that number of flavors will have a stronger influence on perceived variety than number of brands.

Furthermore, there was a significant interaction between regulatory focus and number of brands ($F(2,304) = 3.31$, $p < .04$). To investigate this two-way interaction, I examined the simple main effects of number of brands at each level of regulatory focus, which did not reveal any significant effects ($F(2,304) = 1.91$, $p = .15$ and $F(2,304) = 1.63$, $p = .19$ for prevention and promotion focus respectively). However, decomposing

the overall simple main effects of number of brands into linear and quadratic trends for prevention and promotion focus revealed that, as suggested by figure 1, for promotion-focused individuals perceived variety increased linearly as number of brands increased ($M_{\text{high brand}} = 5.46 > M_{\text{med brand}} = 5.32 > M_{\text{low brand}} = 4.83$; $F(1,304) = 2.93$, $p = .09$), whereas for prevention-focused individuals perceived variety decreased linearly as number of brands increased ($M_{\text{high brand}} = 4.94 < M_{\text{med brand}} = 4.96 < M_{\text{low brand}} = 5.2$; $F(1,304) = 3.72$, $p < .05$). Although I had not predicted a negative effect of increasing number of brands for prevention focused individuals, and the effect of increasing number of brands was significant only at $p < .10$, these results provide some support for H3, which states that increasing number of brands increases perceived variety only for promotion and not for prevention-focused individuals.

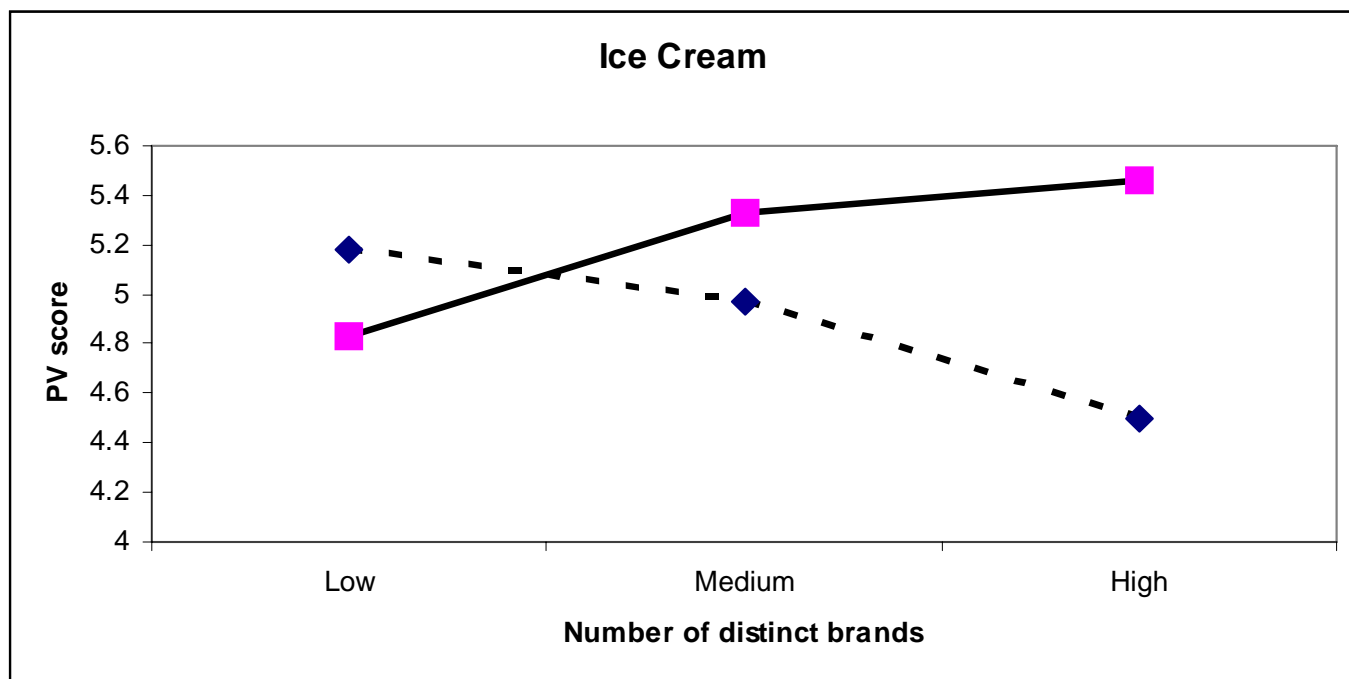


Figure 2.1: Effects of number of distinct brands on perceived variety score for promotion and prevention focused participants

Discussion

Supporting the first two hypotheses, number of flavors had a positive influence on perceived variety that was stronger than the influence of number of brands. As for the third hypothesis, I found support as there was a positive linear trend of number of brands for promotion focused individuals although this effect was marginal. Surprisingly, increasing number of brands reduced perceived variety for prevention focused individuals. These results, although not conclusive, are suggestive and need to be examined in greater detail in a subsequent study. The relatively weak effects of increasing the number of brands could be because participants may have failed to see much of a difference between the brands. A brand is a perceptual entity (Keller 1998) and not a tangible attribute, thus the perceived extent of variety or lack of similarity may not depend on the number of brand names (actual variety) but on how different participants perceive the brands to be.

STUDY 2

Moderating role of brand differentiation

A brand is not a tangible attribute but is comprised of both tangible attributes and intangible associations (Keller 1998), and a brand's image is defined as "perceptions about a brand as reflected by the brand associations held in consumer memory" (Keller 1993, p3). Each brand needs to possess a strong, unique brand image as similarity with other brands can confuse consumers (Keller 1993) and this unique brand image is created by tangible product attributes and branding activities of firms (Hoeffler and Keller 2003). The more distinct and unique the brands that are created by the brand positioning efforts of the firms in a product category, the higher the degree of brand differentiation (Sujan

and Bettman 1989). The extent of brand differentiation is, however, not homogenous across product categories (Chakravarti and Janiszewski 2004), with some categories having more clearly differentiated brands than others (for example, consumers would be better able to differentiate among brands of automobiles than among brands of flour).

The lesser the degree of differentiation, the more similar the brands are perceived to be. When brands are perceived to be similar, variety estimates are likely to be poor because the options are not considered varied. For example, between brands of eggs and brands of apparel, the degree of perceived variety would be higher in the latter case. This reasoning implies that the influence of number of brands on perceived variety is likely to be contingent on the degree of differentiation. Furthermore, as the results of study 1 suggest, the number of brands influences perceived variety only for promotion focused individuals who are in a state of eagerness, aiming to avoid errors of omission. In contrast, prevention focused individuals who are in a state of vigilance, aiming to avoid errors of commission, are likely to selectively attend to variety information pertaining to flavors, filtering out variety information pertaining to brands. This implies that the influence of number of brands on perceived variety is dependent not only on regulatory focus but also on the degree of differentiation among the brands in the category. Thus:

H4: Brand differentiation will moderate the effects of regulatory focus on the relationship between number of brands and perceived variety such that:

- a) when brand differentiation is high, increasing number of brands will have a positive effect on perceived variety for promotion focused and but not for prevention focused participants

- b) when brand differentiation is low, increasing number of brands will have no effect on perceived variety regardless of the regulatory state of the individual

Participants and Design

To test my hypotheses and replicate the results of the first study, I conducted study 2 using two products instead of one. Chips and yogurt suggested themselves as the products, as similar to study 1, I needed hedonic, low involvement products for which there is homogeneity in participants' knowledge of and familiarity with this product. Further, a pretest revealed that brand differentiation was higher in chips than yogurt – a key consideration for the current study.

I conducted a pretest similar to study 1 among an independent sample of 32 students at a leading Northeastern university, using chips and yogurt instead of ice cream. As a measure of brand differentiation, I computed the standard deviation of brand equity scores for the brands of chips and yogurt which showed a significant difference ($M_{\text{chips brand equity SD}} = 6.78 > M_{\text{yogurt brand equity SD}} = 5.78; t = 2.485, p < .02$) indicating greater brand differentiation among chips than yogurt brands. Thus not only did chips and yogurt satisfy the earlier criterion, there was also a difference in the extent of brand differentiation between the two products, leading us to use chips and yogurt in study 2.

As the focus of study 2 was on examining the possible role of brand differentiation and not the specific nature of the effects of number of brands and flavors on perceived variety, I decided to use only two levels of the factors. The methodology for studying perceived variety was the same as study 1. In order to increase the power, I decided to use product as a within subjects factor, so that each participant would be asked

to look at brand-flavor cards for both chips and yogurt. Consequently, to reduce possible participant fatigue, I decided to use only one prime for regulatory focus.

In the main study, I invited 185 undergraduate students at a leading Northeastern university to participate for extra credit. The study used a 2 (number of flavors: low and high) X 2 (number of brands: low and high) X 2 (regulatory focus: promotion, prevention focus) X 2 (brand differentiation: low and high) mixed design. Participants were assigned randomly to one of these conditions. The first three factors were between subject factors while the fourth factor, brand differentiation, was a within subjects factor. As there was greater brand differentiation among chips than yogurt brands, I used the product factor (chips /yogurt) as a surrogate for brand differentiation.

Stimulus Material

Similar to study 1, participants of the pretest, being ostensibly in charge of refreshments at a hypothetical marketing seminar, in the first part of the exercise inspected a list of 20 (25) existing flavors of chips (yogurt) and selected the ideal set of flavors to be served to create a perception of variety. In terms of number of flavors, as the 1st and 3rd quartiles (table 3) were approximately 3 and 5 for both chips and yogurt, I concluded that three and six flavors should be offered in the low (high) number of flavors conditions. To keep the number of brands consistent with number of flavors I decided to use the same number of brands.

In chips, among ideal choices, Sour cream and Onion was the favorite flavor followed by Barbecue, Classic, Salt and Vinegar, Original and Ripples in that order while in yogurt, Raspberry, Blueberry, Peach, Strawberry Cheesecake, Very Vanilla, Strawberry& Banana and Cherry Vanilla were favorites in that order. I used the top six flavors of each product in the stimulus. In the second part of the pretest, participants filled the same brand equity scale as the one used in study 1 for some common brands of chips and yogurt. The six top scoring brands (table 4) for each product were selected to be used in the stimulus. To manipulate regulatory focus I used the Ideal/Ought prime (Pham and Avnet 2004) as per study 1.

Table 2-3: First and third quartiles for Ideal number of flavors (Study 2)

	IDEAL: Q1	IDEAL: Q2	IDEAL Q3
Yogurt	3	4	5
Chips	3	3.5	4.25

Table 2-4: Brand equity scores for brands of yogurt and chips from pretest (Study 2)

	Yogurt	Mean	Chips	Mean
1	Dannon	4.28	Pringles	4.28
2	Yoplait	3.96	Lays	4.15
3	Breyers	3.9	Ruffles	4.08
4	Colombo	3.6	Martins	2.8
5	Stonyfield Farm	3.49	Poore Brothers	2.8
6	Alta Dena	3.47	TGI Fridays	2.69
7	Blue Bunny	3.32	Tims Cascade	2.55
8	Cascade	2.50	Herrs	2.38

Procedure

Participants were provided with a booklet and a set of cards similar to study 1, each of which contained a single brand-flavor combination of chips or yogurt. After they completed the regulatory focus prime task, their attention was directed to the set of brand-flavor cards. After exposure to the cards, participants responded to the perceived variety scale, which was administered twice – once after exposure to chips and once after yogurt cards. Finally, they recorded their brand preferences for the nine brands of chips and yogurt and were debriefed before leaving.

Participants in all the conditions received six cards of chips and six cards of yogurt brand-flavor combinations although the order of presentation of chips and yogurt was counterbalanced. The brand-flavor combinations comprised of three brands (flavors) in the low number of brands (flavors) condition and six brands (flavors) in the high number of brands (flavors) condition. In the low number of brands condition, I used the

top three brands (based on brand equity scores from pretest) with each brand repeating twice, while in the high number of brands condition I used the top six brands from the pretest, each of which appeared once. Similarly, in the low number of flavors condition I used the top three flavors from the pretest with each flavor repeated twice while in the high condition, I used the top six flavors with each flavor appearing once (for a schematic representation of the stimulus used in the different conditions, please refer to table 5). In this way, similar to study 1, I made sure that the top three brands and flavors were available to all participants and that no particular brand-flavor combination was present more than any other in any condition.

Table 2-5: Schematic representation of stimulus (Study 2)

(Numbers following brand and flavor correspond to rank)

Condition 1	Condition 2	Condition 3	Condition 4
3 Brands 3 Flavors	3 brands 6 flavors	6 brands 3 flavors	6 brands 6 flavors
Brand1 flavor1	Brand1flavor 1	Brand1flavor 1	Brand1flavor 1
Brand1 flavor2	Brand1flavor 2	Brand2flavor 2	Brand2flavor 2
Brand2 flavor3	Brand2flavor 3	Brand3flavor 3	Brand3flavor 3
Brand2 flavor1	Brand2flavor 4	Brand4flavor 1	Brand4flavor 4
Brand3 flavor2	Brand3flavor 5	Brand5flavor 2	Brand5flavor 5
Brand3 flavor3	Brand3flavor 6	Brand6flavor3	Brand6flavor6

Measures

Similar to study 1, factor analysis on chips and yogurt variety scale items yielded one factor that explained 74% and 72% of the variation respectively.

Consequently, I computed the perceived variety score using the one-factor structure for both categories as per study 1. The reliability coefficients for both the scales were .92.

Results

Tests of hypotheses: A 2 (number of flavors: low and high) X 2 (number of brands: low and high) X 2 (regulatory focus: promotion, prevention focus) X 2 (brand differentiation: low and high) ANOVA, with perceived variety as the dependent measure, revealed that number of flavors had a significant effect on perceived variety ($F(1,177) = 55.37, p < .0001$). Furthermore, there was a significant interaction between number of brands and regulatory focus ($F(1,177) = 4.54, p = .035$) both of which were consistent with results from study 1. Unlike study 1, however, there was also a significant interaction between number of brands and number of flavors ($F(1,177) = 5.78, p = .017$). Finally, there were two significant three-way interactions viz. number of brands X regulatory focus X brand differentiation ($F(1,177) = 4.14, p = .04$) and number of brands X number of flavors X brand differentiation ($F(1,177) = 6.3, p = .013$) (for a summary of the results please refer to table 6)

Table 2-6 To investigate the two three way interactions, I split the data on the basis of the within subjects factor (product) and ran a 2 (number of flavors: low and high) X 2 (number of brands: low and high) X 2 (regulatory focus: promotion, prevention focus) ANOVA for chips and yogurt separately. As expected, increasing number of flavors increased perceived variety for both products ($M_{\text{high flav}} = 5.86 > M_{\text{low flav}} = 4.55; F(1,177) = 25.84, p < .0001$ and $M_{\text{high flav}} = 5.89 > M_{\text{low flav}} = 4.29; F(1,177) = 41.23, p < .0001$ for chips and yogurt respectively) in support of H1. In contrast, increasing number of brands had no effect on perceived variety for chips ($F(1,177) = .95, p > .3$) or yogurt ($F(1,177) = 1.27, p > .26$). The main effects for flavor and lack of effects for number of

brands for both products lend support to H2 according to which increasing the number of flavors will have a stronger influence on perceived variety than increasing the number of brands.

Table 2-6: Summary of Results (Study 2)

Effect	F	P value
Number of flavors	55.37	<.0001
Number of brands X Number of flavors	5.78	.0172
Number of brands X Regulatory focus	4.54	.0345
Number of brands X Number of flavors X Brand differentiation	6.30	.0130
Number of brands X Regulatory Focus X Brand Differentiation	4.14	.04

In chips (high brand differentiation) there was a significant two-way interaction between number of brands and regulatory focus ($F(1,177) = 8.31, p < .01$), as suggested by figure 2. Further, while increasing number of brands had an effect on perceived variety for promotion focused participants ($F(1,177) = 7.66, p < .01$), it did not have any effect on perceived variety for prevention focused participants ($F(1,177) = 1.75, p > .19$). This is consistent with H3, according to which increasing number of brands will increase perceived variety only for promotion focused individuals. In contrast, as suggested by figure 2, for yogurt, (low brand differentiation) there was no interaction between number of brands and regulatory focus ($F(1,177) = .15, p > .7$). These results provide support for H4, according to which, when brand differentiation is high, increasing number of brands will have a positive effect on perceived variety for promotion focused and not for prevention focused participants while when brand differentiation is low, increasing number of brands will have no effect, regardless of the regulatory state of the perceiver.

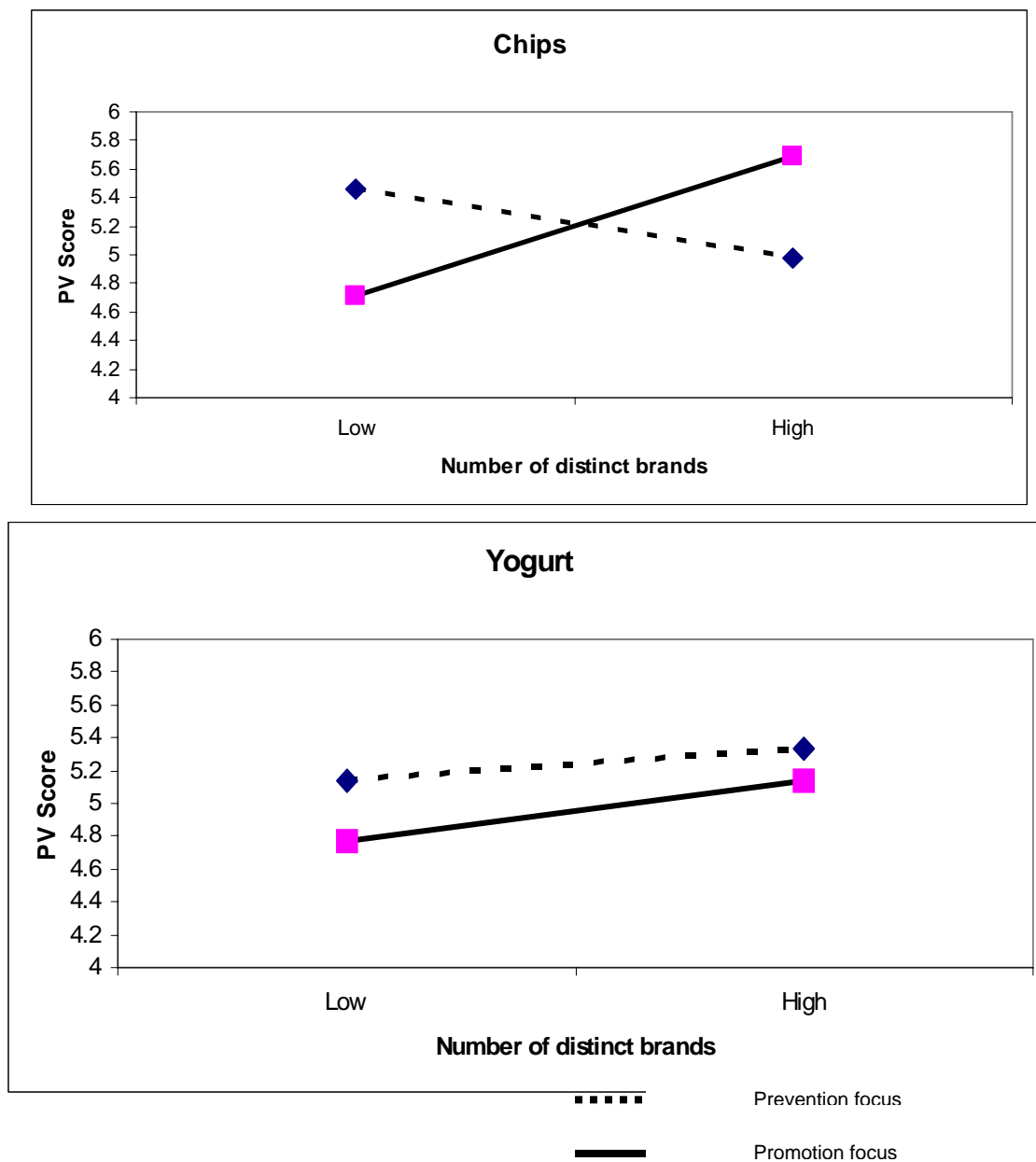


Figure 2.2: Effects of number of distinct brands on perceived variety score for promotion and prevention focused participants (Study 2)

There was a significant interaction of number of brands and number of flavors for chips and yogurt ($F(1,177) = 11.51, p < .00$) but not for yogurt ($F(1,177) = .092, p > .7$)

suggesting that degree of brand differentiation could be the moderating factor leading to these differences. In the case of chips, planned contrasts revealed boundary conditions for both number of flavors and number of brands. Specifically, while neither number of flavors nor number of brands had an effect at low levels of the other ($t_{0.975,117} = 1.23 > 1.96$; $t_{0.975,117} = 1.65 > 1.96$ respectively), both number of flavors and number of brands had a significant effect when number of brands and number of flavors was high respectively ($M_{\text{high flav high brand}} = 6.44 > M_{\text{low flav high brand}} = 4.25$, $t_{0.975,117} = 5.88 > 1.96$; $M_{\text{high brand high flav}} = 6.44 > M_{\text{low brand high flav}} = 5.3$, $t_{0.975,117} = 3.06 > 1.96$ respectively).

In contrast, for yogurt, number of brands had no effect across levels of number of flavors ($F(1,177) = 1.32, p > .25$) while number of flavors had a significant effect across levels of number of brands ($F(1,177) = 41.45, p < .0001$). Planned contrasts revealed that increasing number of flavors had a positive influence on perceived variety at low and high levels of number of brands ($M_{\text{high brand low flav}} = 5.7 > M_{\text{low brand low flav}} = 4.19$, $t_{0.975,117} = 4.1 > 1.96$; $M_{\text{high flav high brand}} = 6.18 > M_{\text{low flav high brand}} = 4.44$, $t_{0.975,117} = 4.76 > 1.96$ respectively). This is consistent with previous results. As brand differentiation is higher in chips, number of brands did have an effect and was also able to moderate the effects of number of flavors. However in a product where brand differentiation is low, such as yogurt, number of brands had a) no effect and b) did not moderate the influence of number of flavors.

Discussion

Study 2 provides support for H1, H2, H3 and H4. While the support for H1, H2 and H3, as seen in study 1 was replicated in study 2, the support for H4 implies that number of brands does have a stronger influence on perceived variety when degree of

brand differentiation is high, but only for promotion-focused individuals. Thus, contingencies were evidenced in the influence of number of brands, while there were no such contingencies in the influence of number of flavors, which further supports the view that number of brands is weaker than number of flavors as a determinant of perceived variety. More importantly, these results support my contention that different attributes influence perceived variety differently and also show support for the interacting moderating effects of regulatory focus and brand differentiation on the relationship between number of brands and perceived variety.

GENERAL DISCUSSION

Perception of variety is not simply a result of external cues but also of internal cognitive processes of the perceiver. In this essay I showed that consumers use focal attributes to ascertain variety in an assortment. Specifically, in hedonic low involvement products, number of flavors is a stronger determinant of perceived variety than number of brands, which is contingent on the regulatory focus of the perceiver and the degree of brand differentiation such that number of brands have a stronger influence on perceived variety when degree of brand differentiation is high, but only for promotion-focused individuals. Such contingencies were not evidenced in the influence of number of flavors on perceived variety.

While Broniarczyk, Hoyer, and McAlister (1998) maintain that availability of preferred alternative, category space and SKU count determine variety perception in an assortment, and Hoch, Bradlow and Wansink (1999) show that information structure of each assortment and level of organization of objects and task orientations (analytic or holistic) determine perceived variety, they investigate the process of variety perception

from an outside-in perspective (i.e., they investigate the role of external cues on the variety perceived by consumers), overlooking the possible role of individual differences that may impact the variety perception task. Although they do suggest that future research must investigate individual differences such as variety-seeking and need for cognition. I investigate the variety perception task from an inside-out perspective, looking at the possible role of the individual's regulatory focus on the variety perception task.

This essay contributes to the variety perception literature by showing that variety perceptions are not merely triggered as a stimulus-response reaction to external cues but that the nature of the attribute also has an import in this regard. Not all attributes are created equal and consumers assess variety based on variety in the focal attribute(s). Further evidence of the subjective nature of variety perception is provided by the result that regulatory focus and extent of brand differentiation interact to influence the perception of variety from brand cues. Specifically, in hedonic low involvement products, number of flavors is a stronger determinant of perceived variety than number of brands, which is contingent on the regulatory focus of the perceiver and the degree of brand differentiation. I show that number of brands has a stronger influence on perceived variety when degree of brand differentiation is high, but only for promotion-focused individuals, while there is no such interaction between number of flavors and regulatory focus.

This essay contributes to research on brands and branding by showing that the degree of perceived differentiation among brands can influence perceived variety. Despite having different names, brands can still vary in the extent to which consumers differentiate among them. This perceived differentiation is a result of the brand building

activities of the marketers – the outside-in process. An important theoretical contribution of this research is in showing that regulatory focus, an inside-out process, can influence a purely perceptual process. Although extant research has investigated the influence of regulatory focus on other cognitive processes such as choice (Chernev 2004), repurchase (Louro, Pieters and Zeelenberg 2005) and information processing and persuasion (Aaker and Lee 2001), its possible influence on a perceptual task such as variety estimation has not been hitherto explored.

Firms may consider the introduction of extensions (brand or line extensions) when competition is high or when consumers' desire for variety is great (Guitinan, 1993). This essay helps provide managers (brand and/or retail store managers) to decide whether a brand or line extension is advisable in their context. Further, it helps managers determine which attribute to offer variety in, considering that variety in focal attributes is more effective in creating variety perceptions.

Limitations

A criticism of this essay could be that I used only three products and investigated only snack foods. Further, the sample I tested my hypotheses on comprised only of university students. Thus, while internal validity was ensured in the studies, the external validity of the findings needs to be established by replicating the findings across a more diverse set of products and samples.

A key methodological issue I faced was of determining the specific brand-flavor combinations to use. Preference orders of real brands and flavors are such that the difference in preference between brands (flavors) 1 and 2 may not be the same as that between brands (flavors) 2 and 3 and so on and the specific brand-flavor combinations

may also be differentially preferred. Although I strived to address this challenge, it may not have been adequate as participants could not all see the same set of flavors and brands. Thus, while I counter balanced the preference order of the brands and flavors participants of each condition saw, theoretically ensuring that they all saw a similar set of brands and flavors (in terms of preference order), actually participants in different conditions saw some brands and flavors that were unique to that condition. It can be argued that as participants were exposed to different brands and flavors (for example, if Ruffles Salt N Vinegar is a popular combination and only some participants saw it), this may have led to some confounds.

Researching brands creates this unique problem that may persist in any design. Also, although I did include lesser know brands and flavors, I always included the top flavors and brands in all conditions. This ensured a high likelihood of the preferred alternative being present in all conditions, thereby controlling for the possible effects of presence of preferred alternative (Broniarczyk, Hoyer, and McAlister 1998), but it can be argued that presence of most preferred flavors and brands may have influenced the results.

Chapter 3

It's All In The Brand or Is It? Brand Centricity and Its Role in Brand Extension Evaluations

Abstract

I define brand centricity as a generalized predisposition of the consumer to center or focus on brands. This trait has potentially important implications for all facets of the consumer brand relationship examined in extant research. In this research, the theoretical background for the construct and a scale to measure it are developed. It is proposed that a) brand information has a greater influence on product evaluations for brand-centric as opposed to non brand-centric consumers, and b) brand centricity influences the evaluation of brand extensions such that brand-centric consumers will assign i) higher weight to brand concept consistency than non brand-centric consumers and ii) higher weight to brand concept consistency than product feature similarity while evaluating brand extensions. I describe two rounds of scale development and two studies to test the hypotheses.

INTRODUCTION

Although extensive literature has examined the relevance of and the intricacies within the consumer-brand relationship (Kassarjian 1971, Jacoby and Kyner 1973, Sirgy 1982, Montgomery and Wernerfelt 1992, Keller 1993, 1998, 2003, Aaker 1997, Fournier 1998, Chaudhuri and Holbrook 2001, Muniz and O'Guinn 2001 among others), the possibility that not all consumers assign equal importance to brands and brand information has received limited attention.

I define brand centrality as a predisposition of the consumer to center or focus on brands. It is a generalized propensity, not an inclination towards any particular brand (s). Thus, the scope of brand centrality is not confined to any specific brand or brands but extends to any and all brands that a consumer interacts with. Due to the focus on brands, the brand-centric consumer is brand-schematic, thereby organizing, interpreting and utilizing consumption related information at a brand level. A consequence of the brand-centric consumer's brand-schematicity is increased motivation and ability to acquire and store information pertaining to brands. While brand-centric consumers are likely to approach consumption using brands as units of analysis, the non brand-centric consumers are more likely to have a product centric view, using products' item-specific attribute information (Aggarwal and Law 2005) to aid their evaluations.

Using the Meta-Theoretic Model of Motivation and Personality, i.e. the 3M, hierarchical model of personality traits (Mowen 2000), I argue that brand centrality is a situation trait of a consumer. Situation traits are dispositions to behave within a general situation and context, and are consequently likely to exist in the consumer behavior

domain (Mowen 2000). Brand centricity is conceptualized as a consumer trait unlike extant constructs pertaining to the consumer-brand relationship such as brand loyalty, (Jacoby and Kyner 1973), brand awareness and brand recognition (Keller 1993), brand affect and brand trust (Chaudhuri and Holbrook 2001) and brand commitment (Lastovicka and Gardner 1978), all of which pertain explicitly to the dyadic relationship between a consumer and a specific brand.

For example, a consumer who is loyal to Nike will exhibit a non-random, behavioral response (i.e. purchase) with respect to Nike, over time, as a function of psychological (decision-making, evaluative) processes (Jacoby and Kyner 1973), but this relationship with Nike is due to the specific characteristics of the brand and its interaction with the consumer and is not necessarily reflective of any trait of the consumer. Further, just as it is not necessary for a consumer who is loyal to one or more specific brands to be brand-centric, it is also not necessary for a brand-centric consumer to be loyal to any brand. For example, a brand-centric consumer may be a brand experimenter (Cushing and Douglas-Tate 1985) who does not stick with any one brand. Thus, there is no hierarchical relationship between my construct and the specific brand constructs.

Based on exploratory qualitative research and construct conceptualization, scale items to measure brand centricity were generated and administered. Scale purification using exploratory and confirmatory factor analysis led to a 10 item scale with good psychometric properties in two rounds of data collection. The final round of data collection also a) established the discriminant validity of brand centricity from extant constructs such as brand sensitivity (Kapferer and Laurent 1992) and brand

consciousness (Sproles and Kendall 1986) and b) embedded brand centrality in a nomological network of related traits (Mowen 2000).

In addition to scale development, this research examined the influence of brand centrality on the effects of brand information on product evaluation. Brand-centric consumers, being brand schematic, are more likely to utilize brand information diagnostically than non brand-centric consumers such that brand information will have a greater influence on product evaluations for the former. Support for this contention was found in the first experiment of this essay.

Finally, the influence of brand centrality on brand extension evaluations was examined. The brand extension literature has identified the degree of perceived fit between the parent brand and the extension to be a function of a) product feature similarity, which is the similarity between extension products and the parent brand's existing products in concrete features (attributes) or abstract features (usage situation) and b) brand concept consistency, which is the extension product's ability to accommodate the parent brand's concept. The brand-centric consumer's brand-schema leads to a heightened preoccupation with the brand concept. Due to this focus, such a consumer is likely to assign a higher weight to brand concept consistency than the non brand-centric consumer while evaluating brand extensions. Further, if between the original brand and the extension, the product feature similarity is low (high) and brand concept consistency is high (low), brand-centric individuals will rate the extension more (less) favorably than non brand-centric consumers. These hypotheses were supported in the second experiment of this research.

In the remainder of this essay, I first discuss the need for the construct of brand centricity, review trait theory and establish brand centricity as a consumer trait. Subsequently, I describe brand centricity in greater detail and establish its uniqueness compared to similar constructs. I then describe three rounds of data collection conducted for the development of the brand centricity scale and, finally, describe two studies that test the hypotheses about the influence of brand centricity on product and brand extension evaluations.

CONCEPTUAL BACKGROUND

What is a brand?

From a social psychological perspective, a brand is viewed as the cement that holds together its users in a “specialized, non-geographically bound community, and based on a structured set of social relations” (Muniz and O’Guinn 2001 p 412). According to Daniel Boorstein (c.f Keller 1998), brands are like fraternal, religious and service organizations that help people define who they are and communicate that definition to others. Recent research (Fournier 1998 and Muniz and O’Guinn 2001) compares consumer-brand relationships to human relationships, viewing a brand “not as a passive object of marketing transactions but as an active, contributing member of the relationship dyad” (Fournier 1998 p 344). Brands are also viewed as means of self-expression such that consumers prefer brands whose personalities are congruent with their own (Kassarjian 1971; Sirgy 1982). Twitchell (2004), comparing the activity of branding to romantic poetry, envisions a brand as “a story attached to a manufactured object” (p 484) and asserts that consumers desire meaning which “things” cannot

provide, hence meaning is installed in brands and “that is why branding (and Romantic poetry) works” (p 487).

As a cognitive unit a brand is conceptualized as a “perceptual entity” (Keller 1998, p 10) that reflects consumers’ perceptions and idiosyncrasies and is thus more than the product (Keller 1998), possessing its own personality (Aaker 1997). A brand conveys a personal meaning through product-related information and intangible aspects of brand knowledge that are not related to the actual physical product or service (Keller 2003 b). Thus, both social and cognitive perspectives concur that a brand is an entity embedded with culturally derived meaning and is more than the product(s) it is associated with. Further, as the above research suggests, a brand resides in the consumer’s mind (Keller 1998).

Yet, despite this and the consistent interest in the concept of the brand, marketing literature has overlooked examination of the ‘home’ of all brands – the consumer’s mind. I argue that individuals differ in the extent to which marketers are successfully able to create brands in their minds. Some consumers are more receptive to brand information. Brands hold an important place in their scheme of things and brand images are more clearly etched in their minds. For others, brands are not that significant, relegated to being identifiers or labels of products. It is the trait of brand centrality that differentiates among the two types of consumers.

There is a need to understand aspects of the personality of the consumer and how they influence consumption decisions, but not by creating additional taxonomies of personalities at the most abstract level, but by identifying domain specific traits relevant to the consumption domain (Baumgartner 2002). The 3M (Mowen 2000), which was

developed explicitly with the objective of extending personality research and examining its problems in the context of consumer behavior, is a suitable framework to employ to understand individual differences in consumers' dispositions towards brands. The 3M is most comprehensive in the two most abstract levels of traits (Baumgartner 2002), which implies that domain specific traits are needed to build on and augment this framework. Heeding this suggestion, brand centrality is identified as a situation trait specific to how consumers relate to brands.

Trait theory

A trait is any “intra-psychic construct that can be measured validly and reliably and that predicts individual differences in feelings, thoughts and behaviors” (Mowen 2000, p 2). The 3M comprises four hierarchically arranged levels of traits (elemental, compound, situation, and surface traits) in increasing (decreasing) order of specificity (abstractness) with traits of each level interacting with a) each other, b) traits from lower levels, c) cultural and sub-cultural processes and d) learning to create lower level traits (Mowen 2000).

Eight in number, elemental traits are the most basic that derive from genetics and early learning history (e.g. conscientiousness and agreeability) (table 7) and provide abstract behavioral guidelines. The next level of traits known as compound traits (e.g. need for activity and task orientation) result from a combination of elemental traits, the effects of cultural and sub cultural processes and learning. Together, elemental traits, compound traits, learning and the situational context create the next level of traits known as situation traits. Situation traits are dispositions to behave within a general situation and context such as consumption and are more specific than the previous two. They are

specific to person by situation interaction (e.g. health motivation which is specific to the task definition of maintaining health). Finally, surface traits are created through the interplay of the first three levels and product category and are extremely specific to product category (e.g. propensity to consume a healthy diet, which exists as a result of the situation trait of health motivation in the specific context of food products).

Table 3-7: The four types of traits

ELEMENTAL TRAITS	COMPOUND TRAITS	SITUATION TRAITS	SURFACE TRAITS
Openness to experience The need to find novel solutions, express original ideas, and use the imagination in performing tasks	Task orientation The extent to which individuals set goals and strive to complete tasks	Health motivation	Healthy diet lifestyle
Conscientiousness The need to be organized, orderly, and efficient in carrying out tasks	Need for learning The extent to which the individual seeks information resources	Impulsiveness	Compulsive consumption
Extraversion Operationalized as introversion, the tendency to reveal feelings of bashfulness and shyness	Competitiveness “the enjoyment of interpersonal competition and the desire to win and be better than others” (Spence and Helmreich 1983, p 41)	Value consciousness	Bargain proneness
Agreeability The need to express kindness and sympathy to others	Need for activity The extent to which the individual seeks activity	Sports interest	Sports participation
Neuroticism The tendency to emotionality as expressed by moodiness and by being temperamental	Need for play The extent to which an individual seeks hedonic pursuits of fun, amusement, fantasy, arousal, sensory stimulation and enjoyment	frugality	Modest living
Material needs The need to collect and possess material goods	General Self-efficacy “beliefs in one’s capability to organize and execute the courses of action required to manage prospective situations (Bandura 1977, p2)		
The need for arousal The desire for stimulation and excitement			
Physical/body needs The need to maintain and enhance the body			

Brand centrality

A situation trait is specific to a situational context and is thus more narrow than an elemental or compound trait and yet not as concrete and behaviorally specific as a surface trait. For example, the need to maintain a healthy lifestyle is a situation trait that is a result of the combination of the person (elemental and compound traits) and the situation (the situation trait of maintaining a healthy lifestyle) (Mowen 2000). Similarly, brand centrality is a situation trait that results as a combination of elemental and compound traits and the situation or context of consumption. This trait leads the brand-centric consumer to be brand-schematic.

Although conceptualizations of schema can be traced to Plato and Aristotle, Kant (1929, c.f McVee, Dunsmore and Gavelek 2005) is generally considered to be the first to talk about schemas as organizing structures that mediate how we see and interpret the world (for a review of schema theory, see McVee, Dunsmore and Gavelek 2005). A schema is conceptualized as an abstract knowledge structure serving as implicit theory that influences attention, retrieval, behavior, and social judgment (Stangor & McMillan 1992). Linking traits to schema, Higgins (1996) argued that there are individual differences in the chronic accessibility of the stored cognitive constructs that influence the information processing of related stimuli (e.g., Bargh, Bond, Lombardi, & Tota, 1986). Indeed individual differences have been acknowledged to determine the extent of schematicity of individuals (e.g., gender schematicity: Levy, 1994).

Just as gender-schematic individuals are more prone to process information on the basis of gender than do gender-aschematic individuals (Bem 1991), brand-schematic individuals have a greater propensity to process information on the basis of brands.

Further, these brand schema also lead the brand-centric consumer to organize information in and retrieve information from memory on the basis of brand. This pattern of attention, storage and retrieval of brand information is likely to lead to the brand concept (Park, Milberg and Lawson 1991, Twitchell 2004) being clearer and more pertinent to brand-centric consumers.

Brand-centric consumers, due to their brand-schema are likely to be more sensitive to brand information. Thus from any stimulus, brand based information is preferentially attended to and stored. For example, while watching a commercial the brand associations that the commercial tries to evoke through user imagery and/or the message, will be better attended to and stored in memory by the brand-centric viewer than the non brand-centric consumer.

A brand-centric consumer is also more likely to organize all pieces of information around the brand node and link them together to form a brand image (Keller 1998). In contrast, the non brand-centric is neither likely to attend to brand information nor organize information around the brand. Unlike the brand-centric consumer who organizes information on the basis of brand, the non brand-centric consumer is likely to use other schema to organize information (e.g. an economy schema that makes him/her club together all products, across brands on economy). For such a consumer, a brand could mean little more than a label for a product or set of products.

For example, watching a commercial for a brand of washing machines touting its superior energy economy that is obtained due to proprietary technology, the non brand-centric consumer is likely to organize the information in a manner enabling associations in memory between the specific technology and energy economy, whereas the brand-

centric consumer is likely to organize the information in a manner that facilitates associations between the brand and energy economy. This difference is not confined to watching commercials but would apply to all consumer interactions with the brands and products. Indeed, brand associations are viewed as anything linked in memory to a brand (Keller 1998; Low and Lamb, 2000) and may be based on product experience, product attributes, positioning of the brand in promotional communications, price information.

Exemplars of high and low brand centrality were found in the first round of exploratory qualitative research conducted at a large Northeastern university in an attempt to generate scale items to measure brand centrality. Zack, a participant in an in-depth interview exemplifies the brand-centric consumer, stating “it (a brand) does have a lot more meaning than just a product itself. When you see a brand you not only see the product you also, without realizing it you think of all the things that that brand could mean.” To Megan, brands bring a certain drama and ‘color’ to life- “life is less boring with brands.” In contrast, Marissa, who appears to be low on brand-centrality averred, “I don’t think I am too concerned about brands. I analyze everything. I don’t care what brand it says on it. Commercials and stuff I don’t remember much about.” Carl, another participant who exemplifies the non brand-centric consumer is very brand loyal to Nike but only to Nike, while in general he prefers to know about the products than about brands. When asked whether brands mean more or less to him compared to the average person he stated, “probably less to me, as I said I see things not based on brand but based on what I want from a product”.

Brand centrality: category specific or generalized?

Brand centrality is a situation trait that exists at a higher level of abstraction than product category. Thus a consumer is brand-centric or not in general, across all brands in all product categories. For example, Mowen (2000) describes the need to maintain a healthy lifestyle as a situation trait that is a result of the combination of the person (elemental and compound traits) and the situation (the task definition of maintaining a healthy lifestyle). In contrast, surface traits are specific to a product category and occur as a result of “person, by situation, by product category interactions” (Mowen 2000, p. 21).

When brand centrality interacts with product category, there occur category specific surface traits such as the tendency to use branded clothes. Viewed differently, product category moderates the effects of brand centrality on specific behaviors of consumers. For example, while a brand-centric consumer may be generally focused on brands, she may choose to buy expensive brands only in conspicuous products such as fashion goods to be able to display the brands and obtain the benefits of status through their consumption, leading to a tendency (surface trait) to buy premium fashion brands.

Further, while brand-centricity is a situation trait that may or may not be directly observable by the brand-centric consumer (Mowen 2000), surface traits being most specific and directly linked to specific behaviors are more observable and measurable (Mowen 2000), which helps in their identification. Consequently, a consumer may not be consciously aware of being brand-centric in general, but if she tends to buy more branded clothes, which is more observable, she may consider herself brand-centric only in that category. This would be her unique interpretation of brand-centricity, which is actually

closer to the construct of brand consciousness (Sproles and Kendall 1986) as it pertains to behavior.

Finally, schemata can be broad or specific. While the brand-centric consumer's brand- schemata are broad, both brand-centric and non brand-centric consumers can be schematic with respect to a specific brand(s). Thus even a non brand-centric consumer may have a Pepsi-schema that guides attention and behavior in the specific domain of cola drinks. The same consumer, being brand-aschematic, is likely to attend to, organize and utilize information in other categories at a more disaggregated item-specific attribute level.

CONSTRUCT DEVELOPMENT

Brand centrality vis-à-vis other traits

In order to ground brand centrality vis-à-vis other traits and embed it in a nomological network of related traits, the traits described in the 3M were utilized. The 3M establishes a hierarchically organized set of traits such that the ingredient elements successively account for an increasing proportion of the variation of the next lower elements in the hierarchy. Substantively this implies that each trait is a result of the combination of a certain set of the traits preceding it in the hierarchy. For example, situation traits exist due to the combined effects of elemental traits, compound traits, learning, and situational context (Mowen 2000).

Extending this, some relationships between brand-centrality and a subset of elemental and compound traits seemed plausible. The elemental traits of extraversion, agreeableness and material needs and the compound traits of need for learning, competitiveness and general self-efficacy, could combine with the effects of learning and

situation context to create the trait of brand centricity. An individual scoring high on extraversion is gregarious and socially poised (Mc Crae and Costa 2003) predisposing him or her to be brand-centric as brands are a means of self- presentation (Escalas and Bettman 2005). Agreeable individuals are sympathetic, warm and compassionate (McCrae and Costa 2003), which is likely to predispose them to being brand-centric to the extent that they have warm, empathetic relationships with several brands. Need for material resources makes individuals seek expensive and luxurious things (Mowen 2000), which, in many categories, are signified by brands. Competitiveness is defined as the enjoyment of interpersonal competition and the desire to be better than others (Mowen 2000). As brands are often times symbols of prestige (Park, Milberg and Lawson 1991), this trait is likely to be positively related to brand centricity. To test these relationships, scales for all the traits from the 3M were included in the 2nd round of data collection, and SEM was used to analyze the data.

Brand-centricity vis-à-vis other brand related constructs

Marketing literature is replete with constructs pertaining to the consumer-brand relationship (table 8). Brand loyalty, (Jacoby and Kyner 1973), brand awareness (Keller 1993), brand affect and brand trust (Chaudhuri and Holbrook 2001) and brand commitment (Lastovicka and Gardner 1978) are specific to a focal brand (e.g. brand loyalty to Marlboro) and pertain to the dyadic relationship between a consumer and a specific brand (Fournier 1998). Brand centricity is generalized and a dispositional, individual difference variable of the consumer (e.g. inclination towards brands of cigarettes, cars, jeans etc. in general).

Table 3-8: Summary of brand related constructs from extant literature

Construct	Definition	Source	Target brand(s)	Domain	State/trait	Consequence
Brand Centricity	Tendency of the consumer to center or focus on brands in general	Current Research	Generalized across all brands	Info Processing	Trait	Prod Evaluation Locus of equity Evaluation of Brand extension
Brand consciousness	Consumers' orientation towards buying the more expensive, well-known national brands	Sproles and Kendall (1986)	Generalized across all brands	Info Processing and Behavior	Trait	Behavior (Purchase of brands)
Brand sensitivity	The importance the consumer attaches to brands in the overall choice	Kapferer and Laurent (1992)	Generalized across all brands	Info Processing and Behavior	Trait	Importance of brands in choice
Brand experimentation	Switching among brands to gain knowledge about the products, brands and features	Cushing and Douglas-Tate (1985)	Directed to reference brand(s)	Behavior	State – context of category	Trial,
Brand Attitudes	Consumers' overall evaluations of a brand	Keller (1993)	Directed to reference brand(s)	Info Processing	State	Intentions, Behavior (purchase), loyalty
Brand awareness	The likelihood of and ease with which a brand name will come to mind	Keller (1993)	Directed to reference brand(s)	Info Processing	State	Brand recognition
Brand recognition	Consumers' ability to confirm prior exposure to the brand when given the brand as a cue	Keller (1993)	Directed to reference brand(s)	Info Processing	State	Brand attitude, Trust/distrust,
Brand Affect	A brand's potential to elicit a positive emotional response in the average consumer as a result of its use	Chaudhuri and Holbrook (2001)	Directed to reference brand(s)	Info Processing	State	Positive/negative affect, Trust/distrust (over time)
Brand Trust	Willingness of the average consumer to rely on the ability of the brand to perform its stated function (pp82)	Chaudhuri and Holbrook (2001)	Directed to reference brand(s)	Info Processing	State	Brand commitment,
Brand Loyalty	The biased (i.e. non random), behavioral response (i.e. purchase), expressed over time, by some decision-making unit, with respect to one or more alternative brands out of a set of such brands and is a function of psychological (decision-making, evaluative) processes	Jacoby and Kyner (1973)	Directed to reference brand(s)	Info Processing and Behavior	State	Behavior (Repeat purchase, Brand endorsement)
Brand commitment	Emotional or psychological attachment to a brand within a product class	Lastovicka and Gardner (1978)	Directed to reference brand(s)	Info Processing	State	Attitudinal Brand loyalty

I do not suggest a hierarchical relationship between brand centricity and the specific brand- based constructs. A brand-centric consumer need not necessarily be brand loyal to any one brand, neither is it necessary for a consumer loyal to a brand to be brand-centric. In the former case, the brand-centric consumer may be a brand experimenter (Cushing and Douglas-Tate 1985) without being loyal to any brand. Conversely, a non brand-centric consumer may be loyal to a specific brand due to its availability or past experience with the brand.

Brand consciousness (Sproles and Kendall 1986), a dispositional construct, is defined as “consumers’ orientation towards buying the more expensive, well-known national brands” (p 270) that exists due to price-quality associations. This construct’s limitation is that it is justified on price-quality associations alone. Brand-centricity is generalized, not necessarily directed to premium or expensive brands. There are several brands that are not “expensive” but that have strong brand associations (e.g. Wal-Mart, Great Value, Hyundai etc.). Further, while brand consciousness focuses on behavioral implications only, brand centricity is a predisposition that is likely to influence antecedent consumer cognitive processes such as product evaluation, message processing and perceptual scanning.

Kapferer and Laurent’s (1992) concept of brand sensitivity refers to the importance the consumer attaches to brands in the choice. The brand sensitivity scale (Kapferer and Laurent 1989) comprises the following three items: (1) "When making a purchase, I always give attention to the brand" (strongly agree/strongly disagree); (2) "In general, a brand tells a lot about a product's quality" (strongly agree/strongly disagree); (3) "For me, a brand name is very important information" (strongly agree/strongly

disagree). Although this construct does overlap with brand centrality (especially items 2 and 3), the two constructs are different.

Kapferer and Laurent (1992) argue that brand sensitivity is category specific and occurs in categories where a) consumers are interested in the category, b) brands signify quality and c) brands signal status suggesting that brand sensitivity arises by the interaction of brand centrality with category. Also, brand sensitivity pertains mainly to the context of choice and the decision making process preceding a purchase. Thus, according to the 3M, brand sensitivity is a surface trait while brand centrality is a situation trait that is at a higher level of abstraction. While choice and behavior are important, there are other cognitive processes (e.g. brand extension evaluation) which are also important for a construct to measure as they can affect the effectiveness of a marketer's initiatives.

SCALE DEVELOPMENT

Exploratory qualitative research consisting of two focus groups (n=12) and 10 in-depth interviews with undergraduate students was conducted at a leading Northeastern university to provide some insights that would be useful in generating items to measure brand centrality. Based on this, and the conceptualization of the construct, a set of 14 items (appendix B) were generated and administered to an independent sample of 312 undergraduate students (round 1) at a leading Northeastern university.

Exploratory factor analysis (principal component with direct oblimin rotation) on these data initially yielded two factors with Eigen value > 1 , one of which explained 47% of the variance while the other explained 10% of the variance. Items 2, 10 and 11 cross loaded on the two factors. While items 2 and 10 pertain to awareness of brands, item 11

is a mirror of item 7 and pertains to possession of brands. Thus there was lack of internal consistency among these three items suggesting that the second factor could be a result of poor comprehension of these items which were consequently dropped. Factor analysis of the remaining items yielded one factor with Eigen value >1 and this factor explained 53% of the variance. The next largest Eigen Value was .92 and the factor with this value explained only 8.3% of the variance. The corrected item-total correlations of the remaining items were all satisfactory ($> .5$) and so were the average inter-item correlations.

To confirm these results a CFA was performed on the retained items, specifying a one factor structure. The model fit was satisfactory ($\chi^2_{(44)} = 174.28$, RMSEA=0.09, NFI = 0.95, NNFI=0.95, CFI=0.96). The completely standardized solution showed satisfactory loadings for all the items ($> .55$) except item 13 which had a loading of .23. Further, item 13 was similar in content to items 3 and 8. After deleting item 13, CFA was performed on the remaining items. The model fit improved ($\chi^2_{(35)} = 131.75$, RMSEA=0.09, NFI = 0.96, NNFI=0.96, CFI=0.97) albeit at a loss of 9 degrees of freedom. The completely standardized solution showed satisfactory loadings for all the items ($> .55$) (table 9). The composite reliability for the retained items was .9 and so was the Cronbach's alpha. Thus a ten item scale of brand centricity was developed.

Table 3-9: Item-total Correlations, Intercorrelations and Completely Standardized Loadings

Rounds 1 and 2 of data collection
(Figures in parentheses are from round 2 data)

ITC: Item-Total Correlations
IC: Inter-correlations
CSL: Completely Standardized Loadings

#	ITC	IC										CSL
		1	2	3	4	5	6	7	8	9	10	
1	.53(.55)	1										.54(0.57)
2	.52(.63)	.36(.46)	1									.55(0.66)
3	.73(.7)	.41(.4)	.41(.44)	1								.78(0.75)
4	.67(.69)	.42(.5)	.46(.58)	.58(.6)	1							.69(0.75)
5	.79(.77)	.44(.42)	.48(.53)	.68(.68)	.58(.66)	1						.86(0.84)
6	.82(.65)	.47(.3)	.46(.44)	.67(.48)	.59(.48)	.78(.58)	1					.88(0.69)
7	.65(.63)	.28(.32)	.42(.46)	.56(.52)	.38(.35)	.64(.57)	.64(.56)	1				.71(0.67)
8	.61(.65)	.36(.36)	.27(.42)	.47(.44)	.43(.43)	.53(.56)	.61(.57)	.55(.52)	1			.65(0.68)
9	.62(.6)	.32(.41)	.4(.38)	.54(.53)	.55(.52)	.57(.51)	.56(.42)	.48(.45)	.38(.41)	1		.66(0.64)
10	.58(.52)	.51(.45)	.25(.39)	.46(.34)	.44(.32)	.44(.4)	.53(.38)	.37(.34)	.46(.52)	.36(.26)	1	.58(0.52)

A second round of data collection was conducted using an independent sample of 169 undergraduate students at a leading Northeastern university. In this round, the 10 item brand centricity scale, brand sensitivity, brand consciousness, and the eight elemental and six compound traits from Mowen's framework were administered. Further, as per Bagozzi (1993) a single item brand centricity scale was administered to check the extent of convergent validity of my scale. The single item scale consisted of a detailed description of brand centricity followed by an item "I think I am very brand-centric" followed by a 9 point scale anchored by 1 = Disagree completely and 9= Agree completely (appendix C). The order of presentation of the three brand related constructs and the set of Mowen's (2000) constructs was counterbalanced in the sample such that

half the participants completed the brand centricity 10-item scale, the single item brand centricity scale and Mowen's (2000) items in that order while the other half completed Mowen's (2000) items, brand centricity 10-item scale, and the single item brand centricity scale in that order.

Exploratory factor analysis (principal component with varimax rotation) on these data yielded one factor with Eigen value > 1 which explained 52% of the variance. The corrected item-total correlations of the items were all satisfactory ($> .5$) and so were the average inter-item correlations (table 9). To confirm these results, a CFA was performed on the retained items, specifying a one factor structure. The model fit was satisfactory ($\chi^2_{(35)} = 104.71$, RMSEA=0.10, NFI = 0.94, NNFI=0.94, CFI=0.96). The completely standardized solution showed satisfactory loadings for all the items ($> .55$) (table 9). The cronbach alpha for the items was .9 and so was the composite scale reliability.

Convergent validity

There was a significant correlation ($r=.8$, $p<.0001$) between the brand centricity scores obtained from the 10 item scale and the single item scale suggesting convergent validity (Bagozzi 1993). Further evidence of convergent validity was provided by the highly significant t-values ($t > 7.00$) of all the item loadings (Mathwick and Rigdon 2004). Finally, the average variance extracted (AVE) is .51, which does satisfy the criterion by Fornell and Larcker (1981), according to whom convergent validity is suggested if the average variance extracted is at least .5

Discriminant validity

Discriminant validity of a construct with other constructs is established if there is minimal correlation among independent measures of the different constructs.

Conceptually, brand centrality is distinct from constructs such as brand loyalty and brand trust that pertain to dyadic relationships between consumers and focal brand(s). To establish the discriminant validity of brand centrality with brand consciousness and brand sensitivity, the two other constructs that are most similar in as much as they also pertain to individual differences, two models were compared using SEM based on the data collected in round 2. In the second round of data collection (N= 169), along with brand centrality, brand consciousness and brand sensitivity had been measured using the seven item brand consciousness scale (Sproles and Kendall 1986) and the three item brand sensitivity scale (Kapferer and Laurent 1992) respectively. The baseline model (model 1) was a three factor model in which brand centrality, brand consciousness and brand sensitivity were the latent factors that were allowed to freely correlate while in model 2 the three factors correlated perfectly. Model 1 displayed significantly better fit than model 2 ($\Delta \chi^2_{(6)} = 110.15, p < .001$) suggesting discriminant validity (Byrne 1998).

The Fornell and Larcker (1981) criterion for discriminant validity is that the AVE for a given construct should be greater than the squared correlations of the given construct with other constructs in the analysis. The AVE for brand centrality was .51 while the squared correlations of brand centrality with brand consciousness and brand sensitivity were .79 and .74 respectively. Fornell and Larcker's (1981) criterion for discriminant validity seem to be violated but considering that a) there are no specific recommendations on the desired magnitude of the superiority of the square root of the AVE over the squared correlations between the constructs, and b) Byrne's (1988) criterion for discriminant validity have been satisfied, the data seem to suggest discriminant validity of brand centrality over the other two constructs.

Nomological validity

In order to examine the possible relationships between brand centrality and Mowen's (2000) trait measures, the scale items of these four constructs had been included in the second round of data collection (N=169). Subsequently, a full model consisting of both structural and measurement models was estimated. The measurement model consisted of the relationship of the traits with their respective items while the structural model consisted of the relationship between the traits and brand centrality (figure 3). As per Byrne (1998), before running the full model, the measurement model was examined using the five constructs as exogenous X constructs which had a good model fit ($\chi^2_{(242)} = 395.5$, RMSEA=0.062, NFI = 0.91, NNFI = 0.96, CFI= 0.96).

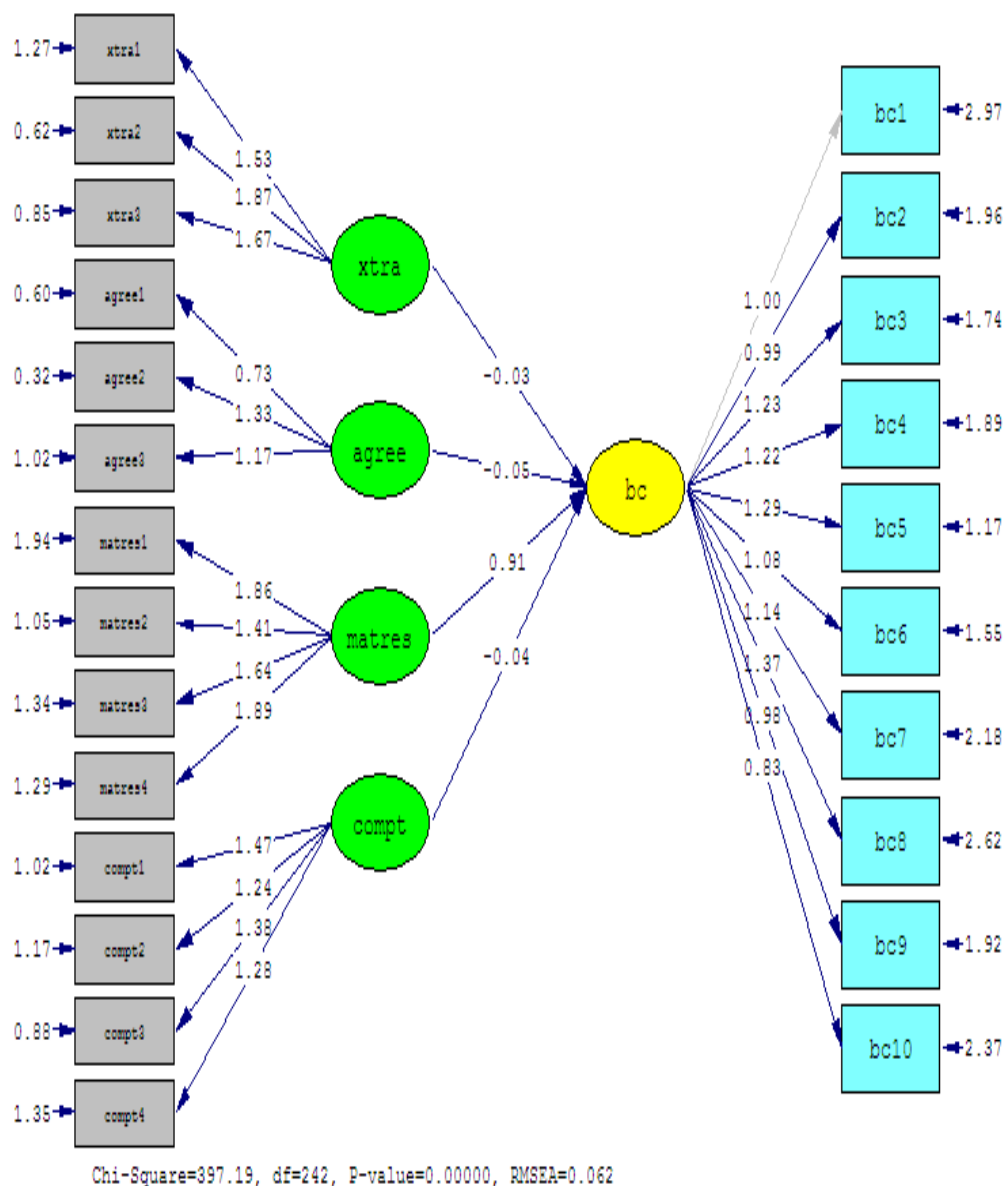


Figure 3.3: Full Structural Model from Round 2 data

The full model using the above model as the measurement model (figure 3) had good fit ($\chi^2_{(242)} = 397.2$, RMSEA=0.062, NFI = 0.91, NNFI=0.96, CFI=0.96) with no modification indices or expected changes in the gamma or beta matrices. Interestingly however, only one relationship was supported. Need for material resources was found to

be predictive of brand centrality ($t = 6.66$) while none of the other traits were found to be predictive of brand centrality, violating the other predictions. Next, the consequences of brand centrality on product and brand extension evaluations were examined.

BRAND CENTRICITY AND PRODUCT, BRAND EXTENSION EVALUATIONS

While evaluating a product, either brand information or attribution or both can be used as predictors of consumption benefits (van Osselaer and Alba 2003) implying that both can influence the evaluation of the product. I argue that for brand-centric consumers who are brand schematic, brand information will have a higher influence on product evaluations than for non brand-centric consumers.

Brand-centric consumers, preferentially attend to, store and retrieve brand information thereby possessing rich, well defined brand images (Keller 1993) in memory. Furthermore, due to their brand schematicity, they are also more likely to use brand information diagnostically to a greater extent than non brand-centric consumers who are likely to use brand information diagnostically to a lesser extent, relying more on attribute information. This implies that brand information will have a greater influence on product evaluations for the brand-centric consumers than for the non brand-centric consumers. For example, among a set of competing branded products, if provided with ratings of the brands, the brand-centric consumers are more likely to base their evaluations of the competing products on the basis of the brand ratings. In contrast, the non brand-centric consumers are likely to rely on attribute information while evaluating the products, ignoring the brand ratings. Thus:

H1: Brand information will have a greater influence on product evaluation for brand-centric consumers than non brand-centric consumers.

Evaluation of brand extensions

The extent of fit between parent brand and the brand extension (hereafter referred to as brand extension evaluation) has been found to depend on product-feature similarity (Park and Smith 1990) and brand-concept similarity (Park, Milberg and Lawson 1991) between the parent brand and the extension. Product feature similarity refers to the similarity between extension products and the parent brand's existing products, be it concrete features such as attributes or more abstract features such as usage situation (Park, Milberg and Lawson 1991). A brand-concept is defined as "brand-unique abstract meanings" (Park, Milberg and Lawson 1991, p 186) and is said to be based on product features (e.g. high price, premium looking) and the owning firm's efforts to create meaning from such attributes configurations (e.g. "the ultimate driving experience" by BMW). For example, between two brands of watches that share many product features, Rolex has, through its brand concept management, come to be associated with prestige (e.g. status symbol, wealth, luxury etc) while Timex has come to be associated with performance and functionality (e.g. durable, reliable, utilitarian etc) (Park, Milberg and Lawson 1991).

Brand concept consistency refers to the extension product's ability to accommodate the parent brand's concept. Building on categorization literature, Park, Milberg and Lawson (1991) argue that, just as people use their own theories to clump objects together (Murphy and Medin 1985), so also would they categorize products at the brand concept level. Thus, while product feature similarity positively influences brand extension evaluation, purchase intention and sales of brand extensions (Chakravarti, MacInnis and Nakamoto 1990, Farquhar, Herr and Fazio 1989), Park, Milberg and

Lawson (1991) show that brand concept consistency is equally important in the success of brand extensions. Specifically, the degree of perceived fit of the parent brand and the extension is a function of both product feature similarity and brand concept consistency (Park, Milberg and Lawson 1991).

However, Park, Milberg and Lawson (1991) are silent on the importance assigned by consumers to brand concept consistency versus product feature similarity. I argue that these weights will be different between brand-centric and non brand-centric consumers. Being more attentive to brand information, brand-centric consumers are likely to be more receptive to nuances of the brand concept communicated by the brands' marketers. For example, a brand-centric consumer is likely to 'pick up' the aspect of luxury and prestige that a marketer is attempting to communicate. In contrast, a non brand-centric consumer would be less attentive to such nuances and is therefore likely to possess a less nuanced brand concept.

Further, brand-centric consumers are also likely to organize the information around the brand concept such that even feature based inferences are more likely to be linked back to the associative network (Keller 1998) of the brand to a larger extent. Consequently, the "luxury" connotations of ROLEX (Park, Milberg and Lawson 1991) will be extended to all brands within the ROLEX stable. In contrast, the non brand-centric consumer may organize the "luxury" associations around the product (e.g. hand made watches are luxurious) or an attribute such as price (e.g. greater price implies more luxury). Thus, if faced with a different product from the ROLEX stable, he or she is likely to extend the luxury associations only if the product's features also connote luxury.

Finally, as argued earlier, brand-centric consumers are likely to utilize brand information to a larger extent than the non brand-centric consumer in evaluations.

The above arguments imply that the brand concept or brand unique meaning is likely to be more important for brand-centric consumers than non brand-centric consumers. Due to the attention, organization and utilization of brand information, the former are likely to possess richer brand concepts and rely on brand concepts to a greater extent than the latter. Consequently, brand concept consistency will have a stronger influence on extension evaluation for the brand- centric consumer than for the non brand-centric consumer

H2: Brand concept consistency will have a higher influence on extension evaluation for brand-centric consumers than for non brand-centric consumers

In the two products they explicitly tested (Timex and Rolex), Park, Milberg and Lawson (1991) found that across high and low levels of brand concept consistency, there were higher extension evaluations for high feature similarity than low feature similarity – thus the more similar the parent and the extension, the better the evaluations, regardless of brand concept consistency. Conversely they also found that brand concept consistency influences extension evaluations across levels of product feature similarity. I argue that these results will be moderated by brand centrality.

Brand-centric consumers, who are preoccupied with brand information, will assign higher weight to brand concept consistency than those low on brand centrality. Thus, even if the extension is dissimilar to the parent, if there is consistency in the brand concept, the extension will be evaluated favorably by brand-centric consumers. In

contrast, the brand concept consistency will not be able to compensate for the lack of product feature similarity for non brand-centric consumers. Thus:

H 3a: An extension with low product feature similarity and high brand concept consistency with the parent brand will be evaluated more favorably by brand-centric than non brand-centric consumers

Conversely, if product feature similarity is high and brand concept consistency is low, non brand-centric consumers, who are likely to organize information along product features, will evaluate the extension favorably despite the brand concept consistency being low since they a) do not have well defined memory structures of the brand concept and b) do not utilize brand concepts for evaluations. In contrast, brand-centric consumers, more concerned with the brand concept, will devalue the extension evaluation if the brand concept is not consistent, even if product feature similarity is high. Thus:

H 3b: An extension with high product feature similarity and low brand concept consistency with the parent brand will be evaluated less favorably by brand-centric than non brand-centric consumers

STUDY 1

Participants and design

112 undergraduate students at a leading Northeastern university were invited to participate for extra credit in this study. Participants were asked to evaluate a pair of jeans, which was described by brand and attribute information that were either favorable or unfavorable. The study used a 2 (brand centrality: low, high) X 2 (brand Information: favorable, unfavorable) X 2 (attribute Information: favorable, unfavorable) between subjects design. While brand and attribute information were manipulated, brand centrality

was measured. Each participant was randomly assigned to one of four manipulation conditions that were obtained by combining favorable and unfavorable brand and attribute information (refer to table 10 for schematic diagram of manipulation).

Table 3-10: Schematic diagram of design (Study 1)

Brand descriptors:

Levi's was rated best among 10 brands of jeans

Sanjay's was rated worst among 10 brands of jeans

Attribute descriptors:

Preshrunk jeans have better stitches & durability. They also feel soft against the skin

Non preshrunk jeans have poorer stitches & durability. Non preshrunk jeans feel hard against the skin

<p>Condition 1</p> <p>Favorable brand & Favorable attribute Information</p> <p>Brand: Levi's Fabric: Preshrunk</p>	<p>Condition 2</p> <p>Favorable brand & Unfavorable attribute Information</p> <p>Brand: Levi's Fabric: Not Preshrunk</p>
<p>Condition 3</p> <p>Unfavorable brand & Favorable attribute Information</p> <p>Brand: Sanjay's Fabric: Preshrunk</p>	<p>Condition 4</p> <p>Unfavorable brand & Unfavorable attribute Information</p> <p>Brand: Sanjay's Fabric: Not Preshrunk</p>

Procedure

The procedure used was similar to that used by Adaval (2003). Participants were asked to imagine that they were shopping for a pair of jeans. They were instructed that the two most important things to consider while shopping for jeans are the brand name and the type of fabric. They were then provided with a stimulus that described a pair of jeans using brand name and type of fabric followed by descriptors that presented the brand name and type of fabric either favorably or unfavorably. The brand name was

either Levi's or author name's while the type of fabric was either Preshrunk or Not Preshrunk. The brand names were described using the following statements "Levi's (author name) was rated best (worst) among 10 brands of jeans." Thus participants who were exposed to the Levi's brand name knew that this brand was rated the best among 10 brands while those exposed to author name's knew that this was rated the worst among 10 brands. The type of fabric was described using the following statements: "Preshrunk (Not Preshrunk) jeans have better (poorer) stitches & durability. They also feel soft (hard) against the skin" (Adaval 2003). Thus the favorability of brand and attribute information was manipulated (Adaval 2003). The participants then indicated their evaluation of the pair of jeans and responded to the 10 item brand centrality scale.

Measures

The 10 item brand centrality scale was used to measure brand centrality. Factor analysis of the brand centrality scale items revealed one factor with Eigen Value > 1 that explained 52% of the variation. The cronbach alpha for the items was .7. Product evaluation was measured using two items. The first item ("Do you like the pair of jeans you just saw?") was followed by a scale anchored by -5 = Disliked extremely and +5= Liked extremely while the second item ("What do you think about the product you just saw?") was followed by a scale anchored by -5 = Extremely bad product and +5= Extremely good product (Adaval 2003).

Results

To arrive at high and low levels of brand centrality the score for each participant on the brand centrality scale was computed and the data was median split. A 2 (brand centrality: low, high) X 2 (attribute information: unfavorable, favorable) X 2 (brand

information: unfavorable, favorable) ANOVA revealed that the favorability of both attribute and brand information had a significant main effect on product evaluation ($M_{\text{favorable attribute information}} = 1.95 > M_{\text{unfavorable attribute information}} = -5.65$; $F(1,104) = 103.49$, $p < .0001$ and $M_{\text{favorable brand information}} = 0.46 > M_{\text{unfavorable brand information}} = -4.11$; $F(1,104) = 33.24$, $p < .0001$ respectively). Further, as expected there was a significant interaction between brand centrality and brand information ($F(1,104) = 4.388$, $p = .039$). In contrast, brand centrality had no influence on the relationship between attribute information and product evaluation ($F(1,104) = 0.001$, $p = .972$).

Planned contrasts revealed that, as figure 4 suggests, among brand-centric participants, those who were exposed to favorable brand information rated the jeans significantly more favorably than those that received unfavorable brand information ($M_{\text{favorable brand information}} = 1.47 > M_{\text{unfavorable brand information}} = -4.91$ $t_{0.975,112} = 6.61$, $p < .00001$) whereas brand information had no such influence on non brand-centric participants ($t_{0.975,112} = 1.91$, $p > .1$) suggesting that, as predicted, it is the brand-centric individual who uses brand information as a predictor of consumption benefit – evaluating the product favorably when brand information was favorable and unfavorably when brand information was unfavorable. In contrast, non brand-centric participants did not use brand information as a predictor of consumption benefit. Thus there was support for H1.

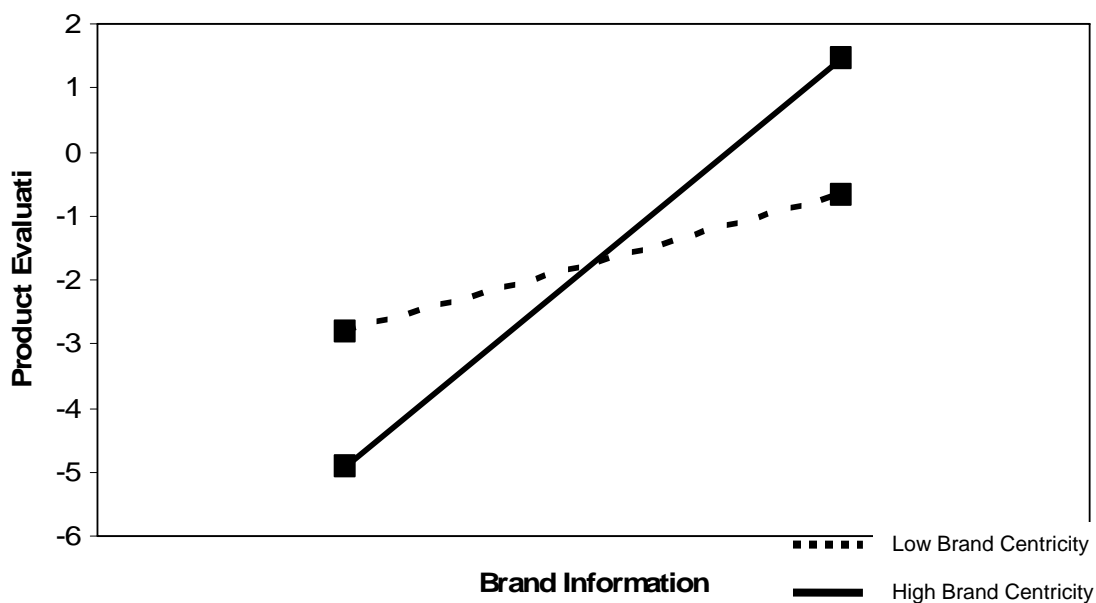


Figure 3.4: Effect of Brand Information on Product Evaluation (Study 1)

STUDY 2

Participants and design

119 undergraduate students at a leading Northeastern university were invited to participate in this study for extra credit. The study used a 2 (brand centricity: low, high) X 2 (brand: TIMEX, ROLEX) X 2 (brand concept consistency: low, high) X 2 (product feature similarity: low, high) mixed design with the first two being between subjects and the last two being within subjects factors. All the factors were experimentally manipulated with the exception of brand centricity which was measured.

Each participant was asked to evaluate four products as possible extensions to a randomly assigned brand - TIMEX, a function-oriented brand or ROLEX, a prestige-

oriented brand (Park, Milberg and Lawson 1991). To ensure the contemporaneity of the brand concepts used by Park, Milberg and Lawson (1991), a pretest was conducted at a large Northeastern university. In the pretest participants (n=51) were given four statements signifying “function” and “prestige” concepts [“To me, the brand _____ stands for _____ (“prestige” labels: status symbol, wealth, luxury, fashion)/ (“function” labels: durability, reliability, utility, value)] each followed by a 9 point scale anchored by 1 = Disagree completely and 9 = Agree completely. For TIMEX, the sum of the scores on the “prestige” label items was subtracted from the sum of the scores on the “function” label items while for ROLEX, the sum of the scores on the “function” label items was subtracted from the sum of the scores on the “prestige” label items.

A mean difference greater than 0 implies that TIMEX (ROLEX) is still considered a functional (prestige) brand. A one-sample two-tailed t-test for difference between the sum of the scores revealed that while TIMEX is still perceived as a “function” concept brand ($M_{\text{function concept}} - M_{\text{prestige concept}} = 2.01$; $t_{0.975,50} = 6.12$, $p < .00001$), ROLEX is still perceived as a “prestige” concept brand ($M_{\text{prestige concept}} - M_{\text{function concept}} = 1.67$; $t_{0.975,50} = 7.58$, $p < .0001$), consistent with Park, Milberg and Lawson (1991).

To determine whether the twelve extension products to be used were “function” or “prestige” oriented, pretest participants were asked to respond to 4 items for each product (table 11). The items used “prestige” and “function” items viz. “How important is _____ (status, luxury and durability, reliability respectively) when you are considering a _____?” and were followed by a 9 point scale anchored by 1 = Not At All Important and 9 = Extremely Important. A one-sample two-tailed t-test for difference between the sum of

the scores on the “prestige” and “function” items revealed that the specific products (except Grandfather clocks) that were “function” and those that were “prestige” oriented was consistent with Park, Milberg and Lawson (1991).

Table 3-11: Products distinguished in terms of Concept Types

	Function Oriented Products (High brand concept consistency with TIMEX and Low brand concept consistency with ROLEX) $M_{diff} = M_{function\ oriented} - M_{prestige\ oriented}$			Prestige Oriented Products (High brand concept consistency with ROLEX and Low brand concept consistency with TIMEX) $M_{diff} = M_{function\ oriented} - M_{prestige\ oriented}$			
	M_{diff}	$t_{0.975,50}$	p	M_{diff}	$t_{0.975,50}$	p	
Smoke Detector	5.4	17.68	.000	Cologne	2.49	6.4	.000
Garage Door Opener	4.75	15.16	.000	Necktie	1.68	6.2	.000
Flashlight	5.65	21.28	.000	Cuff links	1.51	4.01	.000
Stop watch	4.88	14.18	.000	Grandfather clock	.41	1.8	.078
Batteries	5.93	20.43	.000	Bracelet	1.51	6.39	.000
Calculator	4.76	20.24	.000	Ring	1.59	5.59	.000

In the main study, a manipulation check of the extension product categorizations was conducted by asking participants to indicate how “similar” the extension product was to a watch, the importance of “reliability” and “durability” and the importance of “luxury” and “status” while deciding which brand to buy (appendix D).

Procedure

At the beginning of the study, the concept of brand extensions was explicated to participants and they were subsequently exposed to the extension products. Following exposure to each extension product, participants completed the three item extension evaluation scale after which they completed three items that assessed the effectiveness of the manipulation (Park, Milberg and Lawson 1991).

All participants were exposed to four possible extension products with the specific set of extension products any participant saw being drawn randomly from a set of 12 products. Each extension product was characterized by product feature similarity, which could be low or high and brand concept consistency, which could also be low or high (Park, Milberg and Lawson 1991). Thus an extension product could be either low-low, low-high, high-low or high-high in brand concept consistency and product feature similarity. Each product belonged to two product subsets to control for possible subset configuration effects (table 12). The four product subsets were chosen randomly such that each product appeared in exactly two subsets which led to three possible sets of product extensions consisting of four products each. Thus, there were twelve versions of the questionnaire arising out of two brand names, three sets of product extensions in each subset and two subsets (table 12).

TIMEX (Function Oriented Brand)				
Instrument	Function Oriented		Prestige Oriented	
	High brand concept consistency Low product feature similarity	High brand concept consistency High product feature similarity	Low brand concept consistency Low product feature similarity	Low brand concept consistency High product feature similarity
	(A)	(B)	(C)	(D)
1)T1 Subset 1	Smoke detector	Stopwatch	Cologne	Grandfather clock
2)T2 Subset 1	Garage door opener	Batteries	Necktie	Bracelet
3)T3 Subset 1	Flashlight	Calculator	Cufflinks	Ring
4)T4 Subset 2	Garage door opener	Calculator	Cufflinks	Grandfather clock
5)T5 Subset 2	Flashlight	Stopwatch	Cologne	Bracelet
6)T6 Subset 2	Smoke detector	Batteries	Necktie	Ring
ROLEX (Prestige Oriented Brand)				
Instrument	Prestige Oriented		Function Oriented	
	High brand concept consistency Low product feature similarity	High brand concept consistency High product feature similarity	Low brand concept consistency Low product feature similarity	Low brand concept consistency High product feature similarity
	(A)	(B)	(C)	(D)
7) R1 Subset 1	Cologne	Grandfather clock	Smoke detector	Stopwatch
8) R2 Subset 1	Necktie	Bracelet	Garage door opener	Batteries
9) R3 Subset 1	Cufflinks	Ring	Flashlight	Calculator
10) R4 Subset 2	Cufflinks	Grandfather clock	Garage door opener	Calculator
11) R5 Subset 2	Cologne	Bracelet	Flashlight	Stopwatch
12) R6 Subset 2	Necktie	Ring	Smoke detector	Batteries

Table 3-12: Experiment design (Study 2)

Measures

The composite scale reliability using the completely standardized solution from the one factor model was .88 as was the cronbach alpha for the items. Averaging the 10 items' score of each participant provided the brand centricity score for the sample which was then median split to arrive at high and low levels of brand centricity. Factor analysis of each of the four administrations of the three item extension evaluation scale (appendix E) yielded one factor with Eigen Value > 1 that explained 92%, 90%, 87% and 93% of the variation respectively. The Cronbach's alphas were .96, .95, .92 and .96% respectively. As the three items were highly correlated in all administrations, the three items were averaged to obtain the extension evaluation score (Park, Milberg and Lawson 1991).

Results

Manipulation check: The results were highly consistent with the original categorizations. Across the two brands, products in the high product feature similarity conditions were found to be more similar to watches than those in the low similarity conditions ($M_{\text{high similarity}} = 5.975 > M_{\text{low similarity}} = 2.66$; $F(1,118) = 290.07$, $p < .001$). Further, across brands, functional characteristics were rated more important in brand choice for products assigned to the function-concept category than those assigned to the prestige-concept category ($M_{\text{functional products}} = 7.441 > M_{\text{prestige products}} = 5.256$; $F(1,118) = 116.288$, $p < .001$). Conversely, across brands, prestige characteristics were reported more important for products assigned to the prestige-concept category than those assigned to the function-concept category ($M_{\text{prestige products}} = 10.987 > M_{\text{functional products}} = 2.651$; $F(1,118) = 434.0$, $p < .001$).

Hypotheses testing: A 2 (brand centrality: low, high) X 2 (brand: TIMEX, ROLEX) X 2 (brand concept consistency: low, high) X 2 (product feature similarity: low, high) mixed design ANOVA was used to test H2. Brand concept consistency had a significant effect on extension evaluations ($M_{\text{high brand concept consistency}} = 5.359 > M_{\text{low brand concept consistency}} = 3.653$; $F(1,117) = 64.4, p < .001$). In support of H2, brand-centric participants evaluated brand concept consistent products more favorably than non brand-centric participants ($F(1,117) = 3.589, p < .06$).

Planned contrasts revealed, as figure 5 suggests, that while all participants evaluated brand concept consistent products similarly ($F(1,117) = .04, p > .2$), brand-centric participants' evaluations of brand concept inconsistent products were poorer than those of non brand-centric consumers ($M_{\text{high brand centrality}} = 3.3 < M_{\text{low brand centrality}} = 4.016$; $F(1,117) = 7.05, p < .01$) suggesting that brand concept inconsistency was more worrisome for brand-centric participants. Although the results provide support for H2 and brand-centric participants evaluated brand concept inconsistent extensions worse than non brand-centric participants, evaluations were similar across levels of brand centrality for brand concept consistent extensions. This could be due to the fact that brand concept consistency had a very strong main effect making even non brand-centric participants rate the extension as favorably as the brand-centric participants.

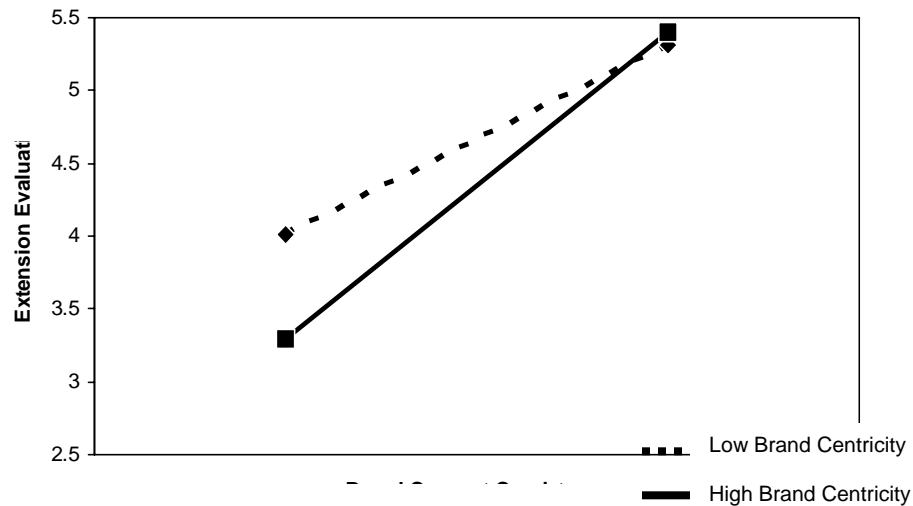


Figure 3.5: Effect of Brand Concept Consistency on Extension Evaluation (Study 2)

While product feature similarity did have a significant positive influence on evaluations ($M_{\text{high product feature similarity}} = 5.538 > M_{\text{low product feature similarity}} = 3.475$; $F(1,117) = 191.48, p < .001$), there was no moderating influence of brand centricity ($F(1,117) = .133, p > .7$).

While testing for H3a and H3b, planned contrasts revealed that, as figure 6 suggests, although directionally consistent with my predictions ($M_{\text{high brand centricity}} = 4.49 > M_{\text{low brand centricity}} = 4.41$), brand centricity did not have a statistically significant effect on extension evaluations when brand concept consistency was high and product feature similarity was low ($F(1,117) = .0004, p > .2$). Thus support for H3a could not be found.

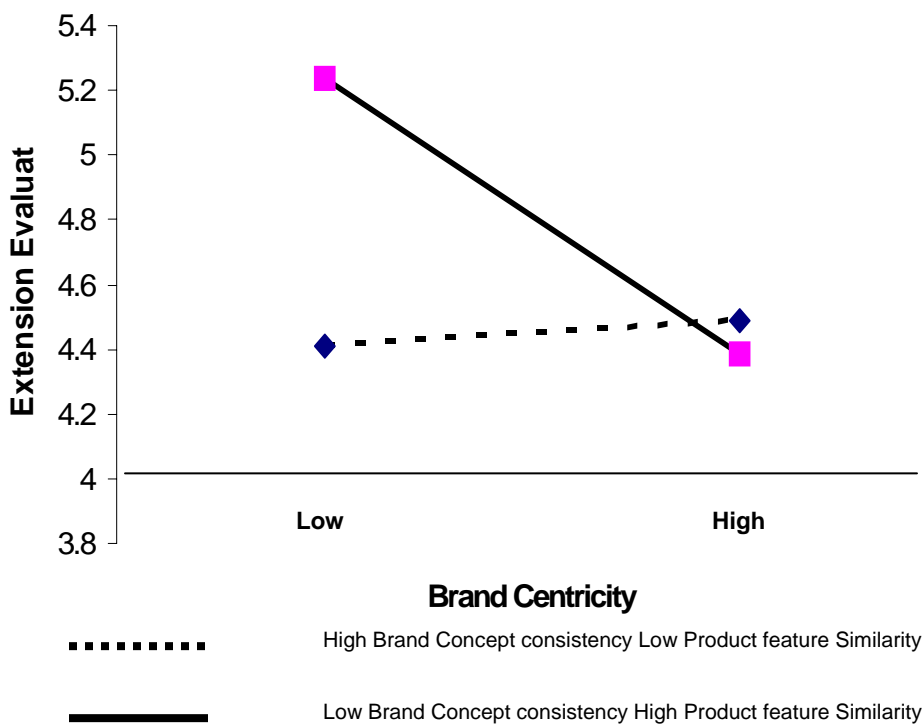


Figure 3.6: Effect of Brand Centricity on Extension Evaluation (Study 2)

Planned contrasts between brand-centric and non brand-centric participants exposed to the low brand concept consistency-high product feature similarity condition revealed that (figure 6), as predicted, brand-centric consumers did evaluate the product less favorably than non brand-centric participants despite high product feature similarity ($M_{\text{high brand centricity}} = 4.38 < M_{\text{low brand centricity}} = 5.24$; $F(1,117) = 4.71$, $p < .05$) in support of H3b.

The support for H3b without support for H3a suggested an investigation of the possible moderating role of product feature similarity, which was conducted by studying the interaction between brand concept consistency and brand centricity at the two levels of product feature similarity separately. A2 (brand centricity: low, high) X 2 (brand

concept consistency: low, high) mixed design ANOVA was conducted at each level of product feature similarity. As each extension product belonged to an interaction of levels of brand concept consistency and product feature similarity, to investigate the effects at low (high) levels of product feature similarity, extension evaluation scores at the two levels of brand concept consistency at low (high) product feature similarity were used. Although the interaction was directionally consistent in both cases, it was statistically significant when product feature similarity was high ($F(1,117) = 3.9, p < .05$), not when it was low ($F(1,117) = 1.722, p > .19$). This provided support for the contention that the predicted interactions between brand concept consistency and brand centrality may exist when product feature similarity is low, lending conditional support to H3a.

Post Hoc Analysis

Park, Milberg and Lawson (1991) suggest a higher importance of brand concept consistency in prestige concept extensions as the prestige concept is more abstract and higher importance of product feature similarity in function concept extensions. If this were true, the nature of the brand concept itself may have a moderating role to play in extension evaluations such that brand concept consistency may be more important for some brand concepts than others.

To investigate this possibility, the data was split along the two brands (TIMEX – function oriented; ROLEX- prestige oriented) and a 2 (brand centrality: low, high) X 2 (brand concept consistency: low, high) mixed design ANOVA was conducted. The moderating influence of brand centrality on the relationship between brand concept consistency and extension evaluations was statistically significant only for ROLEX ($F(1, 57) = 7.995, p < .05$) and not for TIMEX ($F(1, 58) = .305, p > .58$). Planned contrasts

revealed that while brand-centric participants rated brand concept inconsistent extensions to ROLEX poorer than non brand-centric participants ($M_{\text{brand centric}} = 2.68 < M_{\text{brand non centric}} = 3.5$; $t_{0.975,57} = 5.26 > 1.98$), their rating was not significantly poorer for brand concept inconsistent extensions to TIMEX ($t_{0.975,58} = 1.29 < 1.98$). This lent support to the contention that the nature of the brand concept itself may also moderate the relationship between brand concept consistency and extension evaluations.

GENERAL DISCUSSION

An important implication of the largely outside-in perspective of extant research on branding is that regardless of the consumer, all brands influence people similarly. This essay introduces an inside-out perspective by conceptualizing the construct of brand centrality, establishing its uniqueness, developing a scale to measure the construct and showing its influence in product and brand extension evaluations.

The scale developed to measure brand centrality had good psychometric properties that were robust across two rounds of data collection for scale development and two experimental studies involving the measurement of brand centrality. Convergent and discriminant validities of the construct and its nomological relation with other trait measures were established. Further, this essay showed that brand-centric consumers assign higher weight to brand versus product information while evaluating a product.

While investigating brand extension evaluations, brand concept consistency was found to have a stronger influence on extension evaluations for brand-centric consumers than for non brand-centric consumers. There was partial support for the hypothesis that brand-centric consumers evaluate extensions more favorably than non brand-centric

consumers when brand concept consistency is high and product feature similarity is low and it was found that the specific brand concept further moderates this relationship.

Specifically, for a brand concept such as prestige, brand-centric consumers evaluated extensions more favorably than non brand-centric consumers when brand concept consistency was high and product feature similarity was low but this relationship did not hold for a brand concept such as function, consistent with Park, Milberg and Lawson (1991) who show that brand concept consistency is more relevant for a prestige concept while product feature similarity is more relevant for a function concept. Finally, this essay showed that when brand concept consistency is low and product feature similarity is high, brand-centric consumers do evaluate the extension less favorably than non brand-centric consumers.

This essay contributes to theory by extending personality theory to brand research in order to develop the construct of and scale for brand centrality - a consumer specific characteristic that is specific to the context of consumption. A trait measure is developed that has a potentially important influence on a wide array of existing theoretical models pertaining to the consumer-brand relationship. By showing that brand-centric consumers do assign higher weight to brand as opposed to attribute information in product evaluations, it is shown that brand centrality is a trait that influences cognitive processes antecedent to choice or behavior. Finally, this essay contributes specifically to brand extension literature by showing that brand-centric consumers assign higher weight to brand concept consistency than those low in brand centrality while evaluating brand extensions and that brand-centric consumers assign higher weight to brand concept consistency than product feature similarity while evaluating brand extensions.

In so doing, this essay also reinforces the notion that the specific type of brand concept (Park, Milberg and Lawson 1991) also plays a part in whether brand concept consistency or product feature similarity dominate as predictors of brand extension evaluations. Specifically, while evaluations of extensions from a prestige concept brand are dependent more on brand concept consistency, evaluations of extensions from a function concept brand are more dependent on product feature similarity.

A significant managerially relevant contribution of this research is the introduction of a consumer typology on the basis of how important brands are to them and an investigation of how brand centrality affects their information processing. By recognizing brand-centric and non brand-centric consumers, practitioners can maximize communication effectiveness by touting brand virtues to the former and item specific product features to the latter.

Limitations

The scale for brand centrality was developed using a student sample. Not only were the scale items administered to students, they were also developed based on exploratory research using students. This could be a criticism of this research that could challenge the generalizability of the scale. Another criticism of the scale development could be that while a large set of potential items was generated from the exploratory research and the construct conceptualization, only 14 of these items were tested in the quantitative round. Although several of the initial items were eliminated on the basis of their face validity, it can be argued that it may have been advisable to collect data on some of the items and let factor analysis (exploratory and confirmatory) determine the final set of items to retain. Another limitation of this essay could be that variants of

studies already conducted were used. This was done because I was interested in studying the moderating effect of brand centrality on relationships that the original studies had tested. Although not original, this ensured that tried and tested methods were employed to test the hypotheses.

In terms of the nomological net, although data on all the Mowen's (2000) traits was collected, it can be argued that several other constructs (such as need for cognition and self monitoring) could have been examined and the relationship of brand centrality with these constructs tested. As there were already 46 items, more items were not included due to the apprehension that including them could cause fatigue to the participants.

Chapter 4

Conclusion

As Keller (2003) argues, “marketers are desperate for consumer behavior learnings that will improve their understanding of branding and their design and implementation of brand-building marketing programs.” Although there is considerable literature exploring the consumer-brand relationship, it appears to be dominated, much like consumer research in general, by the examination of object centered thought or outside-in processes with relatively scant attention paid to consumer-specific or inside-out processes (Cohen and Reed II 2006). While the influence of marketers’ activities on the consumer-brand relationship has been explored extensively, the possible influence of what transpires in the consumer’s mind, uniquely dependent on the specific consumer’s characteristics, has not been fully explored.

In her seminal article on the consumer-brand relationship, Fournier (1998) describes the relationship as holistic, arguing for a need to understand “the broader context of people’s life experiences as a basis for understanding the constellation of brands with which relationships are likely to develop.” (p 366). What matters, she argues, is not what managers intend but what consumers do with brands to add meaning in their lives. Although this account does hint at the role of the consumer in the consumer-brand relationship dyad, it lacks an explicit investigation of how individual differences among consumers can influence this relationship.

Comparing brands to humans, Aaker (1997) describes five personality characteristics of brands, (much like the big 5 human personality inventory), all of which

are identified as products of marketers' activity. Building on this, Aaker, Fournier and Brasel (2004), comparing consumers' relationships with brands to human relationships, identify the personality of the brand, the transgressions committed by the brand, and the prior experience of the consumer with regard to the brand (all of which are external to the consumer) as the factors that determine this relationship. However, just as personality traits of both spouses affect their relationships (Dehle and Landers 2005), personality characteristics of both consumers and brands (Aaker, Fournier and Brasel 2004) would affect the consumer brand relationship. While social research has investigated the former, consumer research has not extensively explored consumers' individual differences shaping the consumer brand relationship.

Escalas and Bettman (2005) argue that consumers construct their self-identity and present themselves to others through their brand choices based on the congruency between brand-user associations and self-image associations. However, even this perspective identifies brands, as created by marketers, as a means to construe self-identity. Examining the concept of the brand, Park, Milberg and Lawson (1991) dwell on brand concept management as the planning, implementation and control of the brand concept throughout the life of the brand. The brand concept is again conceptualized as external to the consumer, without considering any consumer-specific thought processes that may impact the formation of such a concept.

Although emphasizing the need to assess brand equity from the perspective of the consumer, Keller (1993) enunciates brands' characteristics that are needed to create a favorable customer based brand equity. An appropriate marketing strategy consisting of "anything that causes the consumer to experience or be exposed to the brand" is argued to

have the potential to increase brand equity. Thus, according to this account, even customer-based brand equity is determined by the activities of the marketer alone. Subsequently, Keller (2003) emphasizes the need to recognize the multidimensionality of brand knowledge while explaining branding phenomena. There is no inclusion of the individual consumer's characteristics that may influence how marketers' activities may actually translate into customer-based brand equity or explain branding phenomena.

It is remarkable that although consumer research has borrowed extensively from psychology, sociology and the humanities among others (Holbrook 1987) and the consumer-brand relationship has been attended to extensively, the latter continues to be studied from a largely marketer-centered perspective. There is indeed merit in examining how individual differences among consumers influence the consumer-brand relationship. The consumer, with his or her unique biases and traits, along with brand managers, is a co-creator of this consumer brand relationship. Hence, it behooves researchers of this relationship to also investigate the influence of such consumer-specific influences in this context.

While Burnkrant and Unnava (1995) and Meyers-Levy and Peracchio (1996) examine the role of self referencing in persuasiveness of messages, scant research has examined the gamut of aspects of the consumer brand relationship in such a manner. Cohen and Reed II (2006) argue that objects are elaborated upon and evaluated in relation to a self memory system which is based, among other things, on the accessibility of some personal trait or self schemata, possibly even outside of awareness. Investigation of the role of such personal traits is the missing link in the study of the consumer-brand relationship. Consistently, Baumgartner (2002), lamenting the lack of an understanding

of consumers as dispositional entities, advocates the development of a framework of consumption-specific traits which can then be related to the more basic personality traits.

It is important to introduce the inside-out perspective along with the outside-in perspective to the research of the consumer-brand relationship - both from a theoretician's as well as a practitioner's standpoint. From the former, it is important to recognize that human behavior is complex and specific to individuals. Research directed by such a perspective is likely to identify important individual differences moderating the effects of marketer activity on the consumer-brand relationship. Further, it will help us understand the complexities of the relationship by investigating the specific processes through which such individual differences influence the relationship.

From a managerial perspective its value is obvious considering the efforts firms make to sell brands to consumers (Keller 1998). If indeed it is found that there are specific consumption related individual differences that lead to differential responses among different consumers to the marketing efforts of firms, it behooves brand managers to re engineer such efforts and customize them to obtain maximum effectiveness. For example, identifying brand-centric and non brand-centric consumers can help brand managers tailor their communication such that more brand oriented messaging is made available to the former while more product attribute oriented messaging is made available to the latter.

This research strives to investigate the consumer-brand relationship using a dual perspective of both inside-out and outside-in processes. Taking two disparate contexts (a perceptual process in essay 1 and evaluative processes in essay 2), I investigated how individual differences among consumers can moderate the influences of external cues

that have hitherto been assumed to have the same effects on all kinds of consumers. The two essays of this research show that individual differences among consumers do indeed impact the influence of brands and branding on perceptual and evaluative processes. Furthermore, both essays individually make several contributions to theory and practice.

The two essays provide managers leads on specific actions they can take to ensure greater effectiveness of their brand building activities. While considerable investments are made in brand building activities (Keller 2003), marketers are currently ill equipped to ascertain whether these efforts have the same intended effect on all consumers. The first essay informs brand managers about the factors influencing the role branding can play in maximizing the variety perceived in a retail shelf and individual differences in consumers that moderate these influences. By developing the construct of brand centrality, showing how it influences brand extension evaluations and developing a scale to measure it, the second essay provides managers information that can help them tailor their communications to maximize their effectiveness.

In the larger context of consumer research, this research must be seen as nothing but a starting point in the exploration of the role of consumer specific characteristics in the development of the consumer brand relationship. While the two essays do make significant contributions individually, what I find in this research could well be the tip of the iceberg. This dissertation will be successful if it sets the ball rolling on an investigation of the dual roles of marketer activity and consumer specific characteristics in the evolution of the complex consumer brand relationship.

Future Research

An implication of the first essay is that brand loyalty is likely to play a differential role among promotion and prevention focused individuals. The risk averse, prevention focused individual is more likely to be brand loyal than the promotion focused individual. This relationship should be examined in greater detail in future research.

With regard to assortment perceptions, the subject of essay 1, Broniarczyk, Hoyer, and McAlister (1998) argue that if the assortment perception is ‘quick and easy’, then the consumer is likely to use the most dominant determinant of perceived variety i.e. flavor, to the exclusion of others. If, however, assortment perception were to be more deliberate with adequate time allocated to this task then the consumer is likely to undergo deeper evaluation of attribute information to assess variety, such that even if brands are not highly differentiated, subtle differences in brand image may be noticed and assortment perception enhanced. Thus, the role of number of brands in influencing perceived variety is likely to be stronger if assortment estimation is more deliberate – a phenomenon that future research must explore.

Participants of the studies in essay 1 responded to paper and pencil instruments while, in reality, consumers are exposed to real products in different packaging. Although product packaging can independently influence perceived variety, paper and pencil instruments were used as I was interested in studying the effects of flavor and brand independent of packaging. Future research must investigate the effects of differences in product packaging on variety estimation.

The second essay showed how brand centrality influences the importance of brand versus product information in product evaluation. Conceptually, it can be argued

that brand centrality will influence the effectiveness of a persuasive message touting brand virtues. Future research must examine the moderating role of brand centrality in the differential effectiveness of brand based persuasive messages versus attribute based persuasive messages.

An important social psychological implication of brand centrality is that its effects could extend to broader social contexts. Thus, for example it is possible that brand-centric individuals use brands used by their social group to make judgments about them. Further, a brand-centric consumer would be more motivated to acquire and store information pertaining to the brands his or her reference group members are using. Indeed, a brand-centric consumer may utilize brand schema to form his or her reference groups. An investigation of the role of brand centrality in social judgment and comparisons may reveal this construct's influence in contexts broader than marketing.

Most consumption based constructs and scales are relevant only within the consumption domain and rarely have constructs developed in marketing literature had versatile applicability without. If indeed brand centrality is a human trait with an impact in a wider set of contexts, this research will have contributed not only to marketing but to social sciences in general.

Appendix A

Perceived Variety Scale

Given below are statements followed by an agreement/disagreement scale. If you disagree completely with the statement you can select number 1 on the scale; if you agree completely you can select number 9. If you neither agree nor disagree you can select number 5. You can also select any of the other numbers depending on which is closest to what you think about the statement.

1. “This assortment of ____ (ice cream/chips/yogurt) gives me sufficient variety ”
2. “With the available options, there were enough choices that we could consider buying”
3. “The range of options offered was appropriate for me”
4. “This assortment of ____ (ice cream/chips/yogurt) provides a lot of variety for me to enjoy”
5. “This assortment of ____ (ice cream/chips/yogurt) offers more ways to enjoy it”
6. “I do not think there was much variety among the options of ____ (ice cream/chips/yogurt) provided”
7. “There was considerable variety in this assortment of ____ (ice cream/chips/yogurt)”
8. “The range of options of ____ (ice cream/chips/yogurt) offered was adequate”

In the statement below make a selection according to how much variety you perceived in the cards you just saw

9. How much variety do you think there is in this assortment?

1 2 3 4 5 6 7 8 9

Very Little

Lot of

variety

variety

Appendix B

Brand Centricity Scale

- 1) I couldn't care less what brands people around me are using (R)
- 2) I am usually aware of most major brand names for any product *
- 3) Product features are more important than brand names in my buying decisions (R)
- 4) When I go shopping, I am always scanning the environment for brand names
- 5) Brands are not at all important to me (R)
- 6) Brand name considerably influences my buying decisions
- 7) I like to surround myself with recognizable brand names at home
- 8) When I am considering products, the brand name is more important to me than any other information
- 9) Brands are important to me because they indicate social status
- 10) I do not usually know the names of the competing brands for any given product (R) *
- 11) There are very few brand names on my shelves at home (R) *
- 12) The brand name is the least important information to me when I am considering a product (R)
- 13) I am not concerned at all about brand names when I go shopping (R) *
- 14) I keep abreast of the brands people around me are using

Items marked 'R' are reverse coded

Items marked with an asterisk were deleted

Appendix D

Manipulation Check (Essay 2 Study 2)

(A nine point scale was used to measure each item)

Similarity of extension product to watch

(Anchored by 1=Not At All Similar and 9 = Very Similar)

1. How similar do you think a _____ is to a watch?

Importance of functionality/prestige for a watch

(Anchored by 1=Not At All Important and 9 = Very Important)

2. How important are the characteristics of “reliability” and “durability” in deciding which brand of _____ to buy?
3. How important are the characteristics of “luxury” and “status” in deciding which brand of _____ to buy?

Appendix E

Brand Extension Evaluation Scale

(A nine point scale was used to measure each item)

Extension fit assessment

(Anchored by 1=Bad Idea and 9 = Good Idea; 1=Not At All Likeable and 9 = Very Likeable; 1=Not At All Pleased and 9 = Very Pleased respectively)

4. How good or bad is the extension idea?
5. How likeable is the extension idea?
6. How pleased did the extension make you feel?

References

- Aaker, Jennifer L (1997), "Dimensions of brand personality," *JMR, Journal of Marketing Research*, 34 (3), 347.
- (1999), "The malleable self: The role of self-expression in persuasion," *JMR, Journal of Marketing Research*, 36 (1), 45.
- and Angela Y Lee (2001), "'I' Seek Pleasures and 'we' Avoid Pains: The Role of Self-regulatory Goals in Information Processing and Persuasion," *Journal of Consumer Research*, 28 (1), 33-49.
- , Susan Fournier, and S Adam Brasel (2004), "When Good Brands Do Bad," *Journal of Consumer Research*, 31 (1), 1.
- Adaval, Rashmi (2003), "How Good Gets Better and Bad Gets Worse: Understanding the Impact of Affect on Evaluations of Known Brands," *Journal of Consumer Research*, 30 (3), 352.
- Aggarwal, Pankaj (2004), and Sharmistha Law (2005), "Role of Relationship Norms in Processing Brand Information," *Journal of Consumer Research*, 32 (3), 453.
- Arnold, Stephen J., Tae H. Oum, and Douglas J. Tigert (1983), "Determinant Attributes in Retail Patronage: Seasonal, Temporal, Regional, and International Comparisons," *Journal of Marketing Research*, 20 (000002), 149.
- Bagozzi, Richard P (1993), "An Examination of The Psychometric Properties of Measures of Negative Affect in The PANAS-X Scales," *Journal of Personality and Social Psychology*, 65 (4), 836.
- Bargh, John A, Ronald N Bond, Wendy J Lombardi, and Mary E Tota (1986), "The Additive Nature of Chronic and Temporary Sources of Construct Accessibility," *Journal of Personality and Social Psychology*, 50 (5), 869.
- Barsalou, L.W (1985), "Ideals, Central Tendency and Frequency of Instantiation as Determinants of Graded Structure in Categories," *Journal of Experimental Psychology: Learning, Memory and Cognition*, 11, 629-54.
- Baumgartner, Hans (2002), "Toward a Personology of The Consumer," *Journal of Consumer Research*, 29 (2), 286.
- Baumol, William J. and Edward A. Ide (1956), "Variety in Retailing," *Management Science*, 3 (1), 93-101.
- Bearden, William O, David M Hardesty, and Randall L Rose (2001), "Consumer self-confidence: Refinements in conceptualization and measurement," *Journal of*

- Consumer Research*, 28 (1), 121.
- Bem, S.L. (1981), "Gender Schema Theory: A Cognitive Account of Sex-typing.," *Psychological Review*, 88, (354-64).
- Berlyne, D.C (1960), "Conflict, Arousal and Curiosity," New York: McGraw Hill.
- Boatwright, Peter and Joseph C. Nunes (2001), "Reducing assortment: An Attribute-based Approach," *Journal of Marketing*, 65 (3), 50-63.
- Broniarczyk, Susan M., Wayne D. Hoyer, and Leigh McAlister (1998), "Consumers' Perceptions of the Assortment Offered in a Grocery Category: The Impact of Item Reduction," *Journal of Marketing Research*, 35 (2), 166-76.
- Burnkrant, Robert E and H Rao Unnava (1995), "Effects of self-referencing on persuasion," *Journal of Consumer Research*, 22 (1), 17.
- Byrne, Barbara M, (1998), *Structural Equation Modeling With LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming*, N.J: Lawrence Erlbaum Associates, Ed: Lisa L.Harlow
- Chakravarti, Amitav and Chris Janiszewski (2004), "The Influence of Generic Advertising on Brand Preferences," *Journal of Consumer Research*, 30 (4), 487-502.
- Chakravarti, Dipankar, Deborah J. MacInnis, and Kent Nakamoto (1990), "Product Category Perception, Elaborative Processing and Brand Name Extension Strategies," *Advances in Consumer Research*, 17, Ed Marvin Goldberg et al, Provo UT: Association for Consumer Research, 910-16.
- Chaudhuri, Arjun and Morris B. Holbrook (2001), "The Chain of Effects From Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty," *Journal of Marketing*, 65 (2), 81.
- Chernev, Alexander (2004), "Goal-Attribute Compatibility in Consumer Choice," *Journal of Consumer Psychology*, 14 (1,2), 141.
- Cohen, Joel B and Americus Reed II (2006), "A Multiple Pathway Anchoring and Adjustment (MPAA) Model of Attitude Generation and Recruitment," *Journal of Consumer Research*, 33 (1), 1.
- Coupey, Eloise and Kwon Jung (1996), "Forming and Updating of Product Category Perceptions: The Influence of Goals and Discrepancy," *Psychology & Marketing (1986-1998)*, 13 (7), 695-713.

- Craig, C. Samuel, Avijit Ghosh, and Sara McLafferty (1984), "Models of the Retail Location Process: A Review," *Journal of Retailing*, 60 (1), 5-36.
- Cushing, Peter and Melody Douglas-Tate (1985), "The Effect of People/Product Relationships on Advertising Processing," in *Psychological Processes and Advertising Effects*, Ed. Linda F. Alwitt and Andrew A. Mitchell, Hillsdale, NJ: Erlbaum, 241-59.
- Dean, Dwane Hal (2004), "Evaluating Potential Brand Associations Through Conjoint Analysis and Market Simulation," *The Journal of Product and Brand Management*, 13 (7), 506.
- Dehle, Crystal and John E Landers (2005), "You can't Always Get What You Want, But Can You Get What You Need? Personality Traits and Social Support in Marriage," *Journal of Social and Clinical Psychology*, 24 (7), 1051.
- Escalas, Jennifer Edson and James R Bettman (2003), "Self-Construal, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32 (3), 378.
- Farquhar, Peter H., Paul M. Herr, and Russel H. Fazio (1989), "Extending Brand Equity to New Categories," working paper, *Center for Product Research*, Carnegie Mellon University, Pittsburgh, PA 15213.
- Fornell, Claes and David F Larcker (1981), "Evaluating structural equation models with unobservable variables and measurement error," *JMR, Journal of Marketing Research (pre-1986)*, 18 (000001), 39.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343.
- Friedman, Ronald S. and Jens Forster (2001), "The Effects of Promotion and Prevention Cues on Creativity," *Journal of Personality and Social Psychology*, 81 (6), 1001-13.
- Guiltinan, Joseph P. (1993), "A Strategic Framework for Assessing Product Line Additions," *The Journal of Product Innovation Management*, 10 (2), 136-47.
- Ha, Louisa (1996), "Observations: Advertising Clutter in Consumer Magazines: Dimensions and Effects," *Journal of Advertising Research*, 36 (4), 76-84.
- Herpen, Erica van and Rik Pieters (2002), "Research note: The Variety of an Assortment: An Extension to the Attribute-based Approach," *Marketing Science*, 21 (3), 331-42.

- Hetherington, Marion M., Barbara J. Rolls, and Victoria J. Burley (1989), "The Time Course of Sensory-Specific Satiety," *Appetite*, 12 (February), 57-68.
- Higgins, E. Tory (1996), "The "self-digest": Self-knowledge Serving Self-regulatory Functions," *Journal of Personality and Social Psychology*, 71 (6), 1062-83.
- Higgins, E. Tory (1998), "Promotion and Prevention: Regulatory Focus as a Motivational Principle," *Advances in Experimental Social Psychology*, 30, 1-46.
- Hoch, Stephen J., Eric T. Bradlow, and Brian Wansink (1999), "The Variety of an Assortment," *Marketing Science*, 18 (4), 527-46.
- Hoeffler, Steve and Kevin Lane Keller (2003), "The Marketing Advantages of Strong Brands," *Journal of Brand Management*, 10 (6), 421-45.
- Holbrook, Morris B. (1987), "What is Consumer Research?" *Journal of Consumer Research*, 14(1), 128
- Hyland, M.E (1988), "Motivational Control Theory: An Integrative Framework," *Journal of Personality and Social Psychology*, 55 (4), 642-51.
- Inman, J. Jeffrey (2001), "The Role of Sensory-specific Satiety in Attribute-level Variety Seeking," *Journal of Consumer Research*, 28 (1), 105-20.
- Jacoby, Jacob and David B. Kyner (1973), "Brand Loyalty vs. Repeat Purchasing Behavior," *JMR, Journal of Marketing Research (pre-1986)*, 10 (000001), 1.
- Jain, Shailendra Pratap, Nidhi Agrawal, and Durairaj Maheswaran (2006), "When More May Be Less: The Effects of Regulatory Focus on Responses to Different Comparative Frames," *Journal of Consumer Research*, 33 (1), 91.
- Johnson, Jill and Zita Vickers (1992), "Factors Influencing Sensory-Specific Satiety," *Appetite*, 19 (August), 15-31.
- Johnson, Michael D. (1984), "Consumer Choice Strategies for Comparing Noncomparable Alternatives," *Journal of Consumer Research (pre-1986)*, 11 (3), 741.
- Kahn, Barbara E. and Brian Wansink (2004), "The Influence of Assortment Structure on Perceived Variety and Consumption Quantities," *Journal of Consumer Research*, 30 (4), 519-33.
- , and Donald R. Lehmann (1991), "Modeling Choice Among Assortments,"

Journal of Retailing, 67 (3), 274.

Kapferer, J.-N. and G. Laurent (1989), "La Sensibilite Aux Marques," in Kapferer, J.-N. and Thoenig, J.-C. (Eds), *La Marque*, McGraw-Hill, Paris, 93-124.

----- (1992), "*La Sensibilite aux Marques*," Les Editions d'Organisation, Paris.

Kardes, Frank R. (1994), "Consumer Judgment and Decision Processes," *Handbook of Social Cognition*, 2.

Kassarjian, Harold H. (1971), "Personality and consumer behavior: A review," *JMR, Journal of Marketing Research (pre-1986)*, 8 (000004), 409.

Keller, Kevin Lane (1993), "Conceptualizing, Measuring, and Managing Customer-based Brand Equity," *Journal of Marketing*, 57 (1), 1-22.

---- (1998), *Strategic Brand Management: Building, Measuring and Managing Brand Equity*, N.J.: Prentice Hall, c1998.

---- (2003), "Brand Synthesis: The Multidimensionality of Brand Knowledge," *Journal of Consumer Research*, 29 (4), 595.

Keller, Punam, A. (2006), "Regulatory Focus and Efficacy of Health Messages," *Journal of Consumer Research*, 33 (1), 109.

Lastovicka, John L. and David M. Gardner (1978), "Components of Involvement," in *Attitude Research Plays for High Stakes*, ed. John L. Maloney and Bernard Silverman, Chicago: American Marketing Association, 53-73.

Levy, G.D (1994), "High and Low Gender Schematic Preschoolers' Release From Proactive Interference.," *Sex Roles*, 30, 93-108.

Louro, Maria J., Rik Pieters, and Marcel Zeelenberg (2005), "Negative Returns on Positive Emotions: The Influence of Pride and Self-Regulatory Goals on Repurchase Decisions," *Journal of Consumer Research*, 31 (4), 833-50.

Louviere, Jordan J. and Gary J. Gaeth (1987), "Decomposing the Determinants of Retail Facility Choice Using the Method of Hierarchical Information Integration: A Supermarket Illustration," *Journal of Retailing*, 63 (1), 25-50.

Low, George S. and Charles W. Lamb Jr. (2000), "The measurement and dimensionality of brand associations," *The Journal of Product and Brand Management*, 9 (6), 350.

- Mathwick, Charla and Edward Rigdon (2004), "Play, Flow, and the Online Search Experience," *Journal of Consumer Research*, 31 (2), 324.
- McAlister, Leigh and Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research (pre-1986)*, 9 (3), 311-22
- McCrae, Robert R. and T. Costa Jr. Paul (2003), *Personality in Adulthood*, the Guilford Press, New York, NY.
- McVee, Mary B, Kailonnie Dunsmore, and James R Gavelek (2005), "Schema Theory Revisited," *Review of Educational Research*, 75 (4), 531.
- Meyers-Levy, Joan and Laura A Peracchio (1996), "Moderators of the impact of self-reference on persuasion," *Journal of Consumer Research*, 22 (4), 408.
- Meyvis, Tom and Chris Janiszewski (2004), "When Are Broader Brands Stronger Brands?" An Accessibility Perspective on the Success of Brand Extensions," *Journal of Consumer Research*, 31 (2), 346.
- Montgomery, Cynthia A. and Birger Wernerfelt (1992), "Risk Reduction and Umbrella Branding," *The Journal of Business*, 65 (1), 31.
- Mowen, John C. (2000), *The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior*, Kluwer Academic Publishers.
- Muniz Jr., Albert, M., and Thomas C O'Guinn (2001), "Brand Community," *Journal of Consumer Research*, 27 (4), 412.
- Murphy, G.L. and D. L. Medlin (1985), "The Role of Theories in Conceptual Coherence," *Psychological Review*, 92(3), 289-316.
- Muthukrishnan, A. V. and Frank R. Kardes (2001), "Persistent Preferences for Product Attributes: The Effects of the Initial Choice Context and Uninformative Experience," *Journal of Consumer Research*, 28 (1), 89-104.
- Park, C. Whan, Bernard Jaworski, and Debra J. MacInnis (1986), "Strategic Brand-Concept Image Management," *Journal of Marketing*, 50 (October), 135-45.
- and Daniel C. Smith (1990), "Product Class Competitors as Sources of Innovative Marketing Strategies," *The Journal of Consumer Marketing*, 7 (2), 27.

- , Sandra Milberg, and Robert Lawson (1991), "Evaluation of Brand Extensions: The Role of Product Feature," *Journal of Consumer Research*, 18 (2), 185.
- Pham, Michel Tuan and Tamar Avnet (2004), "Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion," *Journal of Consumer Research*, 30 (4), 503-18.
- Raftery, Dan (1993), "Category Dynamics: Trim the Dead Wood," *Progressive Grocer*, 72 (9), 42-44.
- Ratner, Rebecca K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-preferred Experiences for The Sake of Variety," *Journal of Consumer Research*, 26 (1), 1-15.
- Ratner, Rebecca K. and Barbara E. Kahn (2002), "The Impact of Private Versus Public Consumption on Variety-seeking Behavior," *Journal of Consumer Research*, 29 (2), 246-57.
- Rolls, Barbara J. and Victoria A. Hammer (1995), "Fat, Carbohydrate, and the Regulation of Energy Intake," *American Journal of Clinical Nutrition*, 62 (November), 1086-95.
- Schwarz, Norbert (1998), "Warmer and More Social: Recent Developments in Cognitive Social Psychology," *Annual Review of Sociology*, 24, 239-65.
- Sirgy, Joseph, M. (1982), "Self-Concept in Consumer Behavior: A Critical Review," *Journal of Consumer Research (pre-1986)*, 9 (3), 287.
- Sproles, George B. and Elizabeth L. Kendall (1986), "A Methodology for Profiling Consumers' Decision-Making Styles," *The Journal of Consumer Affairs*, 20 (2), 267.
- Stangor, Charles and David McMillan (1992), "Memory for Expectancy-Congruent and Expectancy-Incongruent Information: A Review of the Social and Social Developmental Literatures," *Psychological Bulletin*, 111 (1), 42.
- Sujan, Mita and James R. Bettman (1989), "The Effects Of Brand Positioning Strategies On Consumers' Brand and Category Perceptions: Some Insights from Schema Research," *Journal of Marketing Research*, 26 (4), 454-67.
- Twitchell, James B (2004), "An English Teacher Looks at Branding," *Journal of Consumer Research*, 31 (2), 484.
- van Osselaer, Stijn J. and Joseph W. Alba (2003), "Locus of Equity and Brand

Extension," *Journal of Consumer Research*, 29 (4), 539.

van Trijp, J.C.M (1995), "Variety-seeking in Product Choice Behavior," *Ed: A.A. Dijkhuizen Backhuys Publishers, Netherlands.*

Wisniewski, Lucene, Leonard H. Epstein, and Anthony R. Caggiula (1992), "Effect of Food Change on Consumption, Hedonics, and Salivation," *Physiology and Behavior*, 52 (January), 21-26.

Zhou, Rongrong and Michel Tuan Pham (2004), "Promotion and Prevention across Mental Accounts: When Financial Products Dictate Consumers' Investment Goals," *Journal of Consumer Research*, 31 (1), 125-35.

VITA

Puligadda Sanjay Subba Rao

Education

Smeal College of Business, The Pennsylvania State University

PhD in Marketing

August 2007 (expected)

Indian Institute of Management, India

Masters in Business Administration with Focus on Marketing 1996

Shri Ram College of Commerce, India

Bachelor of Arts (Honors) in Economics

1993

Dissertation

Essays on branding

Research Interests

I am interested in understanding the consumer-brand relationship and if marketers' branding activities affect all consumers equally. A related area of interest is consumers' processing of attribute information.

Conference Presentations

2007 SCP Las Vegas: "It's All In The Brand, or Is It? Consumers' Brand Centricity and Its Role in Brand Extensions," Competitive paper - presenter

2006 ACR Orlando Florida, "Optimizing Variety in Mass Customization: A Theoretical Perspective," presenter, Competitive Paper - presenter

2006 INFORMS, Marketing Science Conference, "Optimizing Variety in Mass Customization: A Theoretical Perspective" - presenter

2004 Haring Symposium, Indiana University, April 2004, "The Application of Jungian Archetypes in Global Brand Advertising," - discussant

Honors and Research awards

Smeal Small Research Grant from the Dean's Office, Penn State, 2005, USD 1400

Graham Fellowship, The Pennsylvania State University, 2002-2004, USD 8000

Represented Smeal at Haring based on performance in Candidacy exam

Industry Experience (6 years)

1999 to 2001 (2 years): Account Planner for Whirlpool Brand at FCB Ulka advertising (a subsidiary of FCB Inc USA).

1996 to 1999 (3 years): ITC Agrotech Ltd (a subsidiary of ConAgra Inc USA) as Area Sales Manager of large sales area, supervising a 9-member team.

1993 to May 1994 (1 year): Modesto Refrigeration Ltd. as Sales Executive